

Lampiran 01. Nama Responden Uji Coba Kelompok Kecil

| No | Nama Responden | Asal Sekolah |
|----|------------------------|----------------|
| 1 | Adrianus Sunarto | SMA N 2 Borong |
| 2 | Alina Rati Naus | SMA N 2 Borong |
| 3 | Aventus Aman | SMA N 2 Borong |
| 4 | Amelia Aquinas | SMA N 2 Borong |
| 5 | Benediktus Apriliano | SMA N 2 Borong |
| 6 | Dilsiana Sedung | SMA N 2 Borong |
| 7 | Dorotea Inas | SMA N 2 Borong |
| 8 | Emilianus Sakang | SMA N 2 Borong |
| 9 | Ermelinda Ana Dis | SMA N 2 Borong |
| 10 | Edwintius Aman | SMA N 2 Borong |
| 11 | Elia Anim | SMA N 2 Borong |
| 12 | Florianus Sardi Agun | SMA N 2 Borong |
| 13 | Ferdinandus Amput | SMA N 2 Borong |
| 14 | Fladamir Opans | SMA N 2 Borong |
| 15 | Godensiana Rini | SMA N 2 Borong |
| 16 | Gonsaga Kartika | SMA N 2 Borong |
| 17 | Heribertus Savio | SMA N 2 Borong |
| 18 | Koleta F. Onas | SMA N 2 Borong |
| 19 | Kresensiana Frelan | SMA N 2 Borong |
| 20 | Kristina Gianyta | SMA N 2 Borong |
| 21 | MariaLidia Dias | SMA N 2 Borong |
| 22 | Maria Ratna Cenceng | SMA N 2 Borong |
| 23 | Maria ratni Bahong | SMA N 2 Borong |
| 24 | Maria Yonita Sanung | SMA N 2 Borong |
| 25 | Martina Loma | SMA N 2 Borong |
| 26 | Maryana Jelatu | SMA N 2 Borong |
| 27 | Maria Linda Viani | SMA N 2 Borong |
| 28 | Maria Mei | SMA N 2 Borong |
| 29 | Marselina Inda | SMA N 2 Borong |
| 30 | Philippus Ernoi Jegaut | SMA N 2 Borong |
| 31 | Rikardus Nahur | SMA N 2 Borong |
| 32 | Sesilia Rensa | SMA N 2 Borong |
| 33 | Steviana Banul | SMA N 2 Borong |
| 34 | Yanuaris Ocang | SMA N 2 Borong |
| 35 | Yasinta Timun | SMA N 2 Borong |
| 36 | Yeremias Ago | SMA N 2 Borong |
| 37 | Yeremias manco | SMA N 2 Borong |
| 38 | Yofita Bahul | SMA N 2 Borong |

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| 39 | Yohana Jesika Urban | SMA N 2 Borong |
| 40 | Yuliana Darlin Basri | SMA N 2 Borong |
| 41 | Angelus Jeharis | SMA N 7 Borong |
| 42 | Emilia Jesika Mamus | SMA N 7 Borong |
| 43 | Benedikta Karmelia Nema | SMA N 7 Borong |
| 44 | Bonavantura Durhaman | SMA N 7 Borong |
| 45 | Celina Yunita Saudina | SMA N 7 Borong |
| 46 | Elisabet Jiung | SMA N 7 Borong |
| 47 | Faustina Hadiani Pena | SMA N 7 Borong |
| 48 | Helena Setia | SMA N 7 Borong |
| 49 | Ignasius Alfiano | SMA N 7 Borong |
| 50 | Felomena Elni Hamu | SMA N 7 Borong |
| 51 | Florentina Murni | SMA N 7 Borong |
| 52 | Kameliana Renya Jinda | SMA N 7 Borong |
| 53 | Kasianus Agung | SMA N 7 Borong |
| 54 | Kresensia Padung | SMA N 7 Borong |
| 55 | Krisna Betani Imun | SMA N 7 Borong |
| 56 | Leonardus Sudirman | SMA N 7 Borong |
| 57 | Liliosa Danus | SMA N 7 Borong |
| 58 | Marianus Veksi Unus | SMA N 7 Borong |
| 59 | Novita Nanus | SMA N 7 Borong |
| 60 | Oktavia Desi Nirga | SMA N 7 Borong |
| 61 | Petronila Sadul | SMA N 7 Borong |
| 62 | Priska Ana Ndiang | SMA N 7 Borong |
| 63 | Renya Diana Damus | SMA N 7 Borong |
| 64 | Rista Anut | SMA N 7 Borong |
| 65 | Robertus | SMA N 7 Borong |
| 66 | Sesilia Laina | SMA N 7 Borong |
| 67 | Trisno Dato | SMA N 7 Borong |
| 68 | Vinsensius Sudarman | SMA N 7 Borong |
| 69 | Yosefaviani Mirna | SMA N 7 Borong |
| 70 | Yuliana Astuti Anur | SMA N 7 Borong |
| 71 | Ivanti Ngambul | SMA N 7 Borong |
| 72 | Klaferius Taus | SMA N 7 Borong |
| 73 | Lusiana Suri Dalvin | SMA N 7 Borong |
| 74 | Methodyus Boyke Navion | SMA N 7 Borong |
| 75 | Paulus Dandul | SMA N 7 Borong |
| 76 | Reineria Jenunat | SMA N 7 Borong |
| 77 | Rovina Inda | SMA N 7 Borong |
| 78 | Agustina Y Trisakti | SMA N 5 Kotakomba |
| 79 | Avelania Lausari | SMA N 5 Kotakomba |

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|-----|-------------------------|-------------------|
| 80 | Andreanus M Putra | SMA N 5 Kotakomba |
| 81 | Antonius Aron | SMA N 5 Kotakomba |
| 82 | Dominika S Kasih | SMA N 5 Kotakomba |
| 83 | Erasmus Mezze | SMA N 5 Kotakomba |
| 84 | Evarista S Andani | SMA N 5 Kotakomba |
| 85 | Ermelinda Nurti | SMA N 5 Kotakomba |
| 86 | Florentina Karda | SMA N 5 Kotakomba |
| 87 | Juan C De Melo | SMA N 5 Kotakomba |
| 88 | Melania K Manung | SMA N 5 Kotakomba |
| 89 | Maria Nirmaya | SMA N 5 Kotakomba |
| 90 | Maria Delami | SMA N 5 Kotakomba |
| 91 | Maria Yasinta Jelima | SMA N 5 Kotakomba |
| 92 | Maria Korentina Jemia | SMA N 5 Kotakomba |
| 93 | Maria I Mamut | SMA N 5 Kotakomba |
| 94 | Mindalia Jemita | SMA N 5 Kotakomba |
| 95 | Nertriana Unsa | SMA N 5 Kotakomba |
| 96 | Rivaldus Yono | SMA N 5 Kotakomba |
| 97 | Yohanes K Syukur | SMA N 5 Kotakomba |
| 98 | Yosefina A Inga | SMA N 5 Kotakomba |
| 99 | Agustinus Agung | SMA N 7 Kotakomba |
| 100 | Anjelina Novia Julita | SMA N 7 Kotakomba |
| 101 | Ayelius R Iving | SMA N 7 Kotakomba |
| 102 | Bonivasius J Toe | SMA N 7 Kotakomba |
| 103 | Coleta Celvin Patang | SMA N 7 Kotakomba |
| 104 | Elisabet Anggela Unggin | SMA N 7 Kotakomba |
| 105 | Florentino A. Saka | SMA N 7 Kotakomba |
| 106 | Fransiska A. Ngeno | SMA N 7 Kotakomba |
| 107 | Gregorius D. Sartono | SMA N 7 Kotakomba |
| 108 | Gregorius Devarno | SMA N 7 Kotakomba |
| 109 | Gemagalgani Omega | SMA N 7 Kotakomba |
| 110 | Gregorius N Ado | SMA N 7 Kotakomba |
| 111 | Hironimus F. Arbin | SMA N 7 Kotakomba |
| 112 | Kristoforus Mosewake | SMA N 7 Kotakomba |
| 113 | Louisa Maria Apriani | SMA N 7 Kotakomba |
| 114 | Maria Denastrada | SMA N 7 Kotakomba |
| 115 | Maria Y K Nggong | SMA N 7 Kotakomba |
| 116 | Milkior Nggio | SMA N 7 Kotakomba |
| 117 | Miranti I Noba | SMA N 7 Kotakomba |
| 118 | Owentus Somari | SMA N 7 Kotakomba |
| 119 | Rikardus Sole | SMA N 7 Kotakomba |
| 120 | Rikardus T Puji | SMA N 7 Kotakomba |

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|-----|------------------------|-------------------|
| 121 | Rosalia Sarina Ena | SMA N 7 Kotakomba |
| 122 | Selfiani Astuti Jemino | SMA N 7 Kotakomba |
| 123 | Serapinus Pati | SMA N 7 Kotakomba |
| 124 | Simplisius Bimas | SMA N 7 Kotakomba |
| 125 | Yohana Lamdasarni | SMA N 7 Kotakomba |



Lampiran 02. Nama Responden Uji Coba Kelompok Besar

| No | Nama Responden | Asal Sekolah |
|----|------------------------------|----------------|
| 1 | Anastasia Ambut | SMA N 2 Borong |
| 2 | Anastasia Jeniung | SMA N 2 Borong |
| 3 | Aristus Son | SMA N 2 Borong |
| 4 | Aventus Sasang | SMA N 2 Borong |
| 5 | Benedita Erlani Nggajong | SMA N 2 Borong |
| 6 | Egidius Matu | SMA N 2 Borong |
| 7 | Emanuel Rivaldus Jadur | SMA N 2 Borong |
| 8 | Evaritus Jebar | SMA N 2 Borong |
| 9 | Farlitus Arsa | SMA N 2 Borong |
| 10 | Filemon Tomy Susanto | SMA N 2 Borong |
| 11 | Fransiskus Darwin | SMA N 2 Borong |
| 12 | Hendrikus Jebarung | SMA N 2 Borong |
| 13 | Hipolitus Rahu | SMA N 2 Borong |
| 14 | Indriyani Salesti | SMA N 2 Borong |
| 15 | Irsan Syrillus Tabir | SMA N 2 Borong |
| 16 | Koleta Putriani Pia | SMA N 2 Borong |
| 17 | Margareta Rati Jenanus | SMA N 2 Borong |
| 18 | Maria M. T Dolmin | SMA N 2 Borong |
| 19 | Odilia Siana Indri | SMA N 2 Borong |
| 20 | Risaldus Jehatu | SMA N 2 Borong |
| 21 | Waldesi Danus | SMA N 2 Borong |
| 22 | Wilibrodus Hasan | SMA N 2 Borong |
| 23 | Yanuaris Afri Degut | SMA N 2 Borong |
| 24 | Yosefina Kresensia Pajong | SMA N 2 Borong |
| 25 | Yulia Berdinsi | SMA N 2 Borong |
| 26 | Yuliana Saleman Wela | SMA N 2 Borong |
| 27 | Yulita Anim | SMA N 2 Borong |
| 28 | Yunita Anjela | SMA N 2 Borong |
| 29 | Yunita Edis | SMA N 2 Borong |
| 30 | Yustina Ratna Sari | SMA N 2 Borong |
| 31 | Agnes Daimun Magul | SMA N 2 Borong |
| 32 | Alfafira M Anjeli Ngamal | SMA N 2 Borong |
| 33 | Alfina Fida | SMA N 2 Borong |
| 34 | Algonda Nirman | SMA N 2 Borong |
| 35 | Angelina Paskalina Wulandari | SMA N 2 Borong |
| 36 | Antonius Rio Panjiwinata | SMA N 2 Borong |
| 37 | Bonifasius Bokas | SMA N 2 Borong |
| 38 | Darius Karwayu Darung | SMA N 2 Borong |

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|----|-----------------------------|----------------|
| 39 | Deltiana Niva | SMA N 2 Borong |
| 40 | Elisabet Enda | SMA N 2 Borong |
| 41 | Eudoksia Tandri | SMA N 2 Borong |
| 42 | Fonsianus Jaur | SMA N 2 Borong |
| 43 | Fransiskus Gasar | SMA N 2 Borong |
| 44 | Fransiskus The Vito Magung | SMA N 2 Borong |
| 45 | Gensiana Chavara | SMA N 2 Borong |
| 46 | Karolus Spesua | SMA N 2 Borong |
| 47 | Konstantinus Katas | SMA N 2 Borong |
| 48 | Mikhael Jeri | SMA N 2 Borong |
| 49 | Nadyanti Margareth seiman | SMA N 2 Borong |
| 50 | Robertus Yodi Madu | SMA N 2 Borong |
| 51 | Rosalia Ersantika Senau | SMA N 2 Borong |
| 52 | Sarniana Jelinda | SMA N 2 Borong |
| 53 | Sifiardus Eprin | SMA N 2 Borong |
| 54 | Silvamelita Fonga | SMA N 2 Borong |
| 55 | Sintalia Ida | SMA N 2 Borong |
| 56 | Valeria Marlinda | SMA N 2 Borong |
| 57 | Yasinta Nadia | SMA N 2 Borong |
| 58 | Yolanda Nasdy | SMA N 2 Borong |
| 59 | Adrianus Naldo | SMA N 2 Borong |
| 60 | Agustino De Liguori Lumbang | SMA N 2 Borong |
| 61 | Alexander Ejeng | SMA N 2 Borong |
| 62 | Angelus Nal | SMA N 2 Borong |
| 63 | Antonius C Purnama Kasi | SMA N 2 Borong |
| 64 | Delifolga Danus | SMA N 2 Borong |
| 65 | Edita Lunur | SMA N 2 Borong |
| 66 | Elania Maning | SMA N 2 Borong |
| 67 | Elisabet Adriani | SMA N 2 Borong |
| 68 | Elva Dafrosa Ona | SMA N 2 Borong |
| 69 | Ewaldus Febrian | SMA N 2 Borong |
| 70 | Fransiska Yohana Lu | SMA N 2 Borong |
| 71 | Gabriel Belang Nagus | SMA N 2 Borong |
| 72 | Hilarius Gumanto | SMA N 2 Borong |
| 73 | Isnata Yuni | SMA N 2 Borong |
| 74 | Mardiana Lasmini Deharso | SMA N 2 Borong |
| 75 | Maria Kevinta Larus | SMA N 2 Borong |
| 76 | Maria Yustina Ngao | SMA N 2 Borong |
| 77 | Natalia Nda | SMA N 2 Borong |
| 78 | Nicolas Roing Mbalur | SMA N 2 Borong |
| 79 | Olimpius Ronald | SMA N 2 Borong |

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| 80 | Teresia Avila Abas | SMA N 2 Borong |
| 81 | wihelmina yanti | SMA N 2 Borong |
| 82 | Yakobus Lawi | SMA N 2 Borong |
| 83 | Yestin Seri Mita | SMA N 2 Borong |
| 84 | Yohana Destin Wela | SMA N 2 Borong |
| 85 | Yohanes Arjointus Aron | SMA N 2 Borong |
| 86 | Yuliana Nawas | SMA N 2 Borong |
| 87 | Andriana Naul | SMA N 2 Borong |
| 88 | Andrianus Yufandro Desanta | SMA N 2 Borong |
| 89 | Angela Dwisari Dansis | SMA N 2 Borong |
| 90 | Antonia Lisdiani | SMA N 2 Borong |
| 91 | Albertus Darut | SMA N 7 Borong |
| 92 | Angelina Alus | SMA N 7 Borong |
| 93 | Anselmus Agung | SMA N 7 Borong |
| 94 | Edita Mita | SMA N 7 Borong |
| 95 | Ervinsensius Monja | SMA N 7 Borong |
| 96 | Falentinus Dadu | SMA N 7 Borong |
| 97 | Fidelis Roi Homan | SMA N 7 Borong |
| 98 | Fransiskus Demon | SMA N 7 Borong |
| 99 | Marina Murni | SMA N 7 Borong |
| 100 | Marselinus Sardi | SMA N 7 Borong |
| 101 | Osilia Minang | SMA N 7 Borong |
| 102 | Remigius Obisait | SMA N 7 Borong |
| 103 | Rikardus T Kandoi | SMA N 7 Borong |
| 104 | Robertus Romario | SMA N 7 Borong |
| 105 | Stanislaus Awan | SMA N 7 Borong |
| 106 | Urbanus Nggetu | SMA N 7 Borong |
| 107 | Yohana Jenau | SMA N 7 Borong |
| 108 | Zakarias Ubal | SMA N 7 Borong |
| 109 | Aldianus Santus | SMA N 7 Borong |
| 110 | Anskarianus Renol | SMA N 7 Borong |
| 111 | Desigenia Adung | SMA N 7 Borong |
| 112 | Elisius Aldi Manjal | SMA N 7 Borong |
| 113 | Fransiska Inda | SMA N 7 Borong |
| 114 | Karolina Harsin Nuet | SMA N 7 Borong |
| 115 | Kornelis Alju | SMA N 7 Borong |
| 116 | Marianus Asis | SMA N 7 Borong |
| 117 | Maria Gresiana Jesa | SMA N 7 Borong |
| 118 | Maria Karnilan Namul | SMA N 7 Borong |
| 119 | Meliana Mita | SMA N 7 Borong |
| 120 | Oktaviana Nova | SMA N 7 Borong |

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| 121 | Olivia Empita Anut | SMA N 7 Borong |
| 122 | Sergiona Darmaadi Seong | SMA N 7 Borong |
| 123 | Sirilus Hasan | SMA N 7 Borong |
| 124 | Yansensius Jon | SMA N 7 Borong |
| 125 | Yasinta Devisman Jahung | SMA N 7 Borong |
| 126 | Yasinta Manis | SMA N 7 Borong |
| 127 | Yufri Antonius Palu | SMA N 7 Borong |
| 128 | Yuliana Ojo | SMA N 7 Borong |
| 129 | Elfrida Cici | SMA N 7 Borong |
| 130 | Evaldus Dajang | SMA N 7 Borong |
| 131 | Febrianus Jantur | SMA N 7 Borong |
| 132 | Feliana Kalbu | SMA N 7 Borong |
| 133 | Helena Asri Jaiman | SMA N 7 Borong |
| 134 | Irwantus Pantur | SMA N 7 Borong |
| 135 | Ignasius Piantus | SMA N 7 Borong |
| 136 | Karolina Harmi | SMA N 7 Borong |
| 137 | Klaudius Jutang | SMA N 7 Borong |
| 138 | Lastika Ira | SMA N 7 Borong |
| 139 | Liani Jita | SMA N 7 Borong |
| 140 | Marcelina Sung | SMA N 7 Borong |
| 141 | Mariana Hastika | SMA N 7 Borong |
| 142 | Martina Mamis | SMA N 7 Borong |
| 143 | Nardianus Agung | SMA N 7 Borong |
| 144 | Oda Aprilia Cencen | SMA N 7 Borong |
| 145 | Paulus Opin Junardi | SMA N 7 Borong |
| 146 | Rostuta Semung | SMA N 7 Borong |
| 147 | Aldianus Joni | SMA N 7 Borong |
| 148 | Angelus Jeharis | SMA N 7 Borong |
| 149 | Emilia Jesika Mamus | SMA N 7 Borong |
| 150 | Felomena Elni Hamu | SMA N 7 Borong |
| 151 | Florentina Murni | SMA N 7 Borong |
| 152 | Kameliana Renya Jinda | SMA N 7 Borong |
| 153 | Kasianus Agung | SMA N 7 Borong |
| 154 | Kresensia Padung | SMA N 7 Borong |
| 155 | Egistasia Ndiu | SMA N 5 Kota Komba |
| 156 | Florianus Tasman | SMA N 5 Kota Komba |
| 157 | Febronia S Dian | SMA N 5 Kota Komba |
| 158 | Katarina D Enda | SMA N 5 Kota Komba |
| 159 | Kornelia Anda | SMA N 5 Kota Komba |
| 160 | Oktafiana Daghus | SMA N 5 Kota Komba |
| 161 | Rikardus Antus | SMA N 5 Kota Komba |

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|-----|----------------------|--------------------|
| 162 | Rosalia Ngganu | SMA N 5 Kota Komba |
| 163 | Solongia Iko | SMA N 5 Kota Komba |
| 164 | Stefanus Jhagung | SMA N 5 Kota Komba |
| 165 | Vandrianus N Naju | SMA N 5 Kota Komba |
| 166 | Vinsensius Laura | SMA N 5 Kota Komba |
| 167 | Vinsensius Vilandri | SMA N 5 Kota Komba |
| 168 | Mersiana E Eno | SMA N 5 Kota Komba |
| 169 | Yustina N Ajon | SMA N 5 Kota Komba |
| 170 | Yosephus Wangge | SMA N 5 Kota Komba |
| 171 | Yulius J Darma | SMA N 5 Kota Komba |
| 172 | Yohana Y Santi | SMA N 5 Kota Komba |
| 173 | Maria Nirmaya | SMA N 5 Kota Komba |
| 174 | Kristina Imun | SMA N 5 Kota Komba |
| 175 | Yohanes Sudirman | SMA N 5 Kota Komba |
| 176 | Yosefina Danus | SMA N 5 Kota Komba |
| 177 | Marianus Jehaman | SMA N 5 Kota Komba |
| 178 | Novita Jelita | SMA N 5 Kota Komba |
| 179 | Oktaviani Jani | SMA N 5 Kota Komba |
| 180 | Petronia Jemimat | SMA N 5 Kota Komba |
| 181 | Yuliana Ndiang | SMA N 5 Kota Komba |
| 182 | Klaunengsia Damus | SMA N 5 Kota Komba |
| 183 | Rosalia Ani | SMA N 5 Kota Komba |
| 184 | Sesilia Laina | SMA N 5 Kota Komba |
| 185 | Trisna Suryati | SMA N 5 Kota Komba |
| 186 | Vinsensius Sudarman | SMA N 5 Kota Komba |
| 187 | Yosefaviani Kenanu | SMA N 5 Kota Komba |
| 188 | Yuliana Dinda | SMA N 5 Kota Komba |
| 189 | Ferdinanda Jenia | SMA N 5 Kota Komba |
| 190 | Agustinus Saman | SMA N 5 Kota Komba |
| 191 | Helenora Pale | SMA N 5 Kota Komba |
| 192 | Heribertus Kondamari | SMA N 5 Kota Komba |
| 193 | Yohane Jema | SMA N 5 Kota Komba |
| 194 | Margareta Sakina | SMA N 5 Kota Komba |
| 195 | Maria Juinda | SMA N 5 Kota Komba |
| 196 | Mariana Wela | SMA N 5 Kota Komba |
| 197 | Maria Goreti Ina | SMA N 5 Kota Komba |
| 198 | Marselina Kenanau | SMA N 5 Kota Komba |
| 199 | Mersiana Kinda | SMA N 5 Kota Komba |
| 200 | Patrisius Haryanto | SMA N 5 Kota Komba |
| 201 | Rikardus Sambal | SMA N 5 Kota Komba |
| 202 | Agustina Kordi | SMA N 5 Kota Komba |

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|-----|-------------------------|--------------------|
| 203 | Yulianti Amul | SMA N 5 Kota Komba |
| 204 | Rensi Ndia | SMA N 7 Kota Komba |
| 205 | Margareta Sonia | SMA N 7 Kota Komba |
| 206 | Maria Avelina Mei | SMA N 7 Kota Komba |
| 207 | Yosefina Nimas | SMA N 7 Kota Komba |
| 208 | Alberta F. A Bur | SMA N 7 Kota Komba |
| 209 | Alfan Aldino E Poi | SMA N 7 Kota Komba |
| 210 | Anastasia Tangang | SMA N 7 Kota Komba |
| 211 | Antonia A. C Jenadun | SMA N 7 Kota Komba |
| 212 | Arnoidus D Saman | SMA N 7 Kota Komba |
| 213 | Atanasius Rana | SMA N 7 Kota Komba |
| 214 | Cleofas R Dalton | SMA N 7 Kota Komba |
| 215 | Sanca H. A Jelurur | SMA N 7 Kota Komba |
| 216 | Katarina N Karninene | SMA N 7 Kota Komba |
| 217 | Gabrini Anggoja Jebarus | SMA N 7 Kota Komba |
| 218 | Hendrikus Jaiman | SMA N 7 Kota Komba |
| 219 | Minda S Ida | SMA N 7 Kota Komba |
| 220 | Rilafilista Mujur | SMA N 7 Kota Komba |
| 221 | Tarsisius Maikel Jaiman | SMA N 7 Kota Komba |
| 222 | Nursiana Sonya | SMA N 7 Kota Komba |
| 223 | Karolina S Lindang | SMA N 7 Kota Komba |
| 224 | Laura Y Kiong | SMA N 7 Kota Komba |
| 225 | Oktavianus Yesen | SMA N 7 Kota Komba |
| 226 | Roswita Jeluhut | SMA N 7 Kota Komba |
| 227 | Sbastiano J Niubeta | SMA N 7 Kota Komba |
| 228 | Sergius Travinus Junias | SMA N 7 Kota Komba |
| 229 | Theo sadus B Venan | SMA N 7 Kota Komba |
| 230 | Theresia H Jelamu | SMA N 7 Kota Komba |
| 231 | Valentinus D. A Ne'u | SMA N 7 Kota Komba |
| 232 | Vinsensius Rasino | SMA N 7 Kota Komba |
| 233 | Yakobus A Taji | SMA N 7 Kota Komba |
| 234 | Yoachtinus D Tarjen | SMA N 7 Kota Komba |
| 235 | Yohanes A Raga | SMA N 7 Kota Komba |
| 236 | Yohanes Frendelino | SMA N 7 Kota Komba |
| 237 | Yohanes K Jedius | SMA N 7 Kota Komba |
| 238 | Yohanes Yosan | SMA N 7 Kota Komba |
| 239 | Arnoldus Jansen | SMA N 7 Kota Komba |
| 240 | Agustina R Latong | SMA N 7 Kota Komba |
| 241 | Avelina Nanung | SMA N 7 Kota Komba |
| 242 | Aurelia Kurnia | SMA N 7 Kota Komba |
| 243 | Ayu Alisya | SMA N 7 Kota Komba |

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|-----|------------------|--------------------|
| 244 | Maria Kurniati | SMA N 7 Kota Komba |
| 245 | Fatima Namus | SMA N 7 Kota Komba |
| 246 | Flaviana Sintia | SMA N 7 Kota Komba |
| 247 | Florentina Lani | SMA N 7 Kota Komba |
| 248 | Fransiska Jetia | SMA N 7 Kota Komba |
| 249 | Gibrael Pepo | SMA N 7 Kota Komba |
| 250 | Gaudensius Papik | SMA N 7 Kota Komba |



Lampiran 03. Analisis Validitas dan Tingkat Kesukaran Kelompok Kecil

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| 2 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 4 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| 5 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 7 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 |
| 8 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 |
| 9 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |
| 10 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 |
| 11 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 12 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |
| 13 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 14 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 15 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 |
| 16 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 |
| 17 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| 19 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 20 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 21 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 22 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 |
| 23 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 24 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 25 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 |
| 26 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| 27 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 |
| 28 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 29 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| 30 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |
| 31 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 |
| 32 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 |
| 33 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| 34 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 |
| 35 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 |
| 36 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| 37 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 |
| 38 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 39 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| 40 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| 41 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 |
| 42 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 |
| 43 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 44 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 45 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 |
| 46 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 47 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |
| 48 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 |
| 49 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 50 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 |
| 51 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 |
| 52 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| 53 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 |
| 54 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 55 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| 56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 57 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 |
| 58 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 |
| 59 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| 60 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 |
| 61 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| 62 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 63 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 64 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 65 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| 66 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| 67 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 |
| 69 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 70 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 |
| 71 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 |
| 72 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 73 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| 74 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 |
| 75 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 76 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 77 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 78 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 |
| 79 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 |
| 80 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 81 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |
| 82 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 83 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| 84 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| 85 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 |
| 86 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 |
| 87 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 88 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| 89 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 90 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 91 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 92 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 93 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 |
| 94 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 95 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 |
| 96 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 97 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 |
| 98 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 99 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 |
| 100 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| 101 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 |
| 102 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 103 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 104 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 |
| 105 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 |
| 106 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 108 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 109 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| 110 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 |
| 111 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 112 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 113 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|------------------|------------------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 114 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| 115 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 |
| 116 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 |
| 117 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| 118 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 |
| 119 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 120 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |
| 121 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| 122 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| 123 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 |
| 124 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 125 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| Jumlah | 73 | 73 | 69 | 74 | 35 | 74 | 53 | 77 | 35 | 69 | 70 | 73 | 37 |
| r hitung | 0,327 | 0,365 | 0,328 | 0,382 | 0,484 | 0,386 | 0,381 | 0,391 | 0,536 | 0,228 | 0,469 | 0,334 | 0,403 |
| r tabel | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 |
| Status | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID |
| Indeks Kesukaran | 0,58 | 0,58 | 0,55 | 0,59 | 0,28 | 0,59 | 0,42 | 0,62 | 0,28 | 0,55 | 0,56 | 0,58 | 0,30 |
| Kriteria | SEDANG | SEDANG | SEDANG | SEDANG | SUKAR | SEDANG | SEDANG | SEDANG | SUKAR | SEDANG | SEDANG | SEDANG | SUKAR |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | | |
| 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 14 | |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 20 |
| 3 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 7 |
| 4 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 9 |
| 5 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 13 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 |
| 7 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 17 |
| 8 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 12 |
| 9 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 15 |
| 10 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 16 |
| 11 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 12 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 16 |
| 13 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 5 |
| 14 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 16 |
| 15 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 11 |
| 16 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 13 |
| 17 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 18 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 6 |
| 19 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 12 |
| 20 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 6 |
| 21 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 16 |
| 22 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 11 |
| 23 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 11 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | |
| 24 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 18 |
| 25 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 12 |
| 26 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 7 |
| 27 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 17 |
| 28 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 11 |
| 29 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 14 |
| 30 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 6 |
| 31 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 12 |
| 32 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 14 |
| 33 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 7 |
| 34 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 11 |
| 35 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 12 |
| 36 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 13 |
| 37 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 16 |
| 38 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 7 |
| 39 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 14 |
| 40 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 13 |
| 41 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 18 |
| 42 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 11 |
| 43 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 12 |
| 44 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 6 |
| 45 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 16 |
| 46 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 6 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | |
| 47 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 16 |
| 48 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 14 |
| 49 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 6 |
| 50 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 12 |
| 51 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 17 |
| 52 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 20 |
| 53 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 12 |
| 54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 6 |
| 55 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 19 |
| 56 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 57 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 13 |
| 58 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 12 |
| 59 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 13 |
| 60 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 18 |
| 61 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 13 |
| 62 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 18 |
| 63 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 6 |
| 64 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 17 |
| 65 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 10 |
| 66 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 17 |
| 67 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 68 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 5 |
| 69 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 11 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | |
| 70 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 18 |
| 71 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 12 |
| 72 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| 73 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 11 |
| 74 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 17 |
| 75 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 5 |
| 76 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 18 |
| 77 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 78 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 14 |
| 79 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 12 |
| 80 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 |
| 81 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 12 |
| 82 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 18 |
| 83 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 11 |
| 84 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 12 |
| 85 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 14 |
| 86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 7 |
| 87 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 10 |
| 88 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 89 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 6 |
| 90 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 17 |
| 91 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 18 |
| 92 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 9 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | |
| 93 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 6 |
| 94 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 95 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 17 |
| 96 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 97 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 11 |
| 98 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 99 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 12 |
| 100 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 8 |
| 101 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 17 |
| 102 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 103 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 104 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 10 |
| 105 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 16 |
| 106 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 9 |
| 107 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 5 |
| 108 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 10 |
| 109 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 17 |
| 110 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 13 |
| 111 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 |
| 112 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 6 |
| 113 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 16 |
| 114 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 17 |
| 115 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 15 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total |
|--------------|------------------|--------|--------|--------|--------|-------|--------|--------|-------|--------|-------|-------|-------|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | |
| 116 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 13 |
| 117 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 12 |
| 118 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 12 |
| 119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 120 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 18 |
| 121 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 19 |
| 122 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 18 |
| 123 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 12 |
| 124 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 6 |
| 125 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 10 |
| Jumlah | 73 | 62 | 77 | 41 | 63 | 36 | 55 | 62 | 32 | 59 | 36 | 33 | 1442 |
| Jumlah | 0,522 | 0,343 | 0,356 | 0,410 | 0,454 | 0,355 | 0,299 | 0,246 | 0,357 | 0,349 | 0,386 | 0,562 | |
| r hitung | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 | 0,176 | |
| r tabel | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | |
| IK | 0,58 | 0,50 | 0,62 | 0,33 | 0,50 | 0,29 | 0,44 | 0,50 | 0,26 | 0,47 | 0,29 | 0,26 | |
| Kriteria | SEDANG | SEDANG | SEDANG | SEDANG | SEDANG | SUKAR | SEDANG | SEDANG | SUKAR | SEDANG | SUKAR | SUKAR | |

Lampiran 04. Daya Beda Kelompok Kecil

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 2 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 |
| 52 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| 55 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| 121 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| 24 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 41 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 |
| 60 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 |
| 62 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 70 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 |
| 76 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 82 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 91 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 120 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |
| 122 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| 7 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 |
| 27 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 |
| 51 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 |
| 64 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 66 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| 74 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 |
| 90 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 95 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 |
| 101 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 |
| 109 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| 114 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| 10 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 |
| 12 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |
| 14 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 21 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| 37 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 |
| 45 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 |
| 47 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |
| 105 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 |
| 113 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 |
| 9 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |
| 115 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 |
| 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| 29 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| 32 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 |
| 39 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| 48 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 |
| 78 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 |
| 85 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 |
| 5 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 16 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 |
| 36 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| 40 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| 57 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 |
| 59 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| 61 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| 110 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 |
| 116 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 |
| 8 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 |
| 19 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 25 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 |
| 31 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 |
| 35 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 |
| 43 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 50 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 |
| 53 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 |
| 58 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 |
| 71 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 |
| 79 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 |
| 81 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |
| 84 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| 99 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 |
| 117 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 123 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 |
| 15 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 |
| 17 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 22 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 |
| 23 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 28 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 34 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 |
| 42 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 |
| 69 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 73 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| 83 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| 97 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 |
| 118 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 |
| 65 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| 87 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 104 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 |
| 108 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 125 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| 4 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| 92 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 106 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 88 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| 94 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 100 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 26 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| 33 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| 38 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 86 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| 20 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 30 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |
| 44 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 46 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 49 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 54 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 63 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 89 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 93 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 |
| 102 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 112 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 124 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 13 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 67 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| 68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|------|------|------|-------------|------|------|------|-------------|-------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 75 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 80 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 111 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 119 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 72 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 77 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 96 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 103 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 98 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| DAYA BEDA | 0,41 | 0,47 | 0,41 | 0,44 | 0,71 | 0,47 | 0,53 | 0,47 | 0,71 | 0,24 | 0,56 | 0,47 | 0,50 |
| KRITERIA | BAIK | BAIK | BAIK | BAIK | SANGAT BAIK | BAIK | BAIK | BAIK | SANGAT BAIK | CUKUP | BAIK | BAIK | BAIK |

Daya Beda

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|------|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | | |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 20 | Atas |
| 52 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 20 | Atas |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|------|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | | |
| 55 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 19 | Atas |
| 121 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 19 | Atas |
| 24 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 18 | Atas |
| 41 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 18 | Atas |
| 60 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 18 | Atas |
| 62 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 18 | Atas |
| 70 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 18 | Atas |
| 76 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 18 | Atas |
| 82 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 18 | Atas |
| 91 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 18 | Atas |
| 120 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 18 | Atas |
| 122 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 18 | Atas |
| 7 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 17 | Atas |
| 27 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 17 | Atas |
| 51 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 17 | Atas |
| 64 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 17 | Atas |
| 66 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 17 | Atas |
| 74 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 17 | Atas |
| 90 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 17 | Atas |
| 95 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 17 | Atas |
| 101 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 17 | Atas |
| 109 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 17 | Atas |
| 114 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 17 | Atas |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|------|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | | |
| 10 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 16 | Atas |
| 12 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 16 | Atas |
| 14 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 16 | Atas |
| 21 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 16 | Atas |
| 37 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 16 | Atas |
| 45 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 16 | Atas |
| 47 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 16 | Atas |
| 105 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 16 | Atas |
| 113 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 16 | Atas |
| 9 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 15 | |
| 115 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 15 | |
| 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 14 | |
| 29 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 14 | |
| 32 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 14 | |
| 39 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 14 | |
| 48 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 14 | |
| 78 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 14 | |
| 85 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 14 | |
| 5 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 13 | |
| 16 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 13 | |
| 36 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 13 | |
| 40 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 13 | |
| 57 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 13 | |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | |
| 59 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 13 |
| 61 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 13 |
| 110 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 13 |
| 116 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 13 |
| 8 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 12 |
| 19 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 12 |
| 25 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 12 |
| 31 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 12 |
| 35 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 12 |
| 43 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 12 |
| 50 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 12 |
| 53 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 12 |
| 58 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 12 |
| 71 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 12 |
| 79 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 12 |
| 81 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 12 |
| 84 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 12 |
| 99 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 12 |
| 117 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 12 |
| 123 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 12 |
| 15 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 11 |
| 17 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 11 |
| 22 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 11 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|-------|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | | |
| 23 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 11 | |
| 28 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 11 | |
| 34 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 11 | |
| 42 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 11 | |
| 69 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 11 | |
| 73 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 11 | |
| 83 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 11 | |
| 97 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 11 | |
| 118 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 11 | |
| 65 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 10 | |
| 87 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 10 | |
| 104 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 10 | |
| 108 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 10 | |
| 125 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 10 | |
| 4 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 9 | |
| 92 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 9 | |
| 106 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 9 | |
| 88 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | |
| 94 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | |
| 100 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 8 | |
| 3 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 7 | Bawah |
| 26 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 7 | Bawah |
| 33 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 7 | Bawah |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|-------|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | | |
| 38 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 7 | Bawah |
| 86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 7 | Bawah |
| 18 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 6 | Bawah |
| 20 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 6 | Bawah |
| 30 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 6 | Bawah |
| 44 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 6 | Bawah |
| 46 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | Bawah |
| 49 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 6 | Bawah |
| 54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 6 | Bawah |
| 63 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 6 | Bawah |
| 89 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 6 | Bawah |
| 93 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 6 | Bawah |
| 102 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | Bawah |
| 112 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 6 | Bawah |
| 124 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 6 | Bawah |
| 11 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | Bawah |
| 13 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 5 | Bawah |
| 67 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | Bawah |
| 68 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 5 | Bawah |
| 75 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | Bawah |
| 80 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | Bawah |
| 107 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | Bawah |
| 111 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | Bawah |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total | |
|--------------|------------------|------|------|------|------|------|------|--------|------|------|------|-------------|-------|-------|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | | |
| 119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | Bawah |
| 72 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | Bawah |
| 77 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | Bawah |
| 96 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | Bawah |
| 103 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | Bawah |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | Bawah |
| 98 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | Bawah |
| 56 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | Bawah |
| DAYA BEDA | 0,71 | 0,41 | 0,41 | 0,50 | 0,56 | 0,41 | 0,41 | 0,18 | 0,41 | 0,41 | 0,47 | 0,71 | | |
| KRITERIA | SANGAT BAIK | BAIK | BAIK | BAIK | BAIK | BAIK | BAIK | KURANG | BAIK | BAIK | BAIK | SANGAT BAIK | | |



Lampiran 05. Efektivitas Option Kelompok Kecil

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1 | A | E | E | B | C | D | C | D | A | E | A | C | B |
| 2 | A | C | E | C | A | C | A | D | D | E | A | B | C |
| 3 | C | B | D | A | E | B | B | E | C | E | D | E | A |
| 4 | A | C | A | E | A | A | D | D | E | D | A | E | C |
| 5 | E | C | E | B | C | C | C | D | A | E | A | A | E |
| 6 | B | A | C | D | E | D | E | A | C | E | B | D | D |
| 7 | D | C | E | A | A | C | A | D | B | E | C | B | C |
| 8 | A | C | B | B | B | C | A | C | E | E | A | C | E |
| 9 | A | C | E | B | D | C | A | D | E | B | A | B | A |
| 10 | A | D | E | B | A | C | A | E | D | C | A | B | E |
| 11 | A | C | D | C | C | E | D | D | A | C | E | D | D |
| 12 | E | C | E | E | A | C | A | D | B | A | A | A | B |
| 13 | E | C | A | A | E | A | C | A | D | C | D | B | E |
| 14 | A | A | D | B | C | C | A | D | B | E | A | B | D |
| 15 | E | C | E | B | D | B | A | D | C | D | B | B | A |
| 16 | A | C | B | E | B | C | D | B | B | E | A | B | C |
| 17 | A | C | D | B | E | C | A | E | D | E | C | D | A |
| 18 | D | B | C | D | C | A | B | C | E | E | A | C | A |
| 19 | E | C | E | B | A | C | B | D | E | A | C | B | E |
| 20 | A | C | D | A | D | C | E | A | E | D | A | E | B |
| 21 | A | C | E | C | A | D | C | D | B | E | A | B | E |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 22 | D | A | A | B | E | C | D | D | B | C | A | B | D |
| 23 | A | E | E | B | E | C | E | D | A | B | E | A | C |
| 24 | A | C | D | B | E | C | A | D | B | E | A | E | D |
| 25 | A | C | B | B | C | B | A | B | C | E | B | B | A |
| 26 | C | B | D | B | B | A | E | D | A | E | A | D | B |
| 27 | A | C | E | A | A | C | A | E | B | E | A | B | E |
| 28 | E | C | E | B | D | E | E | A | C | E | B | C | A |
| 29 | A | D | E | B | E | C | D | D | C | E | A | E | C |
| 30 | A | A | C | D | E | D | D | B | B | E | D | B | A |
| 31 | A | C | D | B | D | C | A | D | A | D | E | B | D |
| 32 | A | C | A | B | E | C | C | D | D | C | A | B | E |
| 33 | A | B | E | A | C | B | B | B | C | E | A | E | B |
| 34 | D | C | B | C | D | C | A | D | E | E | C | B | E |
| 35 | C | E | E | B | B | A | A | C | B | C | D | B | E |
| 36 | A | C | E | B | E | C | E | A | B | E | A | D | D |
| 37 | A | C | D | B | E | E | A | D | B | E | B | B | A |
| 38 | D | A | E | B | E | E | D | B | A | A | A | E | B |
| 39 | E | C | A | B | C | C | A | E | E | E | A | D | D |
| 40 | A | C | E | B | D | C | E | D | B | A | A | A | B |
| 41 | A | C | C | B | A | D | D | D | C | B | A | B | D |
| 42 | A | B | E | A | A | E | A | B | D | E | A | E | C |
| 43 | D | D | E | B | E | C | C | D | A | C | B | B | A |
| 44 | C | C | B | B | B | A | A | A | C | D | A | C | E |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 45 | A | D | E | E | A | C | A | D | D | B | A | B | D |
| 46 | A | A | E | C | D | B | B | D | A | E | D | D | A |
| 47 | B | C | A | B | A | C | A | D | E | D | A | B | E |
| 48 | A | E | E | D | C | E | A | D | C | E | A | E | B |
| 49 | D | D | E | B | E | C | D | C | D | A | D | B | C |
| 50 | A | C | E | A | D | D | A | D | C | E | A | E | B |
| 51 | E | B | E | B | A | C | C | D | B | C | A | B | D |
| 52 | A | C | B | B | A | C | A | D | B | E | A | B | E |
| 53 | B | A | E | B | C | A | A | B | E | E | C | A | D |
| 54 | E | C | D | A | D | C | D | D | C | B | E | B | A |
| 55 | A | C | E | B | E | C | E | D | B | E | A | B | A |
| 56 | C | E | A | C | B | E | C | A | D | E | B | D | B |
| 57 | D | C | E | B | E | C | B | D | A | E | A | B | E |
| 58 | A | B | E | B | C | C | D | E | B | E | A | B | C |
| 59 | B | C | B | D | B | B | A | D | E | D | A | C | B |
| 60 | A | D | E | B | A | C | E | D | B | E | D | B | D |
| 61 | A | A | E | B | D | E | A | D | D | E | D | B | D |
| 62 | E | C | E | B | A | C | D | D | B | E | A | B | D |
| 63 | A | C | C | A | B | A | B | D | D | C | E | B | A |
| 64 | A | C | A | B | C | C | A | D | B | E | A | A | D |
| 65 | B | C | E | B | E | D | C | D | C | E | B | B | A |
| 66 | A | C | E | E | D | C | A | A | B | E | A | B | D |
| 67 | C | B | B | C | E | C | B | C | A | E | D | B | E |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 68 | B | E | C | A | C | B | E | B | D | E | A | E | D |
| 69 | E | A | E | B | A | C | D | D | C | D | C | B | B |
| 70 | D | C | D | B | A | C | A | D | E | E | A | B | C |
| 71 | A | C | A | B | B | E | A | D | C | D | A | B | D |
| 72 | B | D | C | E | E | C | E | D | A | C | B | B | A |
| 73 | A | E | E | B | D | C | D | D | E | A | A | C | B |
| 74 | A | B | E | B | A | A | A | D | C | E | A | B | D |
| 75 | A | A | B | A | D | C | C | E | D | A | E | B | E |
| 76 | C | C | E | B | B | C | A | D | B | E | A | D | D |
| 77 | B | C | A | D | C | B | A | A | D | C | E | B | B |
| 78 | A | C | D | B | A | D | D | D | A | E | B | A | D |
| 79 | A | E | E | B | B | C | B | D | C | A | A | B | C |
| 80 | D | D | C | C | D | C | C | B | E | B | E | B | A |
| 81 | A | C | E | B | E | E | A | D | C | D | A | B | A |
| 82 | A | C | B | B | A | C | E | D | B | E | A | B | D |
| 83 | A | C | D | B | C | A | A | E | A | E | A | C | D |
| 84 | B | C | E | E | E | C | B | D | A | E | E | B | D |
| 85 | A | A | E | B | D | C | A | C | C | E | A | B | A |
| 86 | A | B | C | B | E | C | E | D | D | E | C | A | D |
| 87 | A | C | A | B | A | B | D | A | E | D | E | B | E |
| 88 | C | C | E | B | A | D | C | B | B | A | A | B | C |
| 89 | B | C | B | B | C | C | B | B | A | E | D | C | B |
| 90 | A | C | E | A | A | C | E | D | B | C | A | B | D |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 91 | A | C | D | B | A | C | B | D | B | E | A | B | D |
| 92 | A | C | E | B | B | A | A | E | C | E | B | D | B |
| 93 | E | E | E | D | D | C | E | D | B | D | E | B | A |
| 94 | A | E | A | B | B | B | A | C | D | D | A | A | B |
| 95 | A | C | E | C | A | C | D | D | B | A | A | B | D |
| 96 | A | A | E | B | C | E | E | D | A | B | C | D | E |
| 97 | D | E | C | B | E | C | A | E | D | A | A | B | E |
| 98 | B | C | B | A | A | E | C | A | D | A | B | A | C |
| 99 | E | B | E | B | D | C | B | D | E | E | A | B | C |
| 100 | A | D | E | E | B | B | A | D | A | D | A | E | B |
| 101 | C | C | E | B | A | C | A | D | B | C | E | B | D |
| 102 | A | C | E | A | C | A | D | C | A | B | E | B | E |
| 103 | B | E | A | D | A | C | E | D | C | E | D | A | E |
| 104 | A | A | E | C | E | D | A | D | C | E | B | B | A |
| 105 | A | C | E | E | A | C | B | B | B | E | D | B | D |
| 106 | A | C | D | B | D | C | A | A | E | E | C | E | A |
| 107 | D | D | C | E | C | B | B | E | D | C | A | C | B |
| 108 | B | B | E | B | D | C | D | D | A | D | B | B | C |
| 109 | A | C | A | E | A | C | A | D | B | E | A | B | E |
| 110 | A | C | E | B | B | C | A | D | C | E | C | B | C |
| 111 | C | E | B | C | D | C | C | D | A | E | B | D | B |
| 112 | A | A | A | D | E | A | E | D | C | B | E | A | B |
| 113 | A | E | E | A | A | C | B | D | B | E | C | B | A |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | |
|--------------|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 114 | A | C | C | B | A | C | A | B | B | C | A | B | D |
| 115 | B | C | E | B | C | C | A | D | D | E | A | A | D |
| 116 | A | C | E | C | B | E | A | A | E | E | A | B | C |
| 117 | A | C | E | B | D | B | E | D | A | E | A | E | C |
| 118 | A | B | E | B | A | C | B | D | C | D | A | B | B |
| 119 | A | C | E | D | C | C | D | E | A | D | B | B | E |
| 120 | A | C | E | B | A | C | C | D | B | A | C | B | D |
| 121 | A | C | E | B | B | C | A | D | B | C | A | B | D |
| 122 | A | C | E | B | A | D | A | C | C | E | A | E | D |
| 123 | C | C | E | E | E | C | A | D | D | E | A | B | A |
| 124 | E | D | B | C | C | A | A | B | E | B | D | A | C |
| 125 | B | C | E | B | D | C | E | D | A | E | A | C | D |
| KUNCI | A | C | E | B | A | C | A | D | B | E | A | B | D |
| 5% | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 |
| Option A | 58,4 | 11,2 | 12 | 12,8 | 28,8 | 11,2 | 42,4 | 10,4 | 19,2 | 10,4 | 56 | 11,2 | 19,2 |
| Kriteria | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF |
| Option B | 12 | 10,4 | 11,2 | 59,2 | 15,2 | 10,4 | 13,6 | 11,2 | 28 | 8 | 12,8 | 58,4 | 17,6 |
| Kriteria | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF |
| Option C | 8,8 | 58,4 | 9,6 | 10,4 | 16 | 59,2 | 12 | 7,2 | 20,8 | 12 | 9,6 | 8,8 | 15,2 |
| Kriteria | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF |
| Option D | 9,6 | 8,8 | 12 | 8 | 18,4 | 8,8 | 16 | 61,6 | 16,8 | 13,6 | 10,4 | 9,6 | 29,6 |
| Kriteria | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF |
| Option E | 11,2 | 11,2 | 55,2 | 9,6 | 21,6 | 10,4 | 16 | 9,6 | 15,2 | 55,2 | 11,2 | 12 | 18,4 |

Efektivitas Option

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 1 | A | A | E | D | B | A | D | C | D | E | B | E |
| 2 | D | A | E | E | B | A | A | C | E | E | C | E |
| 3 | D | B | C | D | B | D | A | C | D | C | A | B |
| 4 | E | A | B | D | C | B | A | B | C | E | A | D |
| 5 | D | A | E | A | B | C | A | C | A | D | B | A |
| 6 | B | D | A | A | D | E | D | E | C | E | C | A |
| 7 | D | A | E | B | A | B | A | B | D | E | A | E |
| 8 | C | A | D | C | B | A | C | C | B | E | E | B |
| 9 | D | A | E | E | A | B | D | C | E | E | C | B |
| 10 | D | A | E | C | B | C | A | C | E | E | A | C |
| 11 | A | B | E | C | E | C | B | A | C | A | B | C |
| 12 | D | A | C | D | B | A | A | E | D | E | C | E |
| 13 | B | C | E | A | E | C | E | C | E | E | C | C |
| 14 | D | A | C | E | B | E | A | D | C | B | D | E |
| 15 | D | E | E | C | B | D | C | C | E | E | B | D |
| 16 | D | A | E | A | D | B | D | C | E | E | A | B |
| 17 | D | A | D | E | B | C | A | B | C | D | B | D |
| 18 | E | A | B | D | A | A | E | C | B | D | A | D |
| 19 | C | B | E | E | C | B | A | D | E | E | C | E |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 20 | D | C | A | B | E | B | E | C | E | B | E | A |
| 21 | D | A | E | D | B | E | A | A | B | E | D | E |
| 22 | A | D | E | C | E | C | A | E | D | A | A | B |
| 23 | D | E | E | A | B | A | D | C | A | E | B | C |
| 24 | D | A | E | E | B | D | A | C | A | E | B | C |
| 25 | B | A | E | C | A | A | A | E | C | E | B | E |
| 26 | C | D | E | C | B | E | B | C | B | A | C | D |
| 27 | D | B | E | E | D | A | A | B | A | E | D | E |
| 28 | D | C | E | C | B | C | A | C | E | E | A | C |
| 29 | E | A | E | E | C | A | D | C | D | C | A | C |
| 30 | C | A | C | D | E | B | A | A | A | B | D | A |
| 31 | D | B | E | B | A | B | A | D | D | C | B | A |
| 32 | D | A | E | A | B | D | C | C | B | E | A | D |
| 33 | C | A | D | C | B | E | C | E | D | B | E | D |
| 34 | D | E | E | E | A | B | A | B | D | C | E | C |
| 35 | B | A | B | E | B | E | A | C | A | E | B | E |
| 36 | A | B | A | C | D | A | D | C | E | E | A | B |
| 37 | D | A | E | D | B | C | A | C | B | E | A | B |
| 38 | D | C | E | E | A | B | A | D | B | A | B | A |
| 39 | D | A | C | E | B | D | A | C | E | E | C | A |
| 40 | E | A | E | A | C | B | A | E | C | E | C | E |
| 41 | D | A | E | E | B | C | A | C | A | E | A | E |
| 42 | D | A | D | B | A | C | A | D | D | A | A | C |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 43 | D | A | E | E | A | A | A | A | E | E | D | C |
| 44 | B | D | A | C | B | E | C | C | A | C | B | C |
| 45 | D | A | E | E | B | C | A | B | A | E | B | C |
| 46 | C | B | A | D | E | A | D | D | E | C | B | E |
| 47 | D | A | E | E | B | D | A | D | A | E | A | D |
| 48 | D | A | E | A | B | A | A | C | A | E | E | A |
| 49 | B | C | B | D | B | E | B | E | C | B | A | A |
| 50 | D | A | C | E | B | D | B | C | E | B | E | B |
| 51 | A | A | E | B | B | A | D | C | D | E | B | E |
| 52 | D | B | E | E | B | A | D | C | E | E | A | E |
| 53 | D | B | E | C | B | C | A | C | D | A | A | C |
| 54 | C | D | C | D | A | B | D | A | D | E | C | D |
| 55 | D | A | E | A | B | A | A | D | D | E | A | D |
| 56 | E | B | A | D | C | A | B | A | B | D | E | A |
| 57 | D | C | E | E | D | B | A | D | C | A | A | D |
| 58 | C | A | D | A | B | C | E | C | A | B | B | E |
| 59 | D | E | E | E | B | A | A | C | D | E | D | A |
| 60 | D | A | E | C | B | A | A | D | D | C | A | B |
| 61 | A | A | E | B | B | E | D | C | A | E | D | C |
| 62 | D | E | B | E | B | D | A | E | D | C | A | E |
| 63 | B | D | E | A | E | B | D | B | E | E | B | A |
| 64 | D | A | C | E | A | A | A | B | D | B | C | E |
| 65 | D | E | E | D | E | C | B | C | A | E | D | A |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 66 | D | B | E | E | C | E | C | C | A | E | A | E |
| 67 | D | C | A | D | B | D | B | A | C | A | E | D |
| 68 | A | D | E | C | D | B | C | C | B | D | E | D |
| 69 | D | E | E | C | D | B | A | B | D | E | B | D |
| 70 | D | A | D | E | B | E | D | C | D | E | A | E |
| 71 | B | E | E | C | B | C | D | C | B | E | D | B |
| 72 | E | B | A | D | A | E | A | B | A | B | E | D |
| 73 | D | E | E | A | B | D | E | C | A | E | E | A |
| 74 | C | B | E | E | B | A | B | C | A | D | A | E |
| 75 | A | C | B | E | A | E | B | D | C | E | C | D |
| 76 | D | A | E | C | B | A | B | C | D | C | A | C |
| 77 | D | D | A | D | E | B | C | A | E | A | B | C |
| 78 | D | A | E | B | B | C | A | C | E | E | D | C |
| 79 | B | A | E | E | D | A | C | C | E | A | B | A |
| 80 | C | A | C | E | C | D | A | E | C | B | E | B |
| 81 | D | A | E | C | A | E | B | E | A | E | E | B |
| 82 | D | B | E | A | B | A | B | C | E | B | A | E |
| 83 | E | A | E | A | B | E | B | C | B | D | B | C |
| 84 | D | E | E | E | A | D | C | A | D | B | A | A |
| 85 | C | A | D | E | B | E | A | C | E | E | B | D |
| 86 | B | C | A | D | E | B | C | C | A | D | C | B |
| 87 | A | A | D | E | B | C | A | D | A | B | C | E |
| 88 | D | E | A | C | E | C | E | D | A | D | D | A |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 89 | C | A | B | D | E | B | D | C | A | B | E | A |
| 90 | D | E | E | C | D | A | A | D | D | A | A | E |
| 91 | D | B | E | A | B | A | B | C | D | A | B | E |
| 92 | A | A | E | C | A | E | A | E | C | D | C | D |
| 93 | E | B | C | B | C | D | B | C | C | A | C | B |
| 94 | D | A | E | C | E | A | C | B | E | A | D | A |
| 95 | D | C | E | E | B | D | A | B | D | B | D | E |
| 96 | C | D | A | D | A | B | C | B | A | B | B | C |
| 97 | D | E | E | E | B | C | A | B | A | E | B | C |
| 98 | B | D | E | A | D | E | D | B | A | C | D | C |
| 99 | D | A | E | E | D | E | D | A | D | C | D | A |
| 100 | C | A | B | D | B | D | E | C | B | C | D | A |
| 101 | D | A | B | E | B | E | D | C | D | C | D | E |
| 102 | A | B | E | C | A | A | D | D | E | C | B | D |
| 103 | B | C | D | C | A | C | D | D | E | D | C | D |
| 104 | D | E | E | D | B | D | C | C | E | D | E | D |
| 105 | D | E | B | E | C | A | B | C | E | E | A | E |
| 106 | D | E | A | B | B | E | B | E | C | E | D | B |
| 107 | E | A | E | A | D | A | B | E | A | E | B | C |
| 108 | D | A | E | D | E | B | A | B | A | E | D | C |
| 109 | D | A | C | E | B | D | B | A | D | A | A | E |
| 110 | A | C | E | D | B | E | B | C | A | E | C | A |
| 111 | C | D | E | C | E | C | A | E | C | B | C | A |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|--------------|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 112 | D | A | E | D | E | B | D | C | A | D | C | A |
| 113 | D | B | E | E | B | A | B | C | A | D | A | E |
| 114 | B | E | E | E | A | A | A | D | D | E | C | E |
| 115 | D | A | E | D | B | D | C | C | E | E | B | C |
| 116 | D | E | E | A | B | A | A | D | C | E | D | A |
| 117 | D | D | B | D | B | E | A | C | B | E | D | A |
| 118 | A | A | E | C | D | B | E | C | B | C | A | A |
| 119 | E | C | A | D | E | C | D | A | B | C | E | D |
| 120 | D | A | E | E | C | A | A | B | D | E | C | D |
| 121 | D | A | C | B | B | A | E | C | A | E | A | E |
| 122 | D | A | E | A | B | A | A | C | D | C | B | E |
| 123 | D | B | E | E | A | D | C | D | E | A | A | B |
| 124 | D | A | D | A | B | E | A | C | A | D | D | B |
| 125 | B | E | A | D | E | C | B | E | D | C | A | B |
| KUNCI | D | A | E | E | B | A | A | C | D | E | A | E |
| 5% | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 | 6,25 |
| Option A | 10,4 | 49,6 | 12 | 16 | 16,8 | 28,8 | 44 | 9,6 | 26,4 | 12,8 | 28,8 | 21,6 |
| Kriteria | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF |
| Option B | 11,2 | 15,2 | 8,8 | 8 | 50,4 | 18,4 | 17,6 | 13,6 | 12 | 13,6 | 23,2 | 14,4 |
| Kriteria | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF |
| Option C | 12 | 10,4 | 9,6 | 20,8 | 8 | 18,4 | 12,8 | 49,6 | 13,6 | 14,4 | 17,6 | 19,2 |
| Kriteria | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF |
| Option D | 58,4 | 9,6 | 8 | 22,4 | 10,4 | 15,2 | 18,4 | 15,2 | 25,6 | 12 | 16,8 | 18,4 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|--------------|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| Kriteria | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF |
| Option E | 8 | 15,2 | 61,6 | 32,8 | 14,4 | 19,2 | 7,2 | 12 | 22,4 | 47,2 | 12,8 | 26,4 |



Lampiran 06. Validitas dan Tingkat Kesukaran Kelompok Besar

| No Responden | Nomor Butir Soal | | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 | 14 | |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | |
| 4 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 5 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| 7 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | |
| 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | |
| 9 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 10 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | |
| 11 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | |
| 12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | |
| 13 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | |
| 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | |
| 15 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | |
| 16 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | |
| 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | |
| 18 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 19 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | |
| 21 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | | |
|-----------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 | 14 | |
| 22 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | |
| 23 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | |
| 24 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | |
| 25 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 26 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | |
| 27 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 28 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | |
| 29 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| 30 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 31 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | |
| 32 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | |
| 33 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| 34 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | |
| 35 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | |
| 36 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | |
| 37 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | |
| 38 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 39 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | |
| 40 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 41 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | |
| 42 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | |
| 43 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | |
| 44 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 | 14 | |
| 45 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | |
| 46 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 47 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | |
| 48 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | |
| 49 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 50 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 51 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | |
| 52 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | |
| 53 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | |
| 54 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| 55 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | |
| 56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 57 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | |
| 58 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 59 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 60 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | |
| 61 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 62 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 64 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | |
| 65 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | |
| 66 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | | |
|-----------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 | 14 | |
| 68 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | |
| 69 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | |
| 70 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 71 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | |
| 72 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | |
| 73 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 74 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | |
| 75 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | |
| 76 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | |
| 77 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | |
| 78 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 79 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | |
| 80 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | |
| 81 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | |
| 82 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | |
| 83 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 84 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | |
| 85 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | |
| 86 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | |
| 87 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 88 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 89 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| 90 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | | |
|-----------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 | 14 | |
| 91 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | |
| 92 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | |
| 93 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | |
| 94 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | |
| 95 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | |
| 96 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 97 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 98 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 99 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | |
| 100 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 101 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | |
| 102 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| 103 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | |
| 104 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | |
| 105 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | |
| 106 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| 107 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | |
| 108 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | |
| 109 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | |
| 110 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | |
| 111 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | |
| 112 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | |
| 113 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | | |
|-----------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 | 14 | |
| 114 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | |
| 115 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | |
| 116 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | |
| 117 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | |
| 118 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | |
| 119 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| 120 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | |
| 121 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | |
| 122 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | |
| 123 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 124 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 125 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | |
| 126 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | |
| 127 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 128 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | |
| 129 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | |
| 130 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 131 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | |
| 132 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | |
| 133 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | |
| 134 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | |
| 135 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | |
| 136 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | | |
|-----------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 | 14 | |
| 137 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | |
| 138 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 139 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | |
| 140 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | |
| 141 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | |
| 142 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | |
| 143 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | |
| 144 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | |
| 145 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | |
| 146 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 147 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | |
| 148 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | |
| 149 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | |
| 150 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 151 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | |
| 152 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | |
| 153 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | |
| 154 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 155 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 156 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| 157 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | |
| 158 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | |
| 159 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 | 14 | |
| 160 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | |
| 161 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 162 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | |
| 163 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| 164 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | |
| 165 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | |
| 166 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 167 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | |
| 168 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| 169 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | |
| 170 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | |
| 171 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | |
| 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | |
| 173 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | |
| 174 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | |
| 175 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | |
| 176 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 177 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | |
| 178 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | |
| 179 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | |
| 180 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 181 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | |
| 182 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 | 14 | |
| 183 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | |
| 184 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | |
| 185 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | |
| 186 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 187 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | |
| 188 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | |
| 189 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | |
| 190 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 191 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | |
| 192 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | |
| 193 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| 194 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | |
| 195 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | |
| 196 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 197 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | |
| 198 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | |
| 199 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | |
| 200 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | |
| 201 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | |
| 202 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | |
| 203 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | |
| 204 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 205 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | | |
|-----------------|------------------|---|---|---|---|---|---|---|---|----|----|----|----|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 | 14 | |
| 206 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | |
| 207 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | |
| 208 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | |
| 209 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | |
| 210 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | |
| 211 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| 212 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | |
| 213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| 214 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | |
| 215 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | |
| 216 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | |
| 217 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | |
| 218 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| 219 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | |
| 220 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | |
| 221 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | |
| 222 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | |
| 223 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | |
| 224 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | |
| 225 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 226 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | |
| 227 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | |
| 228 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | | |
|--------------|------------------|----|-----|-----|----|-----|-----|-----|----|-----|-----|-----|----|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 | 14 | |
| 229 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | |
| 230 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | |
| 231 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | |
| 232 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | |
| 233 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | |
| 234 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | |
| 235 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | |
| 236 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | |
| 237 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | |
| 238 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | |
| 239 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | |
| 240 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | |
| 241 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | |
| 242 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | |
| 243 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | |
| 244 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | |
| 245 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | |
| 246 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | |
| 247 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| 248 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | |
| 249 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | |
| 250 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | |
| Jumlah | 169 | 77 | 118 | 117 | 77 | 118 | 115 | 171 | 75 | 118 | 115 | 117 | 76 | |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | | |
|--------------|------------------|-------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|-------|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 | 14 | |
| r hitung | 0,391 | 0,539 | 0,397 | 0,543 | 0,362 | 0,387 | 0,374 | 0,372 | 0,390 | 0,543 | 0,508 | 0,362 | 0,386 | |
| r tabel | 0,138 | 0,138 | 0,138 | 0,138 | 0,138 | 0,138 | 0,138 | 0,138 | 0,138 | 0,138 | 0,138 | 0,138 | 0,138 | |
| Status | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | |
| IK | 0,7 | 0,3 | 0,5 | 0,5 | 0,3 | 0,5 | 0,5 | 0,7 | 0,3 | 0,5 | 0,5 | 0,5 | 0,3 | |
| Kriteria | SEDANG | SUKAR | SEDANG | SEDANG | SUKAR | SEDANG | SEDANG | SEDANG | SUKAR | SEDANG | SEDANG | SEDANG | SUKAR | |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|--|
| | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 | |
| 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | |
| 2 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | |
| 3 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | |
| 4 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 5 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 7 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | |
| 8 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 9 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | |
| 10 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| 11 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 12 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 14 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | |

| No Responden | Nomor Butir Soal | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|
| | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 15 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| 16 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 |
| 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| 20 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 |
| 21 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 22 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| 23 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| 24 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 26 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 |
| 27 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 28 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| 29 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 30 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 31 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| 32 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 |
| 33 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| 34 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| 35 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| 36 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 |
| 37 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | |
|-----------------|------------------|----|----|----|----|----|----|----|----|----|
| | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 39 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 |
| 40 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| 41 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 42 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| 43 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 |
| 44 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 |
| 45 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 |
| 46 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 47 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| 48 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 49 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 50 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 |
| 51 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 |
| 52 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| 53 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| 54 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| 55 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 |
| 56 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| 58 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 59 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 60 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|
| | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 61 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 |
| 62 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| 63 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 64 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 65 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 66 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 67 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 68 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 69 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 70 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 |
| 71 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 72 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 |
| 73 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 74 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 75 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| 76 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| 77 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 78 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| 79 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 80 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 |
| 81 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| 82 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 |
| 83 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|
| | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 84 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 85 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| 86 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 |
| 87 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| 88 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 89 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 90 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| 91 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| 92 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| 93 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 |
| 94 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| 95 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 96 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 97 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| 98 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 99 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 |
| 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 101 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| 102 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 103 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| 104 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 105 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 |
| 106 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|
| | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 107 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |
| 108 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 109 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 |
| 110 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 |
| 111 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 |
| 112 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| 113 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 114 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| 115 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 116 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 117 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 118 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| 119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 120 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 |
| 121 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 122 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 123 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 |
| 124 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 |
| 125 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| 126 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| 127 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 128 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 |
| 129 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|
| | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 130 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 131 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 132 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 |
| 133 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 |
| 134 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 135 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 |
| 136 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 137 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 138 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 139 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 |
| 140 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| 141 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 142 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 |
| 143 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 144 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 145 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 146 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 147 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| 148 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 149 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 |
| 150 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 151 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 |
| 152 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|
| | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 153 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 |
| 154 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| 155 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 156 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 157 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 |
| 158 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 |
| 159 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 |
| 160 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 161 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 162 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 163 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 |
| 164 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| 165 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 |
| 166 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 |
| 167 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| 168 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 169 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 |
| 170 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 |
| 171 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 172 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 173 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 174 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 |
| 175 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |

| No Responden | Nomor Butir Soal | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|
| | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 176 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| 177 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 178 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 |
| 179 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 |
| 180 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 181 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 |
| 182 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| 183 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| 184 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| 185 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 186 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 |
| 187 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 |
| 188 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 |
| 189 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 190 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| 191 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 192 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| 193 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 194 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| 195 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| 196 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 197 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 |
| 198 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|
| | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 199 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 200 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 |
| 201 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| 202 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| 203 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| 204 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 205 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 |
| 206 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| 207 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 208 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 209 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 210 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 |
| 211 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 212 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 |
| 213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 214 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 |
| 215 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 216 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 217 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 218 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 220 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 |
| 221 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |

| No Responden | Nomor Butir Soal | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|
| | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 222 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 |
| 223 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 224 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 |
| 225 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 226 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 227 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 228 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 229 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| 230 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 231 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 232 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 233 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| 234 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 235 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 |
| 236 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 |
| 237 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 238 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| 239 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 240 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 |
| 241 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 |
| 242 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 |
| 243 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |
| 244 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | |
|--------------|------------------|--------|--------|--------|-------|-------|-------|--------|-------|-------|
| | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 245 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 |
| 246 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 247 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 248 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 249 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 250 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Jumlah | 117 | 116 | 114 | 173 | 76 | 76 | 75 | 112 | 75 | 76 |
| r hitung | 0,580 | 0,501 | 0,633 | 0,366 | 0,370 | 0,379 | 0,391 | 0,408 | 0,333 | 0,372 |
| r tabel | 0,138 | 0,138 | 0,138 | 0,138 | 0,138 | 0,138 | 0,138 | 0,138 | 0,138 | 0,138 |
| Status | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID | VALID |
| IK | 0,5 | 0,5 | 0,5 | 0,7 | 0,3 | 0,3 | 0,3 | 0,4 | 0,3 | 0,3 |
| Kriteria | SEDANG | SEDANG | SEDANG | SEDANG | SUKAR | SUKAR | SUKAR | SEDANG | SUKAR | SUKAR |

Lampiran 07. Daya Beda Kelompok Besar

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | |
| 12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| 49 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| 124 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 233 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 21 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 |
| 99 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 154 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 160 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| 212 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| 241 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 |
| 15 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 26 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| 40 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 42 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 |
| 65 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 |
| 62 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 |
| 91 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 101 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| 110 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| 140 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 |
| 164 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 |
| 166 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| 182 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 183 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 |
| 190 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 202 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 224 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 |
| 238 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 |
| 249 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 |
| 7 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| 9 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| 20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 |
| 23 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| 28 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 |
| 34 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 |
| 60 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 |
| 72 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| 80 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| 86 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 107 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 |
| 112 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 |
| 114 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 |
| 120 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 |
| 142 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 |
| 149 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |
| 152 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 |
| 167 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 |
| 174 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| 176 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 |
| 195 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 |
| 203 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| 210 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| 5 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 |
| 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 |
| 11 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 |
| 32 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 |
| 47 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| 103 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 |
| 109 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| 116 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| 132 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 151 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 |
| 159 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| 187 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| 214 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 |
| 220 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 235 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 |
| 44 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| 126 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 |
| 206 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| 36 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 |
| 52 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 |
| 57 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| 135 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |
| 201 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| 245 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 |
| 24 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 |
| 31 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 |
| 35 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| 43 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| 55 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 74 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 |
| 111 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 118 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |
| 128 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| 147 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 |
| 192 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| 199 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 |
| 215 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 |
| 10 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 |
| 33 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 37 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 |
| 45 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 53 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 |
| 64 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 |
| 68 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 |
| 82 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| 85 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 |
| 92 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |
| 121 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 |
| 125 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 |
| 133 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| 139 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |
| 145 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| 148 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| 158 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 |
| 162 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| 165 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| 175 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 |
| 178 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |
| 179 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 |
| 184 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 |
| 222 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 |
| 230 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 |
| 236 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 |
| 242 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 |
| 243 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| 248 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 16 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| 22 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 |
| 39 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| 50 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 51 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 |
| 76 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| 93 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| 105 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 |
| 123 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 141 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| 143 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 |
| 153 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| 169 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| 188 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 |
| 191 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 |
| 194 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |
| 197 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 204 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 205 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 |
| 208 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 |
| 231 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 |
| 240 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 |
| 244 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 |
| 41 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 54 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 69 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 |
| 70 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 71 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| 79 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| 84 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| 90 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 122 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 |
| 134 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| 144 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 |
| 155 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| 157 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| 170 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 173 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 |
| 177 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 181 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| 185 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 |
| 189 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 200 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 221 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 |
| 228 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| 229 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 |
| 234 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 18 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 27 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| 29 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 48 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 59 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 88 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| 95 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| 117 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 |
| 129 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 137 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| 171 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| 225 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 232 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 |
| 237 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 46 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 61 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 94 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| 115 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 163 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 4 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 13 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 30 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 38 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 66 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 77 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 |
| 78 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 81 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| 96 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 97 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 102 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 106 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 172 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| 186 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 193 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 198 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| 207 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 |
| 216 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| 217 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 219 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 |
| 226 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| 239 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| 19 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 25 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 73 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 75 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| 83 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 87 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 98 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 104 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 108 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 113 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| 119 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 131 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 136 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 146 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 150 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| 161 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 209 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 |
| 211 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|------|------|------|------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 |
| 223 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| 227 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| 246 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 |
| 247 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| 250 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 58 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| 89 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 127 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 130 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 138 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| 156 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 |
| 180 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 196 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 218 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 168 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Daya Beda | 0,50 | 0,74 | 0,47 | 0,72 | 0,43 | 0,49 | 0,50 | 0,46 | 0,43 | 0,71 | 0,71 |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|-------------|------|-------------|------|------|------|------|------|-------------|-------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 |
| Kriteria | Baik | Sangat Baik | Baik | Sangat Baik | Baik | Baik | Baik | Baik | Baik | Sangat Baik | Sangat Baik |

Daya Beda Kelompok Besar

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|---------|
| | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 | | |
| 12 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 21 | K. ATAS |
| 49 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 20 | K. ATAS |
| 124 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 20 | K. ATAS |
| 233 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 19 | K. ATAS |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 18 | K. ATAS |
| 21 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 18 | K. ATAS |
| 99 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 18 | K. ATAS |
| 154 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 18 | K. ATAS |
| 160 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | K. ATAS |
| 212 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 18 | K. ATAS |
| 241 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 18 | K. ATAS |
| 15 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 17 | K. ATAS |
| 26 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 17 | K. ATAS |
| 40 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 17 | K. ATAS |
| 42 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 17 | K. ATAS |
| 65 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 17 | K. ATAS |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|---------|
| | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 | | |
| 62 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 17 | K. ATAS |
| 91 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 17 | K. ATAS |
| 101 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 17 | K. ATAS |
| 110 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 17 | K. ATAS |
| 140 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 17 | K. ATAS |
| 164 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 17 | K. ATAS |
| 166 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 17 | K. ATAS |
| 182 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 17 | K. ATAS |
| 183 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 17 | K. ATAS |
| 190 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 17 | K. ATAS |
| 202 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 17 | K. ATAS |
| 224 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 17 | K. ATAS |
| 238 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 17 | K. ATAS |
| 249 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 17 | K. ATAS |
| 7 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 16 | K. ATAS |
| 9 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 16 | K. ATAS |
| 14 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 16 | K. ATAS |
| 20 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 16 | K. ATAS |
| 23 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 16 | K. ATAS |
| 28 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 16 | K. ATAS |
| 34 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 16 | K. ATAS |
| 60 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 16 | K. ATAS |
| 72 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 16 | K. ATAS |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|---------|
| | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 | | |
| 80 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 16 | K. ATAS |
| 86 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 16 | K. ATAS |
| 107 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 16 | K. ATAS |
| 112 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 16 | K. ATAS |
| 114 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 16 | K. ATAS |
| 120 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 16 | K. ATAS |
| 142 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 16 | K. ATAS |
| 149 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 16 | K. ATAS |
| 152 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 16 | K. ATAS |
| 167 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 16 | K. ATAS |
| 174 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 16 | K. ATAS |
| 176 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 16 | K. ATAS |
| 195 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 16 | K. ATAS |
| 203 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 16 | K. ATAS |
| 210 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 16 | K. ATAS |
| 5 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 15 | K. ATAS |
| 8 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 15 | K. ATAS |
| 11 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 15 | K. ATAS |
| 32 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 15 | K. ATAS |
| 47 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 15 | K. ATAS |
| 103 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 15 | K. ATAS |
| 109 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 15 | K. ATAS |
| 116 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 15 | K. ATAS |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|---------|
| | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 | | |
| 132 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 15 | K. ATAS |
| 151 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 15 | K. ATAS |
| 159 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 15 | K. ATAS |
| 187 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 15 | K. ATAS |
| 214 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 15 | K. ATAS |
| 220 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 15 | K. ATAS |
| 235 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 14 | |
| 44 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 13 | |
| 126 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 13 | |
| 206 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 13 | |
| 36 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 12 | |
| 52 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 12 | |
| 57 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 12 | |
| 135 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 12 | |
| 201 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 12 | |
| 245 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 12 | |
| 24 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | |
| 31 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 11 | |
| 35 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 11 | |
| 43 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 11 | |
| 55 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 11 | |
| 74 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 11 | |
| 111 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 11 | |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|
| | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 | |
| 118 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 11 |
| 128 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 11 |
| 147 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 11 |
| 192 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 11 |
| 199 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 11 |
| 215 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 11 |
| 10 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 10 |
| 33 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 10 |
| 37 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 10 |
| 45 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 10 |
| 53 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 10 |
| 64 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 10 |
| 68 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 10 |
| 82 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 10 |
| 85 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 10 |
| 92 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 10 |
| 121 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 10 |
| 125 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 10 |
| 133 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 10 |
| 139 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 10 |
| 145 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 10 |
| 148 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 158 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 10 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|
| | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 | |
| 162 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 10 |
| 165 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 10 |
| 175 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 10 |
| 178 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 10 |
| 179 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 10 |
| 184 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 10 |
| 222 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 10 |
| 230 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 10 |
| 236 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 10 |
| 242 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 10 |
| 243 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 10 |
| 248 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 10 |
| 3 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 9 |
| 16 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 9 |
| 22 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 9 |
| 39 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 9 |
| 50 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 9 |
| 51 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 9 |
| 76 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 9 |
| 93 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 9 |
| 105 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 9 |
| 123 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 9 |
| 141 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|
| | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 | |
| 143 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 153 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 9 |
| 169 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 9 |
| 188 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 9 |
| 191 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 9 |
| 194 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 9 |
| 197 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 9 |
| 204 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 9 |
| 205 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 9 |
| 208 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 9 |
| 231 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 9 |
| 240 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 9 |
| 244 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 9 |
| 41 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 8 |
| 54 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 8 |
| 69 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 |
| 70 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 8 |
| 71 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 8 |
| 79 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 84 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 8 |
| 90 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 8 |
| 122 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 134 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 8 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|
| | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 | |
| 144 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 8 |
| 155 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 8 |
| 157 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 8 |
| 170 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 8 |
| 173 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 8 |
| 177 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 8 |
| 181 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 8 |
| 185 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 8 |
| 189 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 8 |
| 200 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 8 |
| 221 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 8 |
| 228 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 229 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 8 |
| 234 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 18 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 7 |
| 27 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 7 |
| 29 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 7 |
| 48 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 7 |
| 59 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 7 |
| 88 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 7 |
| 95 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 117 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 129 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 7 |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|----------|
| | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 | | |
| 137 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | |
| 171 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | |
| 225 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 7 | |
| 232 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | |
| 237 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | |
| 2 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 6 | K. BAWAH |
| 46 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 6 | K. BAWAH |
| 61 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 6 | K. BAWAH |
| 94 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 6 | K. BAWAH |
| 115 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 6 | K. BAWAH |
| 163 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 6 | K. BAWAH |
| 4 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | K. BAWAH |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | K. BAWAH |
| 30 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | K. BAWAH |
| 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | K. BAWAH |
| 66 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 5 | K. BAWAH |
| 77 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | K. BAWAH |
| 78 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 5 | K. BAWAH |
| 81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 5 | K. BAWAH |
| 96 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | K. BAWAH |
| 97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 5 | K. BAWAH |
| 102 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | K. BAWAH |
| 106 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | K. BAWAH |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|----------|
| | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 | | |
| 172 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | K. BAWAH |
| 186 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 5 | K. BAWAH |
| 193 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | K. BAWAH |
| 198 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | K. BAWAH |
| 207 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | K. BAWAH |
| 216 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 5 | K. BAWAH |
| 217 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | K. BAWAH |
| 219 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | K. BAWAH |
| 226 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | K. BAWAH |
| 239 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | K. BAWAH |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 4 | K. BAWAH |
| 25 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | K. BAWAH |
| 73 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | K. BAWAH |
| 75 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 4 | K. BAWAH |
| 83 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | K. BAWAH |
| 87 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 4 | K. BAWAH |
| 98 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | K. BAWAH |
| 104 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | K. BAWAH |
| 108 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | K. BAWAH |
| 113 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | K. BAWAH |
| 119 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | K. BAWAH |
| 131 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | K. BAWAH |
| 136 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | K. BAWAH |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|----|-------|----------|
| | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 | | |
| 146 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | K. BAWAH |
| 150 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | K. BAWAH |
| 161 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | K. BAWAH |
| 209 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | K. BAWAH |
| 211 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | K. BAWAH |
| 223 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | K. BAWAH |
| 227 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | K. BAWAH |
| 246 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | K. BAWAH |
| 247 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | K. BAWAH |
| 250 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | K. BAWAH |
| 56 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | K. BAWAH |
| 58 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | K. BAWAH |
| 63 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | K. BAWAH |
| 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | K. BAWAH |
| 89 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | K. BAWAH |
| 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | K. BAWAH |
| 127 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | K. BAWAH |
| 130 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | K. BAWAH |
| 138 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | K. BAWAH |
| 156 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | K. BAWAH |
| 180 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | K. BAWAH |
| 196 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | K. BAWAH |
| 218 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | K. BAWAH |

| No Responden | Nomor Butir Soal | | | | | | | | | | | | Total | |
|--------------|------------------|------|-------------|-------------|-------------|------|------|------|------|------|------|------|-------|----------|
| | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 | | |
| 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | K. BAWAH |
| 17 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | K. BAWAH |
| 168 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | K. BAWAH |
| 213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | K. BAWAH |
| Daya Beda | 0,47 | 0,44 | 0,74 | 0,71 | 0,82 | 0,43 | 0,43 | 0,41 | 0,41 | 0,51 | 0,41 | 0,41 | | |
| Kriteria | Baik | Baik | Sangat Baik | Sangat Baik | Sangat Baik | Baik | Baik | Baik | Baik | Baik | Baik | Baik | | |



Lampiran 08. Efektivitas Option Kelompok Besar

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 |
| 1 | A | E | E | B | A | C | A | D | B | A | B | D |
| 2 | B | D | C | E | C | D | E | D | D | C | A | A |
| 3 | E | B | C | E | A | A | B | B | C | A | E | D |
| 4 | B | D | E | C | B | E | A | B | C | E | D | B |
| 5 | A | C | E | B | E | C | C | D | B | A | B | B |
| 6 | B | E | D | E | E | D | C | E | E | B | A | D |
| 7 | B | C | E | B | A | C | C | D | E | A | B | A |
| 8 | A | C | E | B | A | C | A | C | B | A | C | D |
| 9 | A | A | E | D | B | C | A | D | B | A | B | D |
| 10 | A | A | E | B | E | E | A | D | B | E | E | D |
| 11 | A | C | E | B | E | C | A | D | C | A | B | D |
| 12 | A | C | E | B | A | C | A | D | B | A | D | D |
| 13 | A | B | E | A | C | A | B | D | A | C | B | E |
| 14 | A | C | E | B | A | C | A | D | B | B | E | B |
| 15 | A | C | E | B | A | B | A | D | B | A | B | A |
| 16 | A | B | E | C | A | D | A | B | E | C | A | D |
| 17 | B | E | D | E | B | A | B | C | B | E | C | D |
| 18 | B | E | E | D | A | D | B | C | E | B | E | B |
| 19 | A | A | C | E | C | A | B | D | D | B | D | B |
| 20 | A | C | E | B | A | C | A | D | E | A | B | C |
| 21 | A | C | E | B | E | E | A | D | D | A | B | D |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|-----------------|------------------|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 |
| 22 | E | B | C | D | E | C | C | D | B | A | B | A |
| 23 | A | C | E | B | C | C | D | D | C | A | B | D |
| 24 | A | D | E | B | E | B | A | D | B | A | A | D |
| 25 | B | E | D | B | E | B | A | C | D | B | E | B |
| 26 | E | C | E | B | E | C | A | D | B | A | C | D |
| 27 | A | B | E | A | E | C | A | B | C | D | C | E |
| 28 | A | C | E | B | A | A | E | D | B | A | B | D |
| 29 | A | B | E | D | C | C | E | B | A | D | C | D |
| 30 | A | B | E | C | B | C | E | C | E | B | D | A |
| 31 | A | D | C | B | A | C | B | D | C | A | A | D |
| 32 | A | C | E | B | E | C | A | D | B | E | B | D |
| 33 | A | B | E | B | A | A | C | E | D | E | E | D |
| 34 | E | C | E | B | D | C | A | D | C | A | B | D |
| 35 | A | D | E | D | C | C | A | B | B | D | B | B |
| 36 | A | A | E | B | C | C | E | D | B | A | D | D |
| 37 | A | B | D | B | A | D | A | D | E | C | B | C |
| 38 | A | C | E | B | C | B | A | C | E | B | E | A |
| 39 | E | D | E | B | D | C | D | D | B | D | E | E |
| 40 | A | C | E | D | A | C | A | D | B | A | B | D |
| 41 | A | E | D | B | E | C | D | D | D | E | A | D |
| 42 | A | C | E | B | E | B | A | C | B | A | B | D |
| 43 | A | B | E | C | E | C | B | D | E | A | B | D |
| 44 | A | E | E | B | E | E | A | E | B | A | D | E |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 |
| 45 | A | E | E | D | A | A | E | D | E | D | C | D |
| 46 | A | E | E | B | E | A | D | D | E | B | E | A |
| 47 | E | C | D | B | A | C | B | D | D | A | B | D |
| 48 | A | E | E | B | C | E | A | C | A | C | E | D |
| 49 | A | C | E | B | E | C | B | D | B | A | B | D |
| 50 | A | B | E | B | D | A | C | B | C | E | E | E |
| 51 | B | E | E | A | A | C | C | D | C | A | B | B |
| 52 | A | B | E | C | A | D | C | D | B | A | D | B |
| 53 | A | C | E | A | B | C | C | D | D | C | B | A |
| 54 | E | C | B | A | C | C | C | D | E | B | E | A |
| 55 | A | B | E | A | B | C | C | D | D | D | C | D |
| 56 | D | A | C | E | B | A | C | D | E | E | A | E |
| 57 | B | E | B | E | A | E | A | D | D | C | A | D |
| 58 | E | D | A | B | D | A | B | C | D | C | D | A |
| 59 | A | D | E | C | E | C | B | D | D | B | E | A |
| 60 | A | C | E | B | A | C | C | D | B | A | B | A |
| 61 | D | C | A | D | E | D | A | B | E | D | E | A |
| 62 | A | E | E | B | A | D | A | E | B | A | A | D |
| 63 | D | E | D | D | B | A | E | C | D | E | B | B |
| 64 | A | A | D | B | E | C | A | D | E | A | E | D |
| 65 | A | C | E | B | D | C | D | D | D | B | B | D |
| 66 | E | C | A | E | D | A | D | D | D | E | C | B |
| 67 | E | B | A | C | B | A | D | D | D | A | D | C |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|-----------------|------------------|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 |
| 68 | A | D | A | C | A | B | A | D | E | D | B | D |
| 69 | B | C | A | B | E | B | A | D | A | C | B | E |
| 70 | A | B | A | B | C | B | C | C | E | C | A | C |
| 71 | A | B | E | C | E | D | C | D | B | B | C | D |
| 72 | A | C | E | B | E | C | C | D | C | A | B | B |
| 73 | E | D | C | D | A | D | E | D | C | D | E | A |
| 74 | A | D | A | A | E | C | A | D | C | D | B | C |
| 75 | B | D | A | A | B | E | D | D | C | A | E | C |
| 76 | A | D | A | A | D | C | A | C | D | E | D | D |
| 77 | D | E | D | E | A | E | B | D | E | A | C | E |
| 78 | B | E | D | B | C | C | D | C | D | B | C | C |
| 79 | A | B | E | D | E | C | D | D | D | A | C | A |
| 80 | A | C | A | B | A | C | C | D | D | A | B | D |
| 81 | A | A | B | E | B | D | C | D | D | A | A | B |
| 82 | E | B | A | B | D | B | E | D | B | A | D | D |
| 83 | E | B | E | E | B | C | D | C | A | B | B | E |
| 84 | A | C | A | B | D | E | A | C | A | A | E | C |
| 85 | A | B | A | E | A | B | D | D | A | A | C | C |
| 86 | A | C | B | B | C | C | A | D | B | A | B | D |
| 87 | A | E | A | E | B | C | D | B | D | C | A | C |
| 88 | A | C | E | C | D | B | A | D | D | C | D | A |
| 89 | B | E | A | C | A | B | E | E | C | E | E | D |
| 90 | E | C | D | B | E | A | B | C | C | A | E | C |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 |
| 91 | A | C | A | B | A | C | A | D | B | A | B | D |
| 92 | A | E | C | D | E | D | A | D | E | A | E | B |
| 93 | B | E | A | C | B | C | E | D | B | C | D | E |
| 94 | A | A | C | E | B | E | A | B | C | A | A | A |
| 95 | A | B | A | B | C | B | A | C | B | D | A | D |
| 96 | A | D | E | B | C | A | D | C | A | B | C | E |
| 97 | A | E | C | D | E | C | D | C | A | B | B | E |
| 98 | D | E | A | B | E | B | A | C | A | D | B | C |
| 99 | A | C | E | B | C | C | A | D | B | A | B | D |
| 100 | E | D | D | A | B | D | A | C | E | E | B | C |
| 101 | A | C | E | A | A | C | C | D | B | A | B | D |
| 102 | A | E | D | B | D | C | C | E | E | C | D | D |
| 103 | E | C | B | B | A | D | A | D | D | A | B | E |
| 104 | A | E | B | D | E | D | A | B | D | C | C | D |
| 105 | A | B | B | B | D | C | B | D | C | D | B | B |
| 106 | D | A | E | D | C | A | B | A | D | B | A | D |
| 107 | A | C | B | B | C | C | A | E | B | A | B | A |
| 108 | A | A | E | C | E | A | D | D | E | D | E | D |
| 109 | A | C | D | B | A | C | A | C | B | A | B | D |
| 110 | A | C | E | B | E | C | A | D | E | A | B | D |
| 111 | A | B | E | A | D | E | D | D | D | E | D | D |
| 112 | A | C | E | B | E | C | A | D | C | A | B | E |
| 113 | B | E | D | A | B | C | D | E | B | E | E | D |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|-----------------|------------------|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 |
| 114 | A | C | E | B | E | B | A | D | A | A | B | C |
| 115 | E | E | D | B | E | C | E | D | A | B | C | D |
| 116 | A | C | E | B | A | B | A | B | B | A | B | D |
| 117 | A | C | D | C | E | B | A | D | C | C | B | B |
| 118 | A | E | D | C | A | C | C | C | B | A | A | D |
| 119 | A | D | C | E | D | C | B | C | D | D | E | D |
| 120 | A | C | D | B | A | E | A | D | C | A | B | E |
| 121 | A | D | C | D | A | C | D | D | C | A | D | D |
| 122 | A | B | E | B | B | A | A | D | E | E | B | A |
| 123 | A | B | C | E | B | C | D | D | E | B | E | E |
| 124 | A | A | E | B | A | C | A | D | B | A | B | D |
| 125 | A | A | D | E | B | C | A | D | B | E | C | D |
| 126 | A | E | E | D | A | C | E | D | C | A | A | C |
| 127 | B | E | D | E | B | C | D | C | A | B | E | C |
| 128 | A | B | E | D | D | C | A | D | D | B | A | D |
| 129 | A | E | D | C | B | C | B | C | C | E | B | E |
| 130 | B | E | D | C | A | E | B | C | A | B | D | A |
| 131 | B | E | D | C | E | C | B | E | C | E | B | D |
| 132 | E | C | E | B | A | C | A | D | B | A | B | B |
| 133 | A | B | E | B | D | C | E | D | B | C | B | B |
| 134 | A | B | C | E | D | C | A | B | B | C | B | A |
| 135 | A | A | C | B | D | E | A | D | E | A | A | A |
| 136 | A | A | E | A | C | B | C | A | D | D | E | A |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|-----------------|------------------|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 |
| 137 | A | A | C | A | B | C | C | D | E | A | A | D |
| 138 | E | A | B | B | D | C | A | E | C | E | E | E |
| 139 | A | A | E | B | B | D | A | D | D | A | A | E |
| 140 | A | C | E | B | E | C | A | E | D | A | B | D |
| 141 | A | D | E | A | D | A | C | D | D | A | B | D |
| 142 | A | C | E | B | A | C | A | C | D | A | B | D |
| 143 | A | E | C | B | E | C | A | D | E | D | B | D |
| 144 | A | E | E | A | E | C | D | D | A | D | B | B |
| 145 | A | E | E | B | D | C | D | D | A | A | D | D |
| 146 | E | C | B | D | B | A | E | B | A | E | B | C |
| 147 | A | A | D | B | B | C | A | D | A | A | C | C |
| 148 | A | E | E | B | D | A | E | D | A | A | B | A |
| 149 | A | E | E | B | B | C | A | E | D | A | B | D |
| 150 | C | E | E | D | C | E | A | D | D | B | E | B |
| 151 | E | C | E | B | A | E | A | C | B | A | B | D |
| 152 | A | C | E | B | D | C | A | D | E | C | B | C |
| 153 | A | B | B | E | B | A | B | D | B | A | E | D |
| 154 | A | C | E | B | A | B | A | D | B | A | B | D |
| 155 | A | D | B | A | E | C | A | D | E | D | A | E |
| 156 | A | D | C | A | D | C | D | A | C | A | D | E |
| 157 | E | A | C | D | E | A | D | D | D | A | B | A |
| 158 | A | A | C | D | E | D | A | D | C | D | B | D |
| 159 | A | C | D | B | E | D | A | D | B | A | B | D |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 |
| 160 | A | E | E | B | A | C | A | C | A | C | B | D |
| 161 | E | E | B | B | C | D | A | C | A | E | B | B |
| 162 | C | E | D | B | D | C | E | D | A | A | C | D |
| 163 | E | E | E | C | B | A | E | D | D | B | C | E |
| 164 | A | C | D | B | D | B | A | D | D | A | B | D |
| 165 | A | D | B | C | D | C | D | D | E | A | A | D |
| 166 | A | C | E | B | C | B | A | D | B | A | B | D |
| 167 | A | C | B | B | A | C | A | D | D | A | B | D |
| 168 | A | E | B | E | C | A | B | B | B | C | D | A |
| 169 | A | D | B | C | E | A | B | D | E | A | B | A |
| 170 | A | C | B | A | E | A | B | D | C | D | B | D |
| 171 | A | C | A | A | A | D | A | D | D | B | C | D |
| 172 | B | E | A | C | C | E | D | D | D | A | B | C |
| 173 | A | B | A | C | B | E | A | D | E | D | B | C |
| 174 | A | E | E | A | A | C | A | E | B | A | B | D |
| 175 | A | E | C | A | B | D | A | D | A | A | B | B |
| 176 | A | C | B | B | A | C | D | D | B | A | B | D |
| 177 | A | A | B | A | D | B | D | D | D | C | B | D |
| 178 | E | D | E | A | C | B | A | D | C | A | A | E |
| 179 | E | D | C | A | C | B | A | D | C | A | B | A |
| 180 | A | D | A | D | C | A | C | D | D | B | C | A |
| 181 | B | E | C | A | C | A | C | D | E | A | B | A |
| 182 | E | B | C | B | C | C | A | D | B | A | B | D |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|--------------|------------------|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 |
| 183 | E | C | E | B | C | C | A | D | E | A | B | D |
| 184 | B | E | C | D | A | B | E | D | D | A | B | D |
| 185 | E | C | B | A | B | D | A | D | D | A | B | D |
| 186 | E | A | C | E | A | D | B | C | A | C | B | B |
| 187 | B | C | E | B | D | C | A | D | B | A | D | B |
| 188 | A | D | A | C | A | E | E | D | E | A | C | D |
| 189 | B | D | B | B | E | D | D | D | C | B | B | D |
| 190 | A | E | B | B | C | C | A | D | B | A | B | D |
| 191 | B | C | B | B | C | B | D | D | E | A | B | D |
| 192 | A | E | A | C | D | E | B | D | B | B | A | D |
| 193 | D | B | B | A | C | E | B | D | D | B | A | E |
| 194 | A | E | B | A | D | B | A | D | E | A | A | E |
| 195 | A | E | B | B | A | E | C | D | D | A | B | D |
| 196 | B | E | B | A | C | E | A | B | D | B | E | C |
| 197 | A | D | E | A | B | C | E | D | E | B | D | D |
| 198 | E | C | E | A | B | D | D | D | D | A | C | B |
| 199 | A | E | C | E | A | E | A | D | E | D | B | C |
| 200 | A | C | A | D | C | B | E | D | A | E | A | D |
| 201 | A | A | C | B | C | E | D | D | A | A | A | D |
| 202 | A | D | E | B | A | C | A | D | B | C | B | D |
| 203 | E | C | E | B | D | C | C | D | E | A | B | D |
| 204 | A | E | E | C | A | E | B | D | E | D | E | E |
| 205 | A | E | B | C | A | C | D | D | D | E | B | A |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|-----------------|------------------|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 |
| 206 | A | E | B | B | C | C | A | C | B | A | C | C |
| 207 | E | D | E | D | C | C | E | D | C | E | D | C |
| 208 | A | B | A | B | A | B | A | A | D | A | A | D |
| 209 | C | B | E | D | B | E | A | D | D | E | B | E |
| 210 | A | C | E | B | D | C | C | D | D | A | B | D |
| 211 | A | E | C | B | D | A | E | E | D | E | C | D |
| 212 | A | B | E | B | A | C | A | D | D | A | B | D |
| 213 | B | E | C | E | E | E | D | B | B | C | E | C |
| 214 | A | C | E | B | A | C | B | D | E | C | B | C |
| 215 | A | E | B | B | C | D | A | D | B | A | A | D |
| 216 | E | A | E | E | C | D | A | E | A | A | C | E |
| 217 | A | A | C | B | C | C | C | D | A | C | D | D |
| 218 | A | A | C | E | D | D | A | E | A | E | C | B |
| 219 | E | A | E | C | A | C | B | D | B | E | C | B |
| 220 | A | C | E | B | C | C | A | D | B | A | B | B |
| 221 | A | E | A | E | C | D | A | D | C | A | E | C |
| 222 | A | D | E | D | A | A | D | D | D | D | B | C |
| 223 | D | D | B | B | C | E | A | A | B | D | E | D |
| 224 | A | C | E | B | A | C | A | B | A | D | B | E |
| 225 | D | C | E | B | C | B | E | D | D | B | A | C |
| 226 | A | A | D | E | B | D | B | D | B | E | D | C |
| 227 | B | E | E | D | A | C | E | B | E | A | C | A |
| 228 | A | C | D | B | D | E | A | D | E | D | C | D |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|-----------------|------------------|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 |
| 229 | A | D | E | C | A | E | C | E | B | E | B | B |
| 230 | A | B | A | E | C | C | B | D | B | A | C | E |
| 231 | B | C | E | D | A | E | B | D | B | E | B | C |
| 232 | A | C | D | B | A | E | A | E | A | A | D | C |
| 233 | A | C | E | B | A | C | A | D | B | A | B | C |
| 234 | A | C | B | C | B | C | D | D | C | E | D | D |
| 235 | A | D | E | C | A | C | E | D | B | A | D | D |
| 236 | A | D | B | C | A | B | E | D | D | C | B | B |
| 237 | A | B | A | B | E | B | A | D | E | C | B | B |
| 238 | A | A | E | B | A | C | A | D | B | C | B | E |
| 239 | A | A | E | C | D | C | A | B | B | C | D | E |
| 240 | C | D | E | C | A | D | C | D | E | A | D | D |
| 241 | A | C | E | B | A | C | A | D | B | D | B | D |
| 242 | A | E | C | E | A | C | E | D | C | D | B | D |
| 243 | C | A | E | E | B | 0 | D | D | B | A | A | D |
| 244 | A | A | A | B | A | B | A | D | D | E | B | B |
| 245 | A | E | E | E | D | C | A | D | B | D | E | D |
| 246 | B | B | B | D | A | E | E | A | B | C | B | C |
| 247 | B | A | E | D | C | C | C | E | B | E | D | C |
| 248 | B | E | D | B | A | D | A | D | A | A | A | D |
| 249 | A | C | E | E | A | C | E | D | B | E | B | E |
| 250 | B | D | E | E | B | C | E | E | E | D | D | D |
| Kunci | A | C | E | B | A | C | A | D | B | A | B | D |

| No Responden | Nomor Butir Soal | | | | | | | | | | | |
|--------------|------------------|---------|---------|---------|---------|---------|---------|---------------|---------|---------|---------|---------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 |
| 5% | 12,5 | 12,5 | 12,5 | 12,5 | 12,5 | 12,5 | 12,5 | 12,5 | 12,5 | 12,5 | 12,5 | 12,5 |
| Option A | 67,6 | 13,6 | 12,8 | 13,2 | 30,8 | 12,8 | 46 | 2,4 | 12,8 | 47,2 | 13,6 | 12,8 |
| Kategori | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Tidak Efektif | Efektif | Efektif | Efektif | Efektif |
| Option B | 12,8 | 15,2 | 14 | 46,8 | 15,6 | 13,2 | 12,8 | 8 | 30 | 12,8 | 46,4 | 12,8 |
| Kategori | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Tidak Efektif | Efektif | Efektif | Efektif | Efektif |
| Option C | 2 | 30,8 | 13,2 | 13,6 | 18,4 | 47,2 | 13,2 | 13,2 | 14 | 12,8 | 12,8 | 14,4 |
| Kategori | Tidak Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif |
| Option D | 3,6 | 14,4 | 12,8 | 12,8 | 15,2 | 12,8 | 15,2 | 68,4 | 24 | 12,8 | 12,8 | 46,8 |
| Kategori | Tidak Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif |
| Option E | 14 | 26 | 47,2 | 13,6 | 20 | 13,6 | 12,8 | 8 | 19,2 | 14,4 | 14,4 | 13,2 |
| Kategori | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Efektif | Tidak Efektif | Efektif | Efektif | Efektif | Efektif |

Efektivitas Option Kelompok Besar

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 1 | C | A | E | E | B | A | B | A | E | E | E |
| 2 | D | C | B | D | B | A | A | D | E | B | B |
| 3 | D | B | E | B | B | E | A | D | C | A | A |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|-----------------|------------------|----|----|----|----|----|----|----|----|----|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 4 | D | E | B | E | B | B | E | C | A | D | B |
| 5 | D | A | A | E | B | C | D | D | D | A | B |
| 6 | E | D | C | A | A | E | B | E | E | D | B |
| 7 | D | A | E | E | A | A | A | B | C | A | E |
| 8 | A | A | E | E | B | C | B | B | E | D | D |
| 9 | D | A | E | E | A | A | E | D | E | D | A |
| 10 | B | B | E | E | C | B | A | B | D | D | C |
| 11 | D | A | C | E | B | B | B | E | E | D | C |
| 12 | D | A | E | E | B | B | A | D | E | A | E |
| 13 | C | E | D | D | A | B | B | C | E | B | C |
| 14 | C | A | D | E | B | A | A | D | A | A | A |
| 15 | D | A | A | E | B | C | D | D | E | C | E |
| 16 | E | B | A | A | A | A | C | E | E | A | E |
| 17 | A | D | B | D | C | D | B | C | B | D | D |
| 18 | B | D | E | E | A | A | E | E | E | A | B |
| 19 | B | E | D | A | C | D | B | C | E | A | C |
| 20 | A | A | E | E | B | A | C | D | C | D | A |
| 21 | C | A | E | E | B | A | A | D | E | E | E |
| 22 | C | D | B | D | B | C | A | D | C | A | D |
| 23 | D | A | E | E | B | A | B | C | E | B | B |
| 24 | E | B | E | E | B | D | C | B | D | E | B |
| 25 | A | C | A | D | B | C | B | B | E | E | A |
| 26 | E | A | E | E | B | A | A | D | C | A | D |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|-----------------|------------------|----|----|----|----|----|----|----|----|----|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 27 | D | C | E | B | A | E | A | C | E | E | C |
| 28 | B | C | E | E | B | C | A | C | E | A | C |
| 29 | B | D | E | A | B | E | E | D | A | C | A |
| 30 | E | A | C | D | C | B | D | C | D | D | E |
| 31 | C | B | D | D | B | A | A | D | B | C | D |
| 32 | D | A | A | D | B | E | B | E | E | A | B |
| 33 | A | A | A | A | B | A | A | D | C | B | C |
| 34 | D | A | E | E | A | A | A | B | E | D | D |
| 35 | D | C | E | E | B | A | C | E | D | B | C |
| 36 | E | A | B | D | B | C | C | D | C | A | C |
| 37 | D | E | B | E | B | C | E | E | E | D | A |
| 38 | C | D | B | D | A | B | B | E | D | E | B |
| 39 | A | B | D | D | B | A | A | C | D | A | D |
| 40 | D | C | E | E | B | A | D | B | E | D | D |
| 41 | B | A | C | A | B | D | B | B | E | D | D |
| 42 | D | A | A | E | C | A | A | D | E | A | A |
| 43 | A | D | D | E | B | E | C | A | D | A | E |
| 44 | A | A | E | C | B | A | A | D | C | D | E |
| 45 | A | D | E | E | B | C | C | B | E | A | C |
| 46 | A | A | B | B | E | C | E | D | B | E | D |
| 47 | D | A | E | E | B | B | A | C | E | B | D |
| 48 | E | B | A | A | B | B | B | D | A | C | A |
| 49 | D | A | E | E | B | A | A | D | E | E | E |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|-----------------|------------------|----|----|----|----|----|----|----|----|----|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 50 | C | A | E | E | B | A | E | C | A | A | C |
| 51 | E | C | D | C | B | D | E | D | E | E | E |
| 52 | D | A | B | E | B | A | E | A | E | B | D |
| 53 | A | C | E | C | B | D | A | D | C | D | D |
| 54 | D | D | D | E | B | A | D | A | E | E | A |
| 55 | B | A | E | C | B | D | C | D | C | A | E |
| 56 | A | A | D | E | C | C | B | C | C | D | A |
| 57 | C | A | E | E | B | E | A | D | E | A | E |
| 58 | A | B | A | C | B | C | C | D | A | C | A |
| 59 | A | E | E | A | B | E | E | B | E | B | C |
| 60 | D | A | E | A | A | C | D | D | E | A | B |
| 61 | E | E | B | C | B | A | B | D | E | C | B |
| 62 | C | A | E | E | B | A | A | D | E | A | D |
| 63 | A | D | C | C | B | C | B | A | E | C | B |
| 64 | A | A | C | B | B | E | C | A | D | A | A |
| 65 | A | A | E | E | B | A | A | D | E | C | E |
| 66 | D | B | D | A | B | C | E | D | C | E | D |
| 67 | E | C | B | D | C | C | A | C | D | E | C |
| 68 | B | C | E | E | C | A | E | D | B | C | C |
| 69 | C | A | E | D | C | B | B | A | D | B | E |
| 70 | E | C | D | E | B | B | A | D | C | A | E |
| 71 | A | E | B | E | B | B | B | C | D | A | A |
| 72 | A | A | E | E | E | A | A | E | E | A | E |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|-----------------|------------------|----|----|----|----|----|----|----|----|----|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 73 | A | B | D | C | B | C | D | A | E | D | B |
| 74 | D | A | E | E | B | D | D | D | B | C | B |
| 75 | C | D | B | A | C | A | A | B | C | D | D |
| 76 | D | E | E | B | B | E | A | A | E | C | C |
| 77 | C | B | E | B | B | C | C | B | B | D | A |
| 78 | A | B | A | B | B | C | A | C | E | C | A |
| 79 | C | B | E | E | B | E | E | A | D | B | A |
| 80 | D | A | E | E | C | D | A | D | E | D | B |
| 81 | B | E | A | C | C | E | A | A | E | D | D |
| 82 | A | E | A | E | B | A | C | D | E | D | D |
| 83 | B | D | A | C | B | E | B | E | C | D | B |
| 84 | E | D | E | A | B | E | C | E | D | E | E |
| 85 | E | A | E | D | B | A | A | D | A | C | A |
| 86 | A | E | E | E | B | A | A | E | C | D | E |
| 87 | A | E | C | D | C | D | D | E | E | A | B |
| 88 | A | C | E | D | C | D | A | B | D | B | C |
| 89 | A | B | B | D | B | C | E | C | A | E | C |
| 90 | A | A | E | E | A | E | B | D | E | B | D |
| 91 | A | A | E | B | B | E | A | B | E | A | C |
| 92 | A | A | E | E | B | E | A | D | A | C | D |
| 93 | D | C | E | E | B | A | C | A | D | A | D |
| 94 | C | A | D | A | B | E | A | A | B | D | B |
| 95 | B | A | D | A | B | E | E | C | E | E | A |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|-----------------|------------------|----|----|----|----|----|----|----|----|----|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 96 | E | D | C | A | C | C | E | A | E | D | E |
| 97 | A | B | C | C | C | C | A | A | E | D | D |
| 98 | B | D | A | C | B | C | C | B | A | C | C |
| 99 | B | A | E | E | B | E | B | B | E | A | E |
| 100 | E | C | B | D | D | C | D | B | E | D | B |
| 101 | C | A | E | E | B | E | A | B | E | A | B |
| 102 | A | E | D | D | E | A | D | B | A | B | B |
| 103 | D | E | E | E | B | A | A | B | E | E | E |
| 104 | B | D | D | E | E | C | B | E | A | D | B |
| 105 | D | E | B | C | B | A | B | A | D | A | D |
| 106 | C | D | E | B | B | C | D | E | E | D | B |
| 107 | D | A | E | E | B | A | A | A | E | D | D |
| 108 | A | E | A | A | C | C | B | E | A | C | D |
| 109 | E | B | E | A | B | A | C | E | E | B | E |
| 110 | D | A | E | E | B | C | E | A | E | A | B |
| 111 | A | A | E | E | B | A | A | C | B | C | E |
| 112 | D | A | E | E | B | B | A | A | E | D | C |
| 113 | B | C | E | C | A | B | E | A | C | D | A |
| 114 | D | A | E | E | B | A | A | D | C | D | B |
| 115 | B | E | A | A | B | C | D | C | E | C | B |
| 116 | D | A | B | E | C | D | E | A | E | D | E |
| 117 | A | C | E | E | A | C | C | A | B | E | B |
| 118 | D | B | E | D | B | A | D | B | A | B | E |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 119 | A | D | C | D | A | C | D | A | E | D | B |
| 120 | E | A | E | E | B | A | E | A | E | A | E |
| 121 | E | A | E | E | C | E | B | E | E | E | B |
| 122 | D | E | C | B | B | E | B | E | A | C | D |
| 123 | C | B | A | E | B | A | A | B | E | C | E |
| 124 | D | A | E | E | B | A | B | D | E | A | A |
| 125 | A | A | D | C | B | E | A | E | E | E | B |
| 126 | D | D | A | E | B | A | D | D | A | A | E |
| 127 | C | E | A | C | B | C | D | E | E | D | C |
| 128 | B | C | A | E | B | A | E | C | B | A | E |
| 129 | D | E | E | E | C | B | E | C | E | B | B |
| 130 | B | C | B | D | B | B | C | C | B | D | E |
| 131 | E | D | B | D | A | B | A | C | B | E | B |
| 132 | D | B | B | E | A | B | A | D | E | D | D |
| 133 | A | B | B | B | B | A | E | B | D | A | B |
| 134 | D | B | C | B | B | D | D | D | D | C | D |
| 135 | E | A | E | E | B | D | A | D | E | E | A |
| 136 | D | E | A | B | B | D | C | B | C | B | B |
| 137 | A | E | E | B | A | C | B | A | C | A | D |
| 138 | A | E | D | B | C | E | E | E | C | D | B |
| 139 | A | C | E | A | C | A | A | E | C | A | A |
| 140 | D | A | E | E | B | D | D | D | E | D | E |
| 141 | A | A | E | C | B | D | B | C | B | C | C |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 142 | A | A | E | E | B | C | C | E | E | D | E |
| 143 | A | A | D | E | A | E | B | E | C | B | B |
| 144 | A | B | E | C | C | A | B | D | C | E | C |
| 145 | A | A | C | E | C | E | C | B | D | A | C |
| 146 | A | D | A | C | B | B | B | E | D | A | C |
| 147 | A | E | E | E | B | A | A | A | D | C | B |
| 148 | D | A | B | E | B | C | D | E | D | B | A |
| 149 | C | A | E | E | B | A | A | A | E | A | D |
| 150 | E | C | E | D | C | D | E | A | C | D | D |
| 151 | A | A | E | D | B | A | B | C | A | A | E |
| 152 | D | B | E | E | B | A | B | D | E | A | C |
| 153 | E | D | A | D | B | A | A | B | C | A | B |
| 154 | D | A | D | E | B | D | D | D | E | B | E |
| 155 | B | A | D | E | B | B | B | C | A | A | B |
| 156 | B | C | D | A | C | B | D | A | A | D | B |
| 157 | D | A | C | C | B | B | B | E | E | E | E |
| 158 | B | D | C | E | B | A | C | B | A | A | E |
| 159 | A | D | E | E | B | A | D | E | E | C | E |
| 160 | D | A | E | E | A | A | A | D | E | A | E |
| 161 | C | A | C | C | C | E | B | E | B | D | B |
| 162 | C | A | E | E | B | C | B | B | E | E | A |
| 163 | D | C | B | D | B | D | B | D | A | C | E |
| 164 | E | A | E | E | B | A | A | E | E | A | E |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 165 | D | A | A | B | B | B | D | D | B | E | E |
| 166 | D | A | D | E | B | A | E | A | E | D | E |
| 167 | C | A | E | E | B | B | A | A | E | D | C |
| 168 | A | B | D | C | A | B | D | C | D | B | A |
| 169 | B | A | D | A | B | B | A | D | A | B | E |
| 170 | B | C | C | A | B | B | B | E | E | A | D |
| 171 | A | D | C | B | B | B | C | E | A | C | B |
| 172 | A | B | D | B | B | B | B | B | E | D | D |
| 173 | D | A | A | B | C | B | A | C | D | C | E |
| 174 | A | A | A | E | B | A | B | D | E | A | A |
| 175 | C | A | E | E | B | C | B | E | B | D | E |
| 176 | D | B | E | E | C | C | A | E | E | E | E |
| 177 | E | A | E | B | B | D | C | B | A | E | E |
| 178 | D | C | E | E | C | A | C | C | E | A | A |
| 179 | B | A | C | E | B | A | D | D | A | B | E |
| 180 | A | A | A | D | C | E | B | A | B | C | C |
| 181 | B | E | E | E | B | D | E | A | E | D | E |
| 182 | D | A | E | E | B | B | A | B | E | A | E |
| 183 | B | A | E | A | B | E | A | D | E | A | E |
| 184 | D | E | B | A | B | E | D | D | E | C | E |
| 185 | C | C | B | B | B | B | B | E | E | A | D |
| 186 | A | B | B | B | B | D | B | C | E | A | B |
| 187 | C | A | E | E | B | C | A | D | E | D | A |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 188 | E | A | A | C | B | B | C | D | A | B | E |
| 189 | E | C | E | E | A | B | B | B | E | B | D |
| 190 | D | A | E | C | B | B | A | D | E | D | E |
| 191 | B | A | E | B | B | B | B | C | D | B | E |
| 192 | A | B | E | E | B | D | A | E | E | A | E |
| 193 | D | A | D | A | B | E | C | B | E | C | A |
| 194 | B | A | E | C | A | B | E | D | E | A | E |
| 195 | B | A | E | E | B | A | A | D | E | A | C |
| 196 | D | E | B | D | C | E | D | A | B | E | E |
| 197 | C | D | E | B | B | A | D | B | A | A | B |
| 198 | A | B | A | B | B | D | D | E | D | E | A |
| 199 | D | A | E | E | B | B | B | C | D | C | E |
| 200 | D | C | C | A | A | A | D | C | E | A | B |
| 201 | E | A | D | E | B | E | A | D | E | D | E |
| 202 | C | A | E | E | B | B | B | D | E | B | E |
| 203 | D | A | D | E | B | A | A | D | E | B | D |
| 204 | A | A | E | E | B | D | C | E | B | C | E |
| 205 | D | E | A | B | B | D | A | B | C | A | C |
| 206 | C | A | E | E | B | B | A | D | C | A | A |
| 207 | D | B | C | C | A | B | B | E | E | E | B |
| 208 | B | C | C | E | B | B | C | B | B | C | E |
| 209 | B | D | A | B | C | B | D | E | C | E | B |
| 210 | A | A | E | E | B | C | B | D | E | A | D |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|----|----|----|----|----|----|----|----|----|----|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 211 | E | D | B | C | B | C | D | B | A | D | B |
| 212 | D | A | E | B | B | C | A | D | E | C | E |
| 213 | C | C | C | B | A | C | B | A | E | D | A |
| 214 | D | A | D | E | B | C | C | A | E | A | E |
| 215 | C | B | E | E | B | B | E | A | D | B | E |
| 216 | A | D | A | A | D | A | E | A | D | B | E |
| 217 | C | D | C | A | C | E | B | A | D | B | C |
| 218 | D | E | D | D | C | E | D | A | B | D | B |
| 219 | A | B | C | C | A | E | B | A | E | C | B |
| 220 | A | A | D | E | B | B | B | C | E | A | A |
| 221 | A | C | E | C | B | A | B | C | B | E | E |
| 222 | D | D | D | E | A | A | A | C | B | A | B |
| 223 | A | B | D | C | A | E | B | C | B | D | B |
| 224 | D | A | E | E | B | D | D | D | E | A | E |
| 225 | B | E | E | B | B | B | B | D | A | D | A |
| 226 | E | A | B | B | B | D | C | C | A | C | C |
| 227 | C | D | B | B | A | D | B | E | B | C | D |
| 228 | A | A | C | B | B | E | D | C | D | E | B |
| 229 | A | E | C | A | A | A | C | D | B | A | A |
| 230 | D | A | E | A | B | C | C | E | B | E | E |
| 231 | B | D | E | D | B | C | C | E | B | A | B |
| 232 | B | A | C | B | A | C | B | C | A | B | A |
| 233 | D | A | E | E | D | C | A | D | E | B | E |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| 234 | A | A | E | B | B | C | D | C | A | B | C |
| 235 | D | A | C | E | B | A | C | D | A | C | B |
| 236 | D | A | E | C | B | E | A | E | B | A | A |
| 237 | A | C | E | E | B | B | E | C | A | C | A |
| 238 | D | A | D | E | B | A | D | D | B | A | E |
| 239 | C | D | B | A | A | C | D | E | A | D | B |
| 240 | C | A | B | B | B | A | C | D | B | C | A |
| 241 | D | A | D | E | B | D | B | E | E | A | E |
| 242 | C | A | D | A | B | A | C | D | C | B | A |
| 243 | B | E | E | E | B | D | A | A | C | E | E |
| 244 | E | A | C | C | B | A | C | A | C | D | C |
| 245 | E | E | E | E | B | E | A | A | B | A | B |
| 246 | E | A | C | C | D | E | E | E | B | D | B |
| 247 | E | C | C | C | D | D | B | E | E | D | A |
| 248 | C | A | E | A | B | E | C | C | E | C | B |
| 249 | D | A | E | D | B | A | A | D | E | B | E |
| 250 | C | E | B | B | C | E | D | E | E | D | B |
| Kunci | D | A | E | E | B | A | A | D | E | A | E |
| 5% | 12,5 | 12,5 | 12,5 | 12,5 | 12,5 | 12,5 | 12,5 | 12,5 | 12,5 | 12,5 | 12,5 |
| Option A | 27,2 | 46,8 | 12,8 | 13,2 | 12,8 | 30,4 | 30,4 | 17,6 | 14 | 30 | 16,8 |
| Kategori | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF |
| Option B | 14 | 13,2 | 13,2 | 14,8 | 69,2 | 18,8 | 25,2 | 14,8 | 13,2 | 14,4 | 24 |
| Kategori | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF |

| No Responden | Nomor Butir Soal | | | | | | | | | | |
|--------------|------------------|---------|---------|---------|-------------|---------|---------|---------|---------|---------|---------|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 23 | 24 | 25 |
| Option C | 15,6 | 12,8 | 12,8 | 13,6 | 14,4 | 20 | 15,6 | 17,2 | 12,8 | 16,4 | 13,6 |
| Kategori | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF |
| Option D | 30,4 | 13,6 | 15,2 | 12,8 | 2 | 13,2 | 16 | 30,4 | 15,2 | 25,2 | 15,2 |
| Kategori | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | TDK EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF |
| Option E | 13,2 | 13,6 | 46,4 | 45,6 | 1,6 | 17,6 | 12,8 | 20 | 44,8 | 14 | 30,4 |
| Kategori | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | TDK EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF | EFEKTIF |



Lampiran 09. Soal Matematika HOTS

SOAL MATEMATIKA HOTS SMA KELAS X

Mata Pelajaran : Matematika

Kelas : X

Alokasi Waktu : 180 menit

1. Lima tahun lalu, jumlah usia Dinda, Putri, dan Agus adalah 40 tahun. Sekarang, usia Dinda 2 tahun kurangnya dari usia Putri, sedangkan jumlah usia Putri dan Agus adalah 35 tahun. Jika sekarang tahun 2020, maka Dinda lahir pada tahun....
 - a. 2000
 - b. 2001
 - c. 2002
 - d. 2003
 - e. 2004
2. Perbandingan usia Ahmad dan usia Dina adalah 2 : 3, perbandingan usia Dina dan usia Rani adalah 3:5. Jumlah usia Ahmad, Dina, dan Rani adalah 100 tahun. Jika x , y , dan z berturut-turut menyatakan usia Ahmad, usia Dina, dan usia Rani, maka persamaan yang menyatakan hubungan usia mereka adalah....
 - a. $x = \frac{2}{3}y$
 $y = \frac{5}{3}z$
 $x + y + z = 100$
 - b. $x = \frac{3}{2}y$
 $y = \frac{3}{5}z$
 $x + y + z = 100$
 - c. $x = \frac{2}{3}y$
 $y = \frac{3}{5}z$
 $x + y + z = 100$
 - d. $3x = 2y$

$$3y = 5z$$

$$x + y + z = 100$$

e. $2x = 3y$





$$3y = 5z$$

$$x + y + z = 100$$

3. Dani, Bima dan Ari dapat membersihkan sebidang sawah dalam waktu 10 jam kerja. Jika Bima dan Ari bekerja secara bersama-sama maka pekerjaan tersebut dapat diselesaikan dalam waktu 15 jam kerja. Dalam membersihkan kebun tersebut, Ari hanya dapat membantu Dani dan Bima selama 4 jam kerja, sehingga Dani dan Bima memerlukan tambahan waktu 8 jam kerja lagi untuk menyelesaikan pekerjaan tersebut. Waktu yang dibutuhkan Dani, Bima dan Ari berturut-turut jika masing-masing bekerja sendirian adalah...jam.
- 24, 30, 40
 - 24, 40, 30
 - 30, 28, 24
 - 30, 40, 24
 - 30, 24, 40
4. Banyaknya tabungan Rino Rp2.000.000,00 lebih banyak daripada tabungan Aldi. Banyaknya tabungan Rani adalah tiga kali tabungan Aldi ditambah dengan Rino. Jika jumlah tabungan ketiganya adalah Rp376.000.000,00 berapakah jumlah tabungan Rino?
- Rp62.000.000,00
 - Rp64.000.000,00
 - Rp186.000.000,00
 - Rp248.000.000,00
 - Rp250.000.000,00
5. Ibu Budi pergi ke pasar untuk membeli buah jeruk, mangga, dan salak seharga Rp 200.000,00. Berat ketiga jenis buah tersebut adalah 9 kg. Nilai belanja jeruk setengah dari nilai belanja mangga. Bila harga setiap kg jeruk, manga, dan salak berturut-turut adalah Rp15.000,00, Rp30.000,00, dan Rp20.000,00. Berapa kg salak yang dibeli Ibu Budi?

- a. 1 kg
- b. 2 kg
- c. 3 kg
- d. 4 kg
- e. 5 kg

6. Perhatikan gambar berikut

| | |
|---|-----|
|  | 125 |
|  | 139 |
|  | ? |
|  | 134 |

Setiap symbol pada gambar diatas merupakan sebuah bilangan. Jumlah bilangan setiap baris terletak sebelah kanan gambar. Bilangan yang dapat menggantikan tanda tanya (?) di atas adalah....

- a. 81
 - b. 95
 - c. 141
 - d. 183
 - e. 231
7. Harga tiket masuk ke pantai Cepi Watu sebesar Rp15.000,00 untuk dewasa, Rp10.000,00 untuk pelajar, dan Rp5.000,00 untuk anak-anak. Pada hari minggu jumlah pengunjung mencapai 100 orang, dengan total penerimaan Rp1.050.000,00. Jika banyak tiket untuk orang dewasa yang terjual 6 tiket lebih sedikit dari dua kali banyak tiket anak-anak yang terjual, maka banyaknya tiket pelajar yang terjual adalah....

- a. 58 tiket
 b. 68 tiket
 c. 78 tiket
 d. 88 tiket
 e. 98 tiket
8. Bu Sari mempunyai uang pecahan lima ribuan, sepuluh ribuan, dan dua puluh ribuan, dengan total uang tersebut adalah Rp160.000,00. Uang pecahan sepuluh ribuan 6 lembar lebih banyak daripada uang pecahan lima ribuan. Banyak lembar uang pecahan dua puluh ribuan dua kali banyak lembar uang pecahan lima ribuan. Jika x menyatakan banyak lembar uang lima ribuan, y menyatakan banyak lembar uang sepuluh ribuan, dan z menyatakan banyak lembar uang dua puluh ribuan, maka sistem persamaan yang menyatakan hubungan pecahan uang tersebut adalah
- a. $x + 2y + 4z = 32$
 $x - y = 6$
 $2x - z = 0$
- b. $x + 2y + 4z = 32$
 $x - y = 6$
 $x - 2z = 0$
- c. $x + 2y + 4z = 16$
 $x - y = -6$
 $2x - z = 0$
- d. $x + 2y + 4z = 32$
 $x - y = -6$
 $2x - z = 0$
- e. $x + 2y + 4z = 16$
 $x - y = -6$
 $x - 2z = 0$
9. Mall "A" mempunyai 3 lahan parkir, dengan jumlah kendaraan di lahan pertama dan kedua 110 unit. Banyak kendaraan di lahan pertama 22 kurangnya dari banyak kendaraan di lahan ketiga. Jika seperenam dari banyak kendaraan di lahan ketiga telah pergi, maka banyak kendaraan di lahan kedua sama dengan banyak kendaraan lahan ketiga. Jadi, total kendaraan yang diparkir adalah....
- a. 72 unit

- b. 182 unit
c. 190 unit
d. 198 unit
e. 232 unit
10. Rita, Maria, dan Indah bersama – sama pergi ke sebuah supermarket. Rita membeli $\frac{1}{2}$ kg bawang merah, 1 kg bawang putih, dan 2 kg cabe dengan harga Rp 72.000,00. Maria membeli 3 kg bawang merah, $\frac{1}{4}$ kg bawang putih, dan $\frac{1}{2}$ kg cabe dengan harga Rp 75.500,00. Indah membeli 1 kg bawang merah, 2 kg bawang putih, dan 2 kg cabe, dengan harga Rp 100.000,00. Harga, 1 kg bawang merah, 1 kg bawang putih, dan 3 kg cabe adalah
- a. Rp 60.000,00
b. Rp 86.000,00
c. Rp 96.000,00
d. Rp 100.000,00
e. Rp 104.000,00
11. Seorang pengusaha Roti akan membeli tiga jenis tepung, yakni: tepung ketan, tepung tapioca, dan tepung beras yang akan dijadikan bahan dasar untuk membuat roti. Harga tiap-tiap karung dari bahan-bahan yang dibutuhkan berturut-turut adalah Rp80.000,00; Rp100.000,00; dan Rp 140.000,00. Pengusaha Roti tersebut membutuhkan 20 karung tepung, dengan proporsi kebutuhan bahwa tepung tapioka dibutuhkan 3 kali tepung ketan. Untuk keperluan bahan dasar tersebut pengusaha roti membayar sebesar Rp2.260.000,00. Berapa karung yang harus dibeli pengusaha tersebut untuk tiap-tiap jenis tepung?
- a. 3 karung tepung ketan, 9 karung tepung tapioca, dan 8 karung tepung beras
b. 3 karung tepung ketan, 9 karung tepung tapioca, dan 10 karung tepung beras
c. 4 karung tepung ketan, 12 karung tepung tapioca, dan 8 karung tepung beras
d. 5 karung tepung ketan, 15 karung tepung tapioca, dan 5 karung tepung beras
e. 6 karung tepung ketan, 18 karung tepung tapioca, dan 2 karung tepung beras
12. Ibu Mei adalah seorang pengrajin kain songket yang mampu membuat tiga motif seperti pada gambar berikut.



Gambar 1



Gambar 2



Gambar 3

Suatu hari ibu Mei mendapat pesanan untuk membuat kain songket dengan motif seperti pada gambar 1 sebanyak 2 kain dan 1 kain dengan motif seperti gambar 3. Dalam pembuatan kain tersebut, Ibu Mei dibantu oleh kedua rekannya yakni Ibu Ida dan Ibu Sofia. Jika Ibu Mei dibantu oleh Ibu Ida maka pesanan tersebut dapat diselesaikan dalam waktu 4 hari. Sedangkan jika dibantu oleh Ibu Sofia, pesanan tersebut dapat diselesaikan dalam waktu 3 hari. Ibu Ida dan Ibu Sofia dapat menyelesaikan pesanan tersebut dalam waktu 5 hari. Jika ketiganya bekerja secara bersama-sama, maka waktu yang dibutuhkan dalam menyelesaikan pesanan tersebut adalah....

- a. 2 hari
- b. 3 hari
- c. 4 hari
- d. 5 hari
- e. 6 hari

13. Pak Budi memiliki uang sebesar Rp120.000.000,00 dan menginvestasikan uangnya di bank dalam bentuk tabungan dengan suku bunga 2% per bulan, deposito berjangka dengan suku bunga 3% per tahun, dan surat obligasi dengan pembayaran 5% per tahun. Adapun total pendapatan pak Budi dalam satu tahun dari ketiga investasi tersebut sebesar Rp5.100.000,00, pendapatan dari investasi tabungan Rp3.500.000,00 kurangnya dari total pendapatan dua investasi lainnya. Jika x , y , z berturut-turut menyatakan tabungan, deposito berjangka, dan surat obligasi maka sistem persamaan yang menyatakan hubungan ketiga bentuk investasi tersebut adalah....

- a. $x + y + z = 120.000.000$
 $2x + 3y + 5z = 5.100.000$

$$x = y + z - 3.500.000$$

b. $x + y + z = 120.000.000$

$$2x + 3y + 5z = 5.100.000$$

$$x = y + z + 3.500.000$$

c. $x + y + z = 120.000.000$

$$2x + 3y + 5z = 5.100.000$$

$$-x + y + z = 3.500.000$$

d. $x + y + z = 120.000.000$

$$0,02x + 0,03y + 0,05z = 5.100.000$$

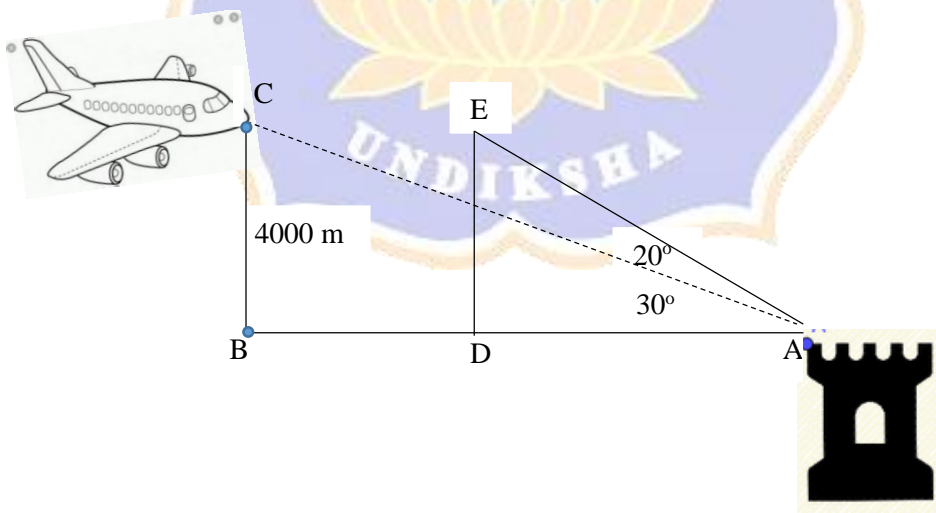
$$x = y + z - 3.500.000$$

e. $x + y + z = 120.000.000$

$$0,02x + 0,03y + 0,05z = 5.100.000$$

$$x + z + y = 3.500.000$$

14. Suatu pesawat terbang sedang berada di udara dengan ketinggian 4.000 meter dari menara pengawas. Dalam 50 detik, sudut elevasi pesawat berubah dari 30° menjadi 50° dilihat dari puncak menara pengawas. Perhatikan ilustrasi berikut



Kecepatan pesawat tersebut adalah... m/detik.

- a. 32,04 m/detik

- b. 55,56 m/detik
- c. 67,11 m/detik
- d. 71,61 m/detik
- e. 72,61 m/detik

15. Irma mempunyai tinggi badan 150 cm. Dia berdiri di depan sebuah tiang bendera dan melihat puncak tiang bendera dengan sudut elevasi 30° , lalu ia berjalan sejauh 10 meter mendekati tiang bendera dan melihat puncak tiang bendera dengan sudut elevasi 60° . Tinggi tiang bendera tersebut adalah...meter

- a. $5\sqrt{3} + 1,5$
- b. $8\sqrt{2} + 1,5$
- c. $10\sqrt{2} + 1,5$
- d. $10\sqrt{3} + 1,5$
- e. $15\sqrt{2} + 1,5$

16. Berikut adalah hasil pekerjaan rumah matematika Rafli

Jika diketahui $\sin(p - 30^\circ) + \sin(p + 30^\circ) = r$, tentukan nilai $\sin 2p$.

Penyelesaian:

$$\Leftrightarrow \sin(p - 30^\circ) + \sin(p + 30^\circ) = r$$

$$\Leftrightarrow 2 \sin\left(\frac{(p-30^\circ)+(p+30^\circ)}{2}\right) \cos\left(\frac{(p-30^\circ)-(p+30^\circ)}{2}\right) = r$$

$$\Leftrightarrow 2 \sin\left(\frac{2p}{2}\right) \cos\left(\frac{-60^\circ}{2}\right) = r$$

$$\Leftrightarrow 2 \sin p \cos(-30^\circ) = r$$

$$\Leftrightarrow 2 \sin p \cdot \frac{1}{2}\sqrt{3} = r$$

$$\Leftrightarrow \sin p \cdot \sqrt{3} = r$$

$$\Leftrightarrow \sin p = \frac{r}{\sqrt{3}}$$

Nilai trigonometri tersebut dapat dibuat segitiga siku-siku berikut.

$$\sin p = \frac{r}{\sqrt{3}} \text{ dan } \cos p = \frac{\sqrt{3^2 - r^2}}{\sqrt{3}}$$

$$\sin 2p = 2 \sin p \cos p$$

$$= 2 \cdot \frac{r}{\sqrt{3}} \cdot \frac{\sqrt{9-r^2}}{\sqrt{3}}$$

$$= \frac{2r}{3} \sqrt{9 - r^2}$$

Setelah diperiksa guru, ternyata jawaban Alfi keliru. Pernyataan mana dari jawaban Alfi yang keliru?

a. $2 \sin\left(\frac{2p}{2}\right) \cos\left(\frac{-60^\circ}{2}\right) = r \Leftrightarrow 2 \sin p \cos(-30^\circ) = r$

b. $2 \sin p \cos(-30^\circ) = r \Leftrightarrow 2 \sin p \cdot \frac{1}{2} \sqrt{3} = r$

c. $2 \sin p \cdot \frac{1}{2} \sqrt{3} = r \Leftrightarrow \sin p \cdot \sqrt{3} = r$

d. $\sin p \cdot \sqrt{3} = r \Leftrightarrow \sin p = \frac{r}{\sqrt{3}}$

e. $\cos p = \frac{\sqrt{3^2 - r^2}}{\sqrt{3}}$

17. Anton, Lukas, Doni, Ahmad dan Rian sedang jalan-jalan di tepi pantai. Dari tepi pantai mereka dapat melihat puncak gunung poco Ndeki. Kelima anak tersebut tersebut memprediksi jarak antara tepi pantai tempat mereka duduk dengan gunung tersebut secara berurutan adalah 250 meter, 353,5 meter, 432,5 meter, 489,5 meter dan 500 meter. Dari kelima anak tersebut, prediksi yang paling tepat jika sudut elevasinya 45° dan hipotenusanya 500 meter adalah....

- a. Anton
- b. Rian
- c. Doni
- d. Ahmad
- e. Lukas

18. Perhatikan pekerjaan rumah matematika Rahmat berikut.

(1) $\tan 40^\circ = \cot 50^\circ$

(2) $\cos 53^\circ = \sin 37^\circ$

(3) $\tan 143^\circ = \tan 37^\circ$

(4) $\cos 190^\circ = -\cos 10^\circ$

Dari pernyataan di atas, pernyataan nomor berapa sajakah yang merupakan pernyataan benar?

$$\tan 40^\circ = \tan(90^\circ - 50^\circ)$$

$$= \cot 50^\circ$$

$$\cos 53^\circ = \cos(90^\circ - 37^\circ)$$

$$= -\sin 37^\circ$$

$$\tan 143^\circ = \tan(180^\circ - 37^\circ)$$

$$= \tan 37^\circ$$

$$\cos 190^\circ = \cos(180^\circ + 10^\circ)$$

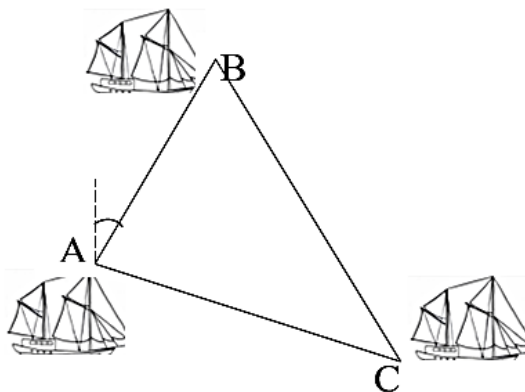
$$= -\cos 10^\circ$$

Setelah diperiksa Ibu guru, ternyata ada jawaban Rahmat yang masih keliru.

Pernyataan mana dari jawaban rahmat yang masih keliru?

- a. (1) dan (2)
- b. (2) dan (3)
- c. (1) dan (3)
- d. (2) dan (4)
- e. (3) dan (4)

19. Perhatikan gambar berikut



Sebuah kapal berangkat dari pelabuhan A pada pukul 08.00 dengan arah 30° dan tiba di pelabuhan B setelah 4 jam. Pada pukul 13.00 kapal berangkat ke pelabuhan C dengan memutar haluan 150° dan tiba di pelabuhan C pada pukul 20.00. Kecepatan rata-rata kapal adalah 50 mil/jam. Jarak Antara pelabuhan C dari pelabuhan A adalah....

- a. $50\sqrt{37}$ mill
- b. $50\sqrt{40}$ mill
- c. $50\sqrt{45}$ mill
- d. $50\sqrt{48}$ mill
- e. 150 mill

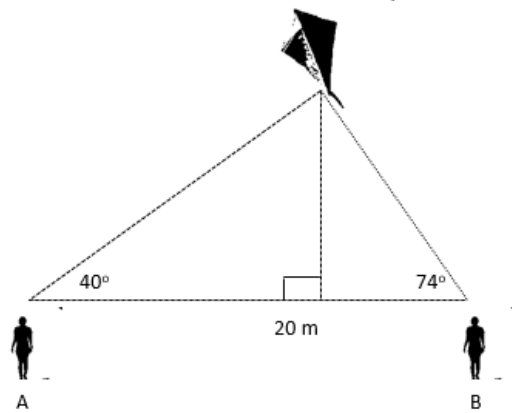
20. Perhatikan gambar berikut



Sebuah mercusuar tingginya 90 meter diatas permukaan laut, sebuah perahu nelayan disoroti dengan menggunakan sudut depresi 15° (Perhatikan ilustrasi diatas). Jauh perahu tersebut dengan garis pantai dapat ditaksirkan sejauh...meter

- a. 335,82
- b. 340,18
- c. 347,49
- d. 358,05
- e. 360,23

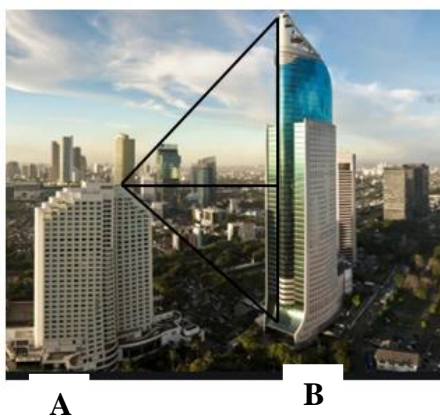
21. Perhatikan ilustrasi berikut



Dua orang anak sedang bermain layang-layang di lapangan sepak bola. Jarak keduanya adalah 20 meter dan kedua anak tersebut memiliki tinggi yang sama yakni 1,5 meter. Fakta pada opsi berikut yang tepat menggambarkan ilustrasi di atas adalah....

- a. Jarak anak A dengan layang-layang adalah 20,098 m
- b. Jarak anak A dengan layang-layang adalah 18,32 m
- c. Ketinggian layang-layang adalah 13,903 m
- d. Jarak anak B dengan layang-layang adalah 13,065 m
- e. Jarak anak B dengan layang-layang adalah 13,502 m

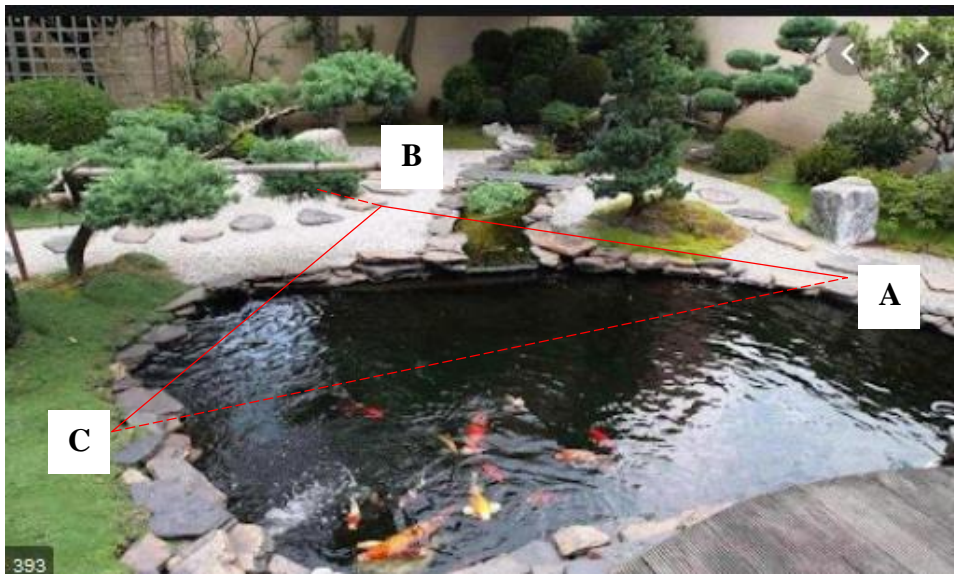
22. Perhatikan gambar berikut



Dari puncak gedung A diamati tinggi gedung B tepat berada didepannya seperti yang diilustrasikan pada gambar di atas, dengan sudut elevasinya 45° dan sudut depresi 30° . Tinggi gedung A adalah 30 meter, maka tinggi gedung B adalah....

- a. 24,49 m
- b. 54,49 m
- c. 72,42 m
- d. 81,99 m
- e. 102,42 m

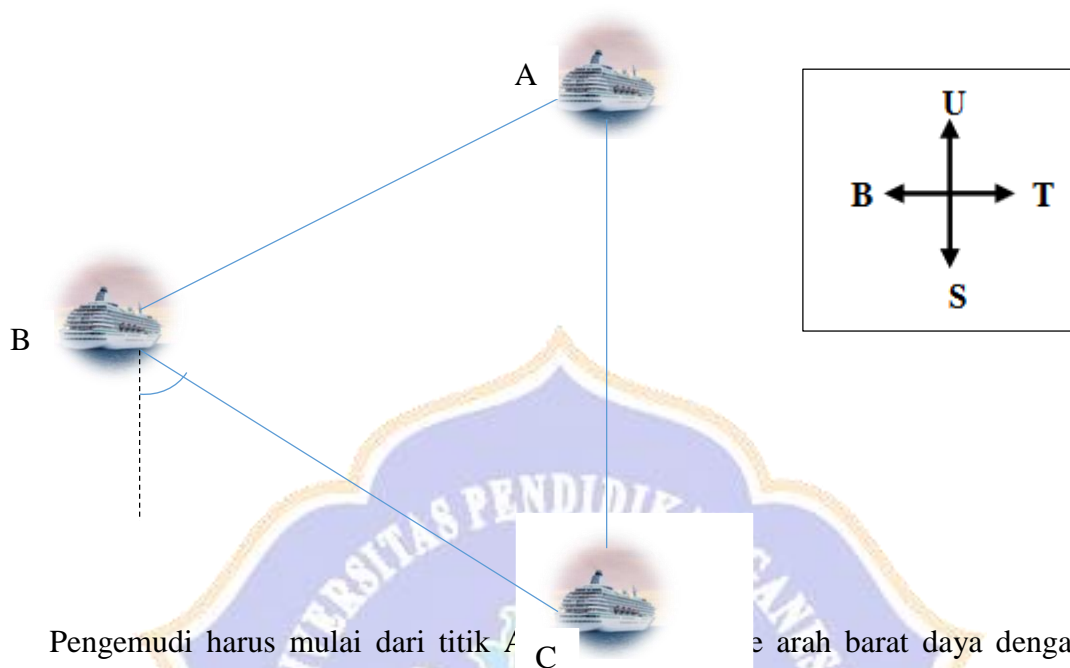
23. Perhatikan gambar berikut.



Seorang pekerja sedang membersihkan kolam ikan, pekerja tersebut berjalan sejauh 4 meter dari titik A ke titik B, kemudian berputar 60° dan berjalan sejauh 2 meter ke titik C. Panjang AC adalah...

- a. $\sqrt{4}$ m
- b. $\sqrt{6}$ m
- c. $\sqrt{8}$ m
- d. $\sqrt{10}$ m
- e. $\sqrt{12}$ m

24. Pada latihan mengendarai suatu kapal cepat di perairan, lintasan latihan didesain seperti yang diberikan pada Gambar berikut.



Pengemudi harus mulai dari titik A ke arah barat daya dengan membentuk sudut 52° ke titik B, kemudian bergerak ke arah tenggara dengan membentuk sudut 40° ke titik C, dilanjutkan kembali ke titik A. Jarak titik A ke C sejauh 8 km. Hitunglah panjang lintasan yang ditempuh.

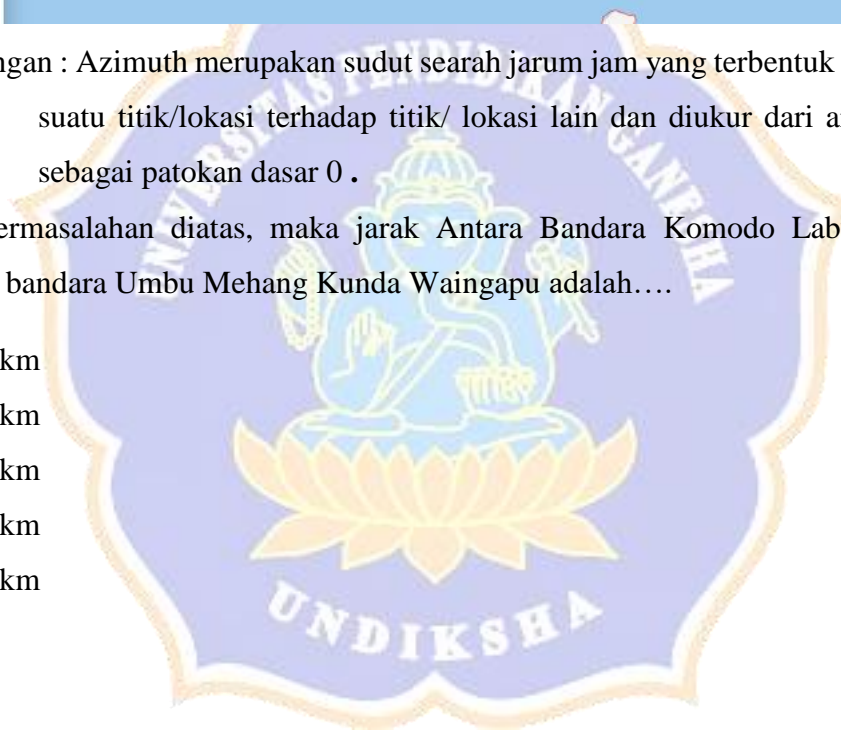
- a. 19,52 km
 - b. 20,02 km
 - c. 21,52 km
 - d. 22,02 km
 - e. 23, 52 km
25. Pesawat Wings berangkat dari Bandara Hasan Aroeboesman Ende menuju Bandara Komodo Labuan Bajo dengan azimuth 280° dan pesawat Transnusa dari Bandara Hasan Aroeboesman Ende menuju bandara Umbu Meheng Kunda Waingapu dengan azimuth 200° . Jarak antara Bandara Hasan Aroeboesman Ende Bandara Komodo Labuan Bajo adalah 300 km dan Jarak antara Bandara Hasan Aroeboesman Ende dengan bandara Umbu Meheng Kunda Waingapu 550 km. Situasi ini ditunjukkan dalam gambar berikut.



Keterangan : Azimuth merupakan sudut searah jarum jam yang terbentuk pada arah suatu titik/lokasi terhadap titik/ lokasi lain dan diukur dari arah Utara sebagai patokan dasar 0 .

Dari permasalahan diatas, maka jarak Antara Bandara Komodo Labuan Bajo dengan bandara Umu Mehang Kunda Waingapu adalah....

- a. 470 km
- b. 490 km
- c. 510 km
- d. 530 km
- e. 550 km



PENILAIAN PAKAR

PENGEMBANGAN INSTRUMEN TES *HIGHER ORDER THINKING SKILL* (HOTS) MATEMATIKA SMA KELAS X DI KABUPATEN MANGGARAI TIMUR PROVINSI NUSA TENGGARA TIMUR

Nama Pakar :

Nama Peneliti : Kamelia Olga Litna

NIM : 1829021002

Program Studi : Penelitian dan Evaluasi Pendidikan

A. Grand Teori

1. *Higher Order Thinking Skill* (HOTS)

Higher order thinking skill (HOTS) adalah kemampuan berpikir kritis, logis, reflektif, metakognitif, dan berpikir kreatif. Instrumen tes kemampuan berpikir tingkat tinggi (HOTS) penting untuk dapat mengukur tingkat penguasaan materi ajar peserta didik. Dasar dari berpikir tingkat tinggi adalah Taksonomi Bloom. Menurut Taksonomi Bloom yang telah direvisi proses kognitif terbagi menjadi kemampuan berpikir tingkat rendah (*Lower Order Thinking/LOTS*) dan kemampuan berpikir tingkat tinggi (HOTS). Kemampuan yang termasuk LOTS adalah kemampuan mengingat (*remember*), memahami (*understand*), dan menerapkan (*apply*). Sedangkan HOTS meliputi kemampuan menganalisis (*analyze*), mengevaluasi (*evaluate*), dan menciptakan (*create*) (Anderson & Krathwohl, 2001). Selanjutnya King, Goodson, & Rohani (2010) menjelaskan bahwa HOTS melibatkan beragam penerapan proses berpikir dalam situasi-situasi kompleks dan terdiri dari banyak variable, yaitu termasuk berpikir kritis, logis, reflektif, metakognitif, dan berpikir kreatif.

Menurut Brookhart (2010) *Higher Order Thinking Skills* (HOTS) adalah kemampuan berpikir yang meliputi 3 hal, yang pertama kemampuan berpikir yang dimiliki individu yang terdiri dari kemampuan mengingat kembali apa yang sudah dipelajari sebelumnya dan mengetahui bagaimana cara menggunakannya atau

disebut transfer, yang kedua adalah kemampuan kritis dimana peserta didik memberikan penilaian akan kejadian disekitarnya dan mampu mengungkapkan kritik yang berdasarkan fakta-fakta yang ada, yang ketiga adalah kemampuan *problem solving* atau kemampuan untuk melihat masalah yang terjadi dan memberikan solusi pada masalah yang ada di sekitarnya berdasarkan pengetahuan yang sudah dimiliki sebelumnya. Pada taksonomi Bloom yang telah direvisi HOTS meliputi kemampuan menganalisis (*analyze*), mengevaluasi (*evaluate*), dan menciptakan (*create*) (Anderson & Krathwohl, 2001:68).

Soal-soal HOTS merupakan instrumen pengukuran yang digunakan untuk mengukur kemampuan berpikir tingkat tinggi, yaitu kemampuan berpikir yang tidak sekedar mengingat (*recall*), menyatakan kembali (*restate*), atau merujuk tanpa melakukan pengolahan (*recite*). Soal-soal HOTS pada konteks asesmen mengukur kemampuan: 1) transfer satu konsep ke konsep lainnya, 2) memproses dan menerapkan informasi, 3) mencari kaitan dari berbagai informasi yang berbeda-beda, 4) menggunakan informasi untuk menyelesaikan masalah, dan 5) menelaah ide dan informasi secara kritis. (Kemendikbud: 2017).

2. Taksonomi Bloom Kemampuan Berpikir *Higher Order Thinking Skill* (HOTS)

Taksonomi Bloom mengalami perbaikan seiring dengan perkembangan zaman serta teknologi. Revisi taksonomi Bloom yang dilakukan oleh Anderson dan Krathwohl lebih berfokus pada bagaimana domain kognitif lebih hidup dan aplikatif bagi pendidik dan praktik pembelajaran yang diharapkan dapat membantu pendidik dalam mengolah dan merumuskan tujuan pembelajaran dan strategi penilaian yang efisien. Taksonomi hasil revisi Anderson pada ranah kognitif adalah mengingat (C1), memahami (C2), menerapkan (C3), menganalisis (C4), mengevaluasi (C5), dan mengkreasi/mencipta (C6). (Anderson & Krathwohl, 2001:268). Yang termasuk dalam level HOTS adalah menganalisis (C4), mengevaluasi (C5), dan mengkreasi/mencipta (C6).

a. Menganalisis

Menganalisis merupakan memecahkan suatu permasalahan dengan memisahkan tiap-tiap bagian dari permasalahan dan mencari keterkaitan dari tiap-

tiap bagian tersebut dan mencari tahu bagaimana keterkaitan tersebut dapat menimbulkan permasalahan.

b. Mengevaluasi

Mengevaluasi meliputi mengecek (*checking*) dan mengkritisi (*critiquing*). Mengecek mengarah pada kegiatan pengujian hal-hal yang tidak konsisten atau kegagalan dari suatu operasi atau produk.

c. Mencipta

Menciptakan meliputi menggeneralisasikan (*generating*) dan memproduksi (*producing*). Menggeneralisasi merupakan kegiatan mempresentasikan permasalahan dan penemuan alternative hipotesis yang diperlukan. Memproduksi mengarah pada perencanaan untuk menyelesaikan permasalahan yang diberikan.

Anderson dan Krathwohl (2001) mengkategorikan dimensi pengetahuan yang berada pada level kemampuan berpikir tingkat tinggi adalah *conceptual knowledge*, *procedural knowledge*, dan *metacognitive knowledge*.

Berikut lebih rinci dijelaskan dimensi pengetahuan Taksonomi Bloom yang termasuk dalam kategori kemampuan berpikir tingkat tinggi (HOTS).

a. *Conceptual Knowledge* (Pengetahuan Konseptual)

Pengetahuan konseptual mencakup pengetahuan tentang kategori, klasifikasi, dan hubungan antara dua atau lebih kategori pengetahuan yang lebih kompleks dan tertata. Pengetahuan konseptual meliputi skema, model, mental, dan teori yang mempresentasikan pengetahuan manusia tentang bagaimana suatu materi kajian ditata dan distruktur, bagaimana bagian-bagian informasi saling berkaitan secara sistematis, dan bagaimana bagian-bagian ini berfungsi bersama. Pengetahuan konseptual terdiri dari tiga sub jenis, yakni: (1) pengetahuan tentang klasifikasi dan kategori; (2) pengetahuan tentang prinsip dan generalisasi; dan (3) pengetahuan tentang teori, model dan struktur.

b. *Procedural Knowledge* (Pengetahuan Prosedural)

Pengetahuan prosedural adalah pengetahuan tentang cara melakukan sesuatu. Pengetahuan prosedural terbagi menjadi tiga subjenis, yakni: (1) pengetahuan tentang keterampilan dalam bidang tertentu dan algoritma, (2) pengetahuan tentang teknik dan metode dalam bidang tertentu, dan

(3) pengetahuan tentang kriteria untuk menentukan kapan harus menggunakan prosedur yang tepat.

c. *Metacognitive Knowledge* (Pengetahuan Metakognitif)

Pengetahuan metakognitif mencakupi pengetahuan tentang kognisi secara umum dan pengetahuan tentang diri sendiri. Pengetahuan metakognisi terbagi menjadi tiga subjenis, yakni: (1) pengetahuan strategis, (2) pengetahuan tentang tugas-tugas kognitif yang meliputi pengetahuan kontekstual dan kondisional, dan (3) pengetahuan diri.

3. Soal Pilihan Ganda

Tes objektif tipe pilihan ganda pada prinsipnya terdiri atas sebuah pokok persoalan atau problem dan daftar pilihan yang dianjurkan untuk diisi oleh siswa yang hendak dievaluasi. Item pilihan ganda dibedakan dalam dua bagian penting, yaitu pokok persoalan dan jawaban alternative (Sukardi, 2015:117). Penyusunan bentuk tes pilihan ganda dilakukan dengan memperhatikan urutan kegiatan yaitu menganalisis kurikulum, membuat peta konsep, menyusun kisi-kisi tes, menyusun spesifikasi butir soal, menuliskan butir soal. Ebel (dalam Mardapi, 2017:103) menjelaskan pedoman utama dalam pembuatan butir soal bentuk pilihan ganda adalah sebagai berikut.

1. Pokok soal harus jelas
2. Pilihan jawaban homogen dalam arti isi
3. Panjang kalimat pilihan jawaban relative sama
4. Tidak ada petunjuk jawaban benar
5. Hindari penggunaan pilihan jawaban: semua benar atau semua salah.
6. Pilihan jawaban angka diurutkan
7. Semua pilihan jawaban logis
8. Jangan menggunakan negatif ganda.
9. Kalimat yang digunakan sesuai dengan tingkat perkembangan peserta tes.
10. Bahasa Indonesia yang digunakan baku.
11. Letak pilihan jawaban benar ditentukan secara acak.

Kaidah atau ketentuan penulisan soal yang digunakan adalah modul penyusunan soal *higher order thinking skills* (HOTS) harus memperhatikan tiga aspek yakni: materi, konstruksi, dan Bahasa, dapat dilihat pada table berikut.

Tabel 01. Kaidah atau ketentuan penulisan soal

| Aspek Penelaahan | Kriteria Penelaahan |
|-------------------------|--|
| Materi | Kesesuaian butir soal dengan KD dan Indikator |
| | Soal tidak mengandung unsur SARAPPPK (suku, agama, ras, antar golongan, pornografi, politik, propaganda, kekerasan). |
| | Penggunaan stimulus yang menarik dan kontekstual |
| | Cakupan materi yang ditanyakan sesuai dengan jenjang sekolah atau tingkatan |
| | Mengukur level kognitif menganalisis, mengevaluasi, dan mencipta. |
| Konstruksi | Perumusan pokok soal yang singkat, jelas dan tegas |
| | Pokok soal tidak memberi petunjuk pada jawaban yang benar |
| | Pilihan jawaban homogen dan logis dengan isi materi |
| | Gambar dan grafik yang dicantumkan jelas dan berfungsi |
| | Panjang pilihan jawaban relative sama |
| | Pilihan jawaban tidak menggunakan pernyataan “semua jawaban benar” dan sejenisnya. |
| | Pilihan jawaban yang berbentuk angka/waktu diurutkan dari besar kecilnya angka tersebut |
| Bahasa | Kalimat yang digunakan sesuai dengan EYD |
| | Tidak menggunakan Bahasa daerah tertentu |
| | Kejelasan Bahasa soal bagi peserta didik |
| | Pilihan jawaban tidak mengulang kata atau kalimat yang sama, kecuali merupakan satu kesatuan yang penting. |

(Widana, 2017)

B. Kisi-Kisi

Kisi-kisi Soal Matematika Kelas X HOTS

Jenis Sekolah : SMA Kelas : X Alokasi Waktu: 2×90 Menit
 Mata Pelajaran : Matematika Semester: 1, 2 Bentuk Soal : Pilihan Ganda
 Kurikulum : K 13 Th. Pel. : 2019/2020 Jumlah Soal : 28 Butir

| No | Kompetensi Dasar | Indikator Pencapaian Kompetensi (IPK) | Dimensi Proses Kognitif | Dimensi Pengetahuan | Cakupan Materi | No Soal |
|----|--|---|-------------------------|---------------------|---------------------------------------|-------------------------------|
| 1 | 3.3 Menyusun sistem persamaan linear tiga variabel dari masalah kontekstual | 3.3.1 Menentukan himpunan penyelesaian dari sistem persamaan linear tiga variabel menggunakan metode yang sesuai | C4 | K3 | Sistem persamaan linear tiga variabel | 7 |
| | | | C4 | K4 | Sistem persamaan linear tiga variabel | 3, 12, 13 |
| | | | C4 | K3 | Sistem persamaan linear tiga variabel | 1, 4, 5,6,7 8,10, 11 |
| | | 3.3.2 Merumuskan model matematika sistem persamaan linear tiga variabel dari masalah kontekstual | C6 | K2 | Sistem persamaan linear tiga variabel | 2,9, 14 |
| 2 | 3.8 Menggeneralisasi rasio trigonometri untuk sudut-sudut di berbagai kuadran dan sudut-sudut berelasi | 3.8.1 Menentukan solusi dari permasalahan kontekstual berkaitan dengan rasio trigonometri untuk sudut-sudut di berbagai kuadran. | C4 | K3 | Perbandingan Trigonometri | 15,16 20,21 22,24 25,26 27,28 |

| No | Kompetensi Dasar | Indikator Pencapaian Kompetensi (IPK) | Dimensi Proses Kognitif | Dimensi Pengetahuan | Cakupan Materi | No Soal |
|----|------------------|--|-------------------------|---------------------|---------------------------|---------|
| | | 3.8.2 Megkritisi kebenaran informasi tentang permasalahan yang disajikan berkaitan dengan rasio trigonometri untuk sudut-sudut diberbagai kuadran | C5 | K4 | Perbandingan Triginometri | 18, 23 |
| | | 3.8.3. Mengoreksi solusi yang diberikan berkaitan dengan rasio trigonometri untuk sudut-sudut diberbagai kuadran | C5 | K3 | Perbandingan Triginometri | 17 |
| | | | | K2 | Perbandingan Triginometri | 19 |

1. Lima tahun lalu, jumlah usia Dinda, Putri, dan Agus adalah 40 tahun. Sekarang, usia Dinda 2 tahun kurangnya dari usia Putri, sedangkan jumlah usia Putri dan Agus adalah 35 tahun. Jika sekarang tahun 2020, maka Dinda lahir pada tahun....

- a. 2000
- b. 2001
- c. 2002
- d. 2003
- e. 2004

Kunci: a

2. Perbandingan usia Ahmad dan usia Dina adalah 2 : 3, perbandingan usia Dina dan usia Rani adalah 3:5. Jumlah usia Ahmad, Dina, dan Rani adalah 100 tahun. Jika x, y, dan z berturut-turut menyatakan usia Ahmad, usia Dina, dan usia Rani, maka persamaan yang menyatakan hubungan usia mereka adalah....

a. $x = \frac{2}{3}y$

$y = \frac{5}{3}z$

$x + y + z = 100$

b. $x = \frac{3}{2}y$

$y = \frac{3}{5}z$

$x + y + z = 100$

c. $x = \frac{2}{3}y$

$y = \frac{3}{5}z$

$x + y + z = 100$

d. $3x = 2y$

$3y = 5z$

$x + y + z = 100$

e. $2x = 3y$

$3y = 5z$

$x + y + z = 100$

Kunci: c

3. Dani, Bima dan Ari dapat membersihkan sebidang sawah dalam waktu 10 jam kerja. Jika Bima dan Ari bekerja secara bersama-sama maka pekerjaan tersebut dapat diselesaikan dalam waktu 15 jam kerja. Dalam membersihkan kebun tersebut, Ari hanya dapat membantu Dani dan Bima selama 4 jam kerja, sehingga Dani dan Bima memerlukan tambahan waktu 8 jam kerja lagi untuk menyelesaikan pekerjaan tersebut. Waktu yang dibutuhkan Dani, Bima dan Ari berturut-turut jika masing-masing bekerja sendirian adalah...jam.

a. 24, 30, 40

b. 24, 40, 30

c. 30, 28, 24

d. 30, 40, 24

e. **30, 24, 40**

Kunci: e

4. Banyaknya tabungan Rino Rp2.000.000,00 lebih banyak daripada tabungan Aldi. Banyaknya tabungan Rani adalah tiga kali tabungan Aldi ditambah dengan Rino. Jika

jumlah tabungan ketiganya adalah Rp376.000.000,00 berapakah jumlah tabungan Rino?

- a. Rp62.000.000,00
- b. Rp64.000.000,00**
- c. Rp186.000.000,00
- d. Rp248.000.000,00
- e. Rp250.000.000,00

Kunci: b

5. Ibu Budi pergi ke pasar untuk membeli buah jeruk, mangga, dan salak seharga Rp 200.000,00. Berat ketiga jenis buah tersebut adalah 9 kg. Nilai belanja jeruk setengah dari nilai belanja mangga. Bila harga setiap kg jeruk, manga, dan salak berturut-turut adalah Rp15.000,00, Rp30.000,00, dan Rp20.000,00. Berapa kg salak yang dibeli Ibu Budi?

- a. 1 kg**
- b. 2 kg
- c. 3 kg
- d. 4 kg
- e. 5 kg





Kunci: a

6. Ani memiliki tiga printer di rumahnya. Jika printer A dan printer B mulai mencetak dalam waktu bersamaan, maka dalam waktu 1 menit mampu mencetak 12 lembar. Jika printer B dan C bekerja bersama, maka mampu menghasilkan 10 lebih banyak dari printer A dalam waktu 1 menit. Jika ketiga printer bekerja bersamaan, maka mampu menghasilkan 20 lembar dalam dalam waktu 1 menit. Berapa lembar yang dihasilkan printer A dalam waktu 1 jam?

- a. 280 lembar
- b. 290 lembar
- c. 300 lembar
- d. 310 lembar
- e. 320 lembar

Kunci: c

7. Perhatikan gambar berikut

| | |
|---|-----|
|  | 125 |
|  | 139 |
|  | ? |
|  | 134 |

Setiap symbol pada gambar diatas merupakan sebuah bilangan. Jumlah bilangan setiap baris terletak sebelah kanan gambar. Bilangan yang dapat menggantikan tanda tanya (?) di atas adalah....

- a. 81
- b. 95
- c. 141
- d. 183
- e. 231

Kunci: c

8. Harga tiket masuk ke pantai Capi Watu sebesar Rp15.000,00 untuk dewasa, Rp10.000,00 untuk pelajar, dan Rp5.000,00 untuk anak-anak. Pada hari minggu jumlah pengunjung mencapai 100 orang, dengan total penerimaan Rp1.050.000,00. Jika banyak tiket untuk orang dewasa yang terjual 6 tiket lebih sedikit dari dua kali banyak tiket anak-anak yang terjual, maka banyaknya tiket pelajar yang terjual adalah....

- a. 58 tiket
- b. 68 tiket

- c. 78 tiket
- d. 88 tiket
- e. 98 tiket

Kunci: a

9. Bu Sari mempunyai uang pecahan lima ribuan, sepuluh ribuan, dan dua puluh ribuan, dengan total uang tersebut adalah Rp160.000,00. Uang pecahan sepuluh ribuan 6 lembar lebih banyak daripada uang pecahan lima ribuan. Banyak lembar uang pecahan dua puluh ribuan dua kali banyak lembar uang pecahan lima ribuan. Jika x menyatakan banyak lembar uang lima ribuan, y menyatakan banyak lembar uang sepuluh ribuan, dan z menyatakan banyak lembar uang dua puluh ribuan, maka sistem persamaan yang menyatakan hubungan pecahan uang tersebut adalah

- a. $x + 2y + 4z = 32$
 $x - y = 6$
 $2x - z = 0$
- b. $x + 2y + 4z = 32$
 $x - y = 6$
 $x - 2z = 0$
- c. $x + 2y + 4z = 16$
 $x - y = -6$
 $2x - z = 0$
- d. $x + 2y + 4z = 32$
 $x - y = -6$
 $2x - z = 0$
- e. $x + 2y + 4z = 16$
 $x - y = -6$
 $x - 2z = 0$

Kunci: d

10. Mall "A" mempunyai 3 lahan parkir, dengan jumlah kendaraan di lahan pertama dan kedua 110 unit. Banyak kendaraan di lahan pertama 22 kurangnya dari banyak kendaraan di lahan ketiga. Jika seperenam dari banyak kendaraan di lahan ketiga telah pergi, maka banyak kendaraan di lahan kedua sama dengan banyak kendaraan lahan ketiga. Jadi, total kendaraan yang diparkir adalah....

- a. 72 unit
- b. 182 unit

- c. 190 unit
- d. 198 unit
- e. 232 unit

Kunci: b

11. Rita, Maria, dan Indah bersama – sama pergi ke sebuah supermarket. Rita membeli $\frac{1}{2}$ kg bawang merah, 1 kg bawang putih, dan 2 kg cabe dengan harga Rp 72.000,00. Maria membeli 3 kg bawang merah, $\frac{1}{4}$ kg bawang putih, dan $\frac{1}{2}$ kg cabe dengan harga Rp 75.500,00. Indah membeli 1 kg bawang merah, 2 kg bawang putih, dan 2 kg cabe, dengan harga Rp 100.000,00. Harga, 1 kg bawang merah, 1 kg bawang putih, dan 3 kg cabe adalah

- a. Rp 60.000,00
- b. Rp 86.000,00
- c. Rp 96.000,00
- d. Rp 100.000,00
- e. Rp 104.000,00

Kunci: e

12. Seorang pengusaha Roti akan membeli tiga jenis tepung, yakni: tepung ketan, tepung tapioca, dan tepung beras yang akan dijadikan bahan dasar untuk membuat roti. Harga tiap-tiap karung dari bahan-bahan yang dibutuhkan berturut-turut adalah Rp80.000,00; Rp100.000,00; dan Rp 140.000,00. Pengusaha Roti tersebut membutuhkan 20 karung tepung, dengan proporsi kebutuhan bahwa tepung tapioka dibutuhkan 3 kali tepung ketan. Untuk keperluan bahan dasar tersebut pengusaha roti membayar sebesar Rp2.260.000,00. Berapa karung yang harus dibeli pengusaha tersebut untuk tiap-tiap jenis tepung?

- a. 3 karung tepung ketan, 9 karung tepung tapioca, dan 8 karung tepung beras
- b. 3 karung tepung ketan, 9 karung tepung tapioca, dan 10 karung tepung beras
- c. 4 karung tepung ketan, 12 karung tepung tapioca, dan 8 karung tepung beras
- d. 5 karung tepung ketan, 15 karung tepung tapioca, dan 5 karung tepung beras
- e. 6 karung tepung ketan, 18 karung tepung tapioca, dan 2 karung tepung beras

Kunci: a

13. Ibu Mei adalah seorang pengrajin kain songket yang mampu membuat tiga motif seperti pada gambar berikut.



Gambar 1



Gambar 2



Gambar 3

Suatu hari Ibu Mei mendapat pesanan untuk membuat kain songket dengan motif seperti pada gambar 1 sebanyak 2 kain dan 1 kain dengan motif seperti gambar 3. Dalam pembuatan kain tersebut, Ibu Mei dibantu oleh kedua rekannya yakni Ibu Ida dan Ibu Sofia. Jika Ibu Mei dibantu oleh Ibu Ida maka pesanan tersebut dapat diselesaikan dalam waktu 4 hari. Sedangkan jika dibantu oleh Ibu Sofia, pesanan tersebut dapat diselesaikan dalam waktu 3 hari. Ibu Ida dan Ibu Sofia dapat menyelesaikan pesanan tersebut dalam waktu 5 hari. Jika ketiganya bekerja secara bersama-sama, maka waktu yang dibutuhkan dalam menyelesaikan pesanan tersebut adalah....

- a. 2 hari
- b. 3 hari
- c. 4 hari
- d. 5 hari
- e. 6 hari

Kunci: b

14. Pak Budi memiliki uang sebesar Rp120.000.000,00 dan menginvestasikan uangnya di bank dalam bentuk tabungan dengan suku bunga 2% per bulan, deposito berjangka dengan suku bunga 3% per tahun, dan surat obligasi dengan pembayaran 5% per tahun. Adapun total pendapatan Pak Budi dalam satu tahun dari ketiga investasi tersebut sebesar Rp5.100.000,00, pendapatan dari investasi tabungan Rp3.500.000,00 kurangnya dari total pendapatan dua investasi lainnya. Jika x , y , z berturut-turut menyatakan tabungan, deposito berjangka, dan surat obligasi maka sistem persamaan yang menyatakan hubungan ketiga bentuk investasi tersebut adalah....

- a. $x + y + z = 120.000.000$

$$2x + 3y + 5z = 5.100.000$$

$$x = y + z - 3.500.000$$

b. $x + y + z = 120.000.000$

$$2x + 3y + 5z = 5.100.000$$

$$x = y + z + 3.500.000$$

c. $x + y + z = 120.000.000$

$$2x + 3y + 5z = 5.100.000$$

$$-x + y + z = 3.500.000$$

d. $x + y + z = 120.000.000$

$$0,02x + 0,03y + 0,05z = 5.100.000$$

$$x = y + z - 3.500.000$$

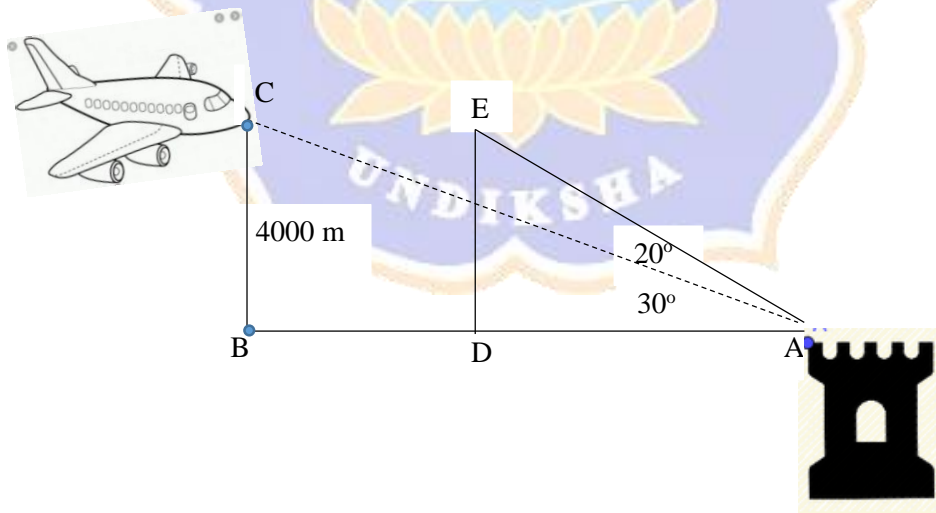
e. $x + y + z = 120.000.000$

$$0,02x + 0,03y + 0,05z = 5.100.000$$

$$x + z + y = 3.500.000$$

Kunci: d

15. Suatu pesawat terbang sedang berada di udara dengan ketinggian 4.000 meter dari menara pengawas. Dalam 50 detik, sudut elevasi pesawat berubah dari 30° menjadi 50° dilihat dari puncak menara pengawas. Perhatikan ilustrasi berikut



Kecepatan pesawat tersebut adalah... m/detik.

- a. 32,04 m/detik
b. 55,56 m/detik

- c. 67,11 m/detik
- d. 71,61 m/detik
- e. 72,61 m/detik

Kunci: d

16. Irma mempunyai tinggi badan 150 cm. Dia berdiri di depan sebuah tiang bendera dan melihat puncak tiang bendera dengan sudut elevasi 30° , lalu ia berjalan sejauh 10 meter mendekati tiang bendera dan melihat puncak tiang bendera dengan sudut elevasi 60° .

Tinggi tiang bendera tersebut adalah...meter

- a. $5\sqrt{3} + 1,5$
- b. $8\sqrt{2} + 1,5$
- c. $10\sqrt{2} + 1,5$
- d. $10\sqrt{3} + 1,5$
- e. $15\sqrt{2} + 1,5$

Kunci: a

17. Berikut adalah hasil pekerjaan rumah matematika Rafli

Jika diketahui $\sin(p - 30^\circ) + \sin(p + 30^\circ) = r$, tentukan nilai $\sin 2p$.

Penyelesaian:

$$\Leftrightarrow \sin(p - 30^\circ) + \sin(p + 30^\circ) = r$$

$$\Leftrightarrow 2 \sin\left(\frac{(p-30^\circ)+(p+30^\circ)}{2}\right) \cos\left(\frac{(p-30^\circ)-(p+30^\circ)}{2}\right) = r$$

$$\Leftrightarrow 2 \sin\left(\frac{2p}{2}\right) \cos\left(\frac{-60^\circ}{2}\right) = r$$

$$\Leftrightarrow 2 \sin p \cos(-30^\circ) = r$$

$$\Leftrightarrow 2 \sin p \cdot \frac{1}{2} \sqrt{3} = r$$

$$\Leftrightarrow \sin p \cdot \sqrt{3} = r$$

$$\Leftrightarrow \sin p = \frac{r}{\sqrt{3}}$$

Nilai trigonometri tersebut dapat dibuat segitiga siku-siku berikut.

$$\sin p = \frac{r}{\sqrt{3}} \text{ dan } \cos p = \frac{\sqrt{3^2 - r^2}}{\sqrt{3}}$$

$$\sin 2p = 2 \sin p \cos p$$

$$= 2 \cdot \frac{r}{\sqrt{3}} \cdot \frac{\sqrt{9-r^2}}{\sqrt{3}}$$

$$= \frac{2r}{3} \sqrt{9 - r^2}$$

Setelah diperiksa guru, ternyata jawaban Alfi keliru. Pernyataan mana dari jawaban Alfi yang keliru?

- a. $2 \sin\left(\frac{2p}{2}\right) \cos\left(\frac{-60^\circ}{2}\right) = r \Leftrightarrow 2 \sin p \cos(-30^\circ) = r$
- b. $2 \sin p \cos(-30^\circ) = r \Leftrightarrow 2 \sin p \cdot \frac{1}{2} \sqrt{3} = r$
- c. $2 \sin p \cdot \frac{1}{2} \sqrt{3} = r \Leftrightarrow \sin p \cdot \sqrt{3} = r$
- d. $\sin p \cdot \sqrt{3} = r \Leftrightarrow \sin p = \frac{r}{\sqrt{3}}$
- e. $\cos p = \frac{\sqrt{3^2 - r^2}}{\sqrt{3}}$

Kunci: e

18. Anton, Lukas, Doni, Ahmad dan Rian sedang jalan-jalan di tepi pantai. Dari tepi pantai mereka dapat melihat puncak gunung poco Ndeki. Kelima anak tersebut tersebut memprediksi jarak antara tepi pantai tempat mereka duduk dengan gunung tersebut secara berurutan adalah 250 meter, 353,5 meter, 432,5 meter, 489,5 meter dan 500 meter. Dari kelima anak tersebut, prediksi yang paling tepat jika sudut elevasinya 45° dan hipotenusanya 500 meter adalah....
- a. Anton
 - b. Rian
 - c. Doni
 - d. Ahmad
 - e. Lukas

Kunci: e

19. Perhatikan pekerjaan rumah matematika Rahmat berikut.

- (1) $\tan 40^\circ = \cot 50^\circ$
- (2) $\cos 53^\circ = \sin 37^\circ$
- (3) $\tan 143^\circ = \tan 37^\circ$
- (4) $\cos 190^\circ = -\cos 10^\circ$

Dari pernyataan di atas, pernyataan nomor berapa sajakah yang merupakan pernyataan benar?

Rahmat menjawab bahwa semua pernyataan yang diberikan benar, dengan penyelesaiannya seperti berikut.

$$\begin{aligned}\tan 40^\circ &= \tan(90^\circ - 50^\circ) \\ &= \cot 50^\circ\end{aligned}$$

$$\begin{aligned}\cos 53^\circ &= \cos(90^\circ - 37^\circ) \\ &= \sin 37^\circ\end{aligned}$$

$$\begin{aligned}\tan 143^\circ &= \tan(180^\circ - 37^\circ) \\ &= -\tan 37^\circ\end{aligned}$$

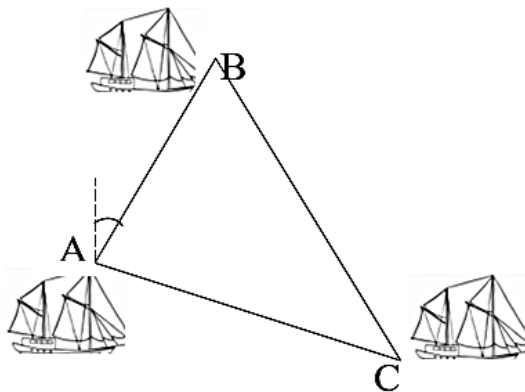
$$\begin{aligned}\cos 190^\circ &= \cos(180^\circ + 10^\circ) \\ &= -\cos 10^\circ\end{aligned}$$

Setelah diperiksa Ibu guru, ternyata ada jawaban Rahmat yang masih keliru. Pernyataan mana dari jawaban rahmat yang masih keliru?

- a. (1) dan (2)
- b. (2) dan (3)
- c. (1) dan (3)
- d. (2) dan (4)
- e. (3) dan (4)

Kunci: b

20. Perhatikan gambar berikut



Sebuah kapal berangkat dari pelabuhan A pada pukul 08.00 dengan arah 30° dan tiba di pelabuhan B setelah 4 jam. Pada pukul 13.00 kapal berangkat ke pelabuhan C dengan memutar haluan 150° dan tiba di pelabuhan C pada pukul 20.00. Kecepatan rata-rata kapal adalah 50 mil/jam. Jarak antara pelabuhan C dari pelabuhan A adalah....

- a. $50\sqrt{37}$ mill
- b. $50\sqrt{40}$ mill
- c. $50\sqrt{45}$ mill
- d. $50\sqrt{48}$ mill
- e. 150 mill

Kunci: a

21. Perhatikan gambar berikut



Sebuah mercusuar tingginya 90 meter di atas permukaan laut, sebuah perahu nelayan disoroti dengan menggunakan sudut depresi 15° (Perhatikan ilustrasi di atas). Jauh perahu tersebut dengan garis pantai dapat ditaksirkan sejauh...meter

- a. 335,82
- b. 340,18
- c. 347,49
- d. 358,05
- e. 360,23

Kunci: a

22. Suatu perusahaan memproduksi komputer. Banyaknya penjualan komputer bulanan (dalam satuan ribuan unit) selama 2 tahun diprediksi sebagai berikut.

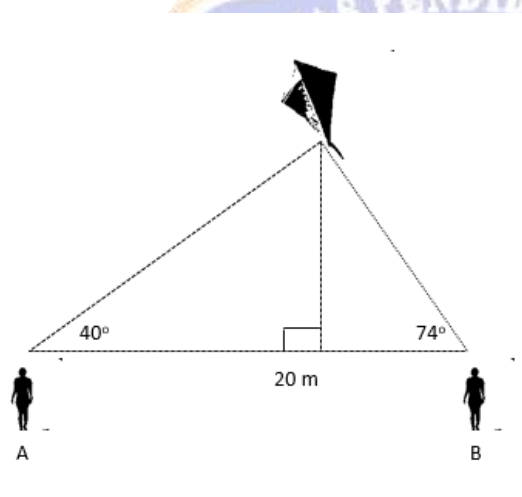
$$S = 31 + 0,521t + 6,2 \sin\left(\frac{2\pi t}{9}\right)$$

$t =$ waktu (bulan), $t = 1$ menyatakan hasil penjualan bulan Januari tahun 2019. Prediksi banyaknya komputer yang terjual bulan Mei tahun 2019 dan bulan Februari tahun 2020 adalah....

- 31.497 unit dan 36.186 unit
- 35.713 unit dan 36.186 unit
- 31.497 unit dan 40.402 unit
- 35.713 unit dan 40.402 unit
- 36.186 unit dan 40.402 unit

Kunci: a

23. Perhatikan ilustrasi berikut

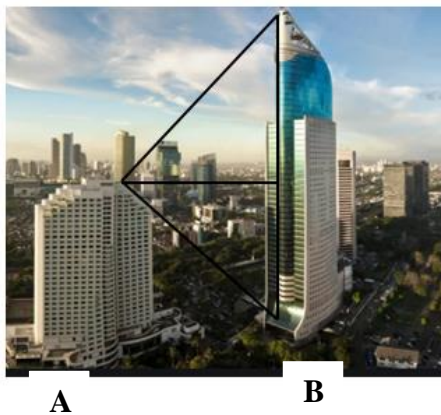


Dua orang anak sedang bermain layang-layang di lapangan sepak bola. Jarak keduanya adalah 20 meter dan kedua anak tersebut memiliki tinggi yang sama yakni 1,5 meter. Fakta pada opsi berikut yang tepat menggambarkan ilustrasi di atas adalah....

- Jarak anak A dengan layang-layang adalah 20,098 m
- Jarak anak A dengan layang-layang adalah 18,32 m
- Ketinggian layang-layang adalah 13,903 m
- Jarak anak B dengan layang-layang adalah 13,065 m
- Jarak anak B dengan layang-layang adalah 13,502 m

Kunci: c

24. Perhatikan gambar berikut

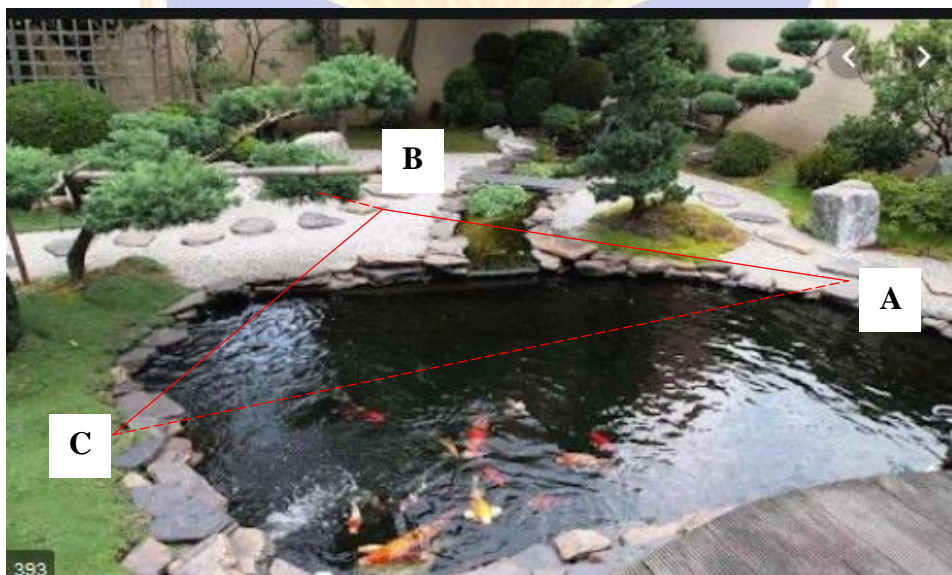


Dari puncak gedung A diamati tinggi gedung B tepat berada didepannya seperti yang diilustrasikan pada gambar di atas, dengan sudut elevasinya 45° dan sudut depresi 30° . Tinggi gedung A adalah 30 meter, maka tinggi gedung B adalah....

- a. 24,49 m
- b. 54,49 m
- c. 72,42 m
- d. 81,99 m
- e. 102,42 m

Kunci: d

25. Perhatikan gambar berikut.

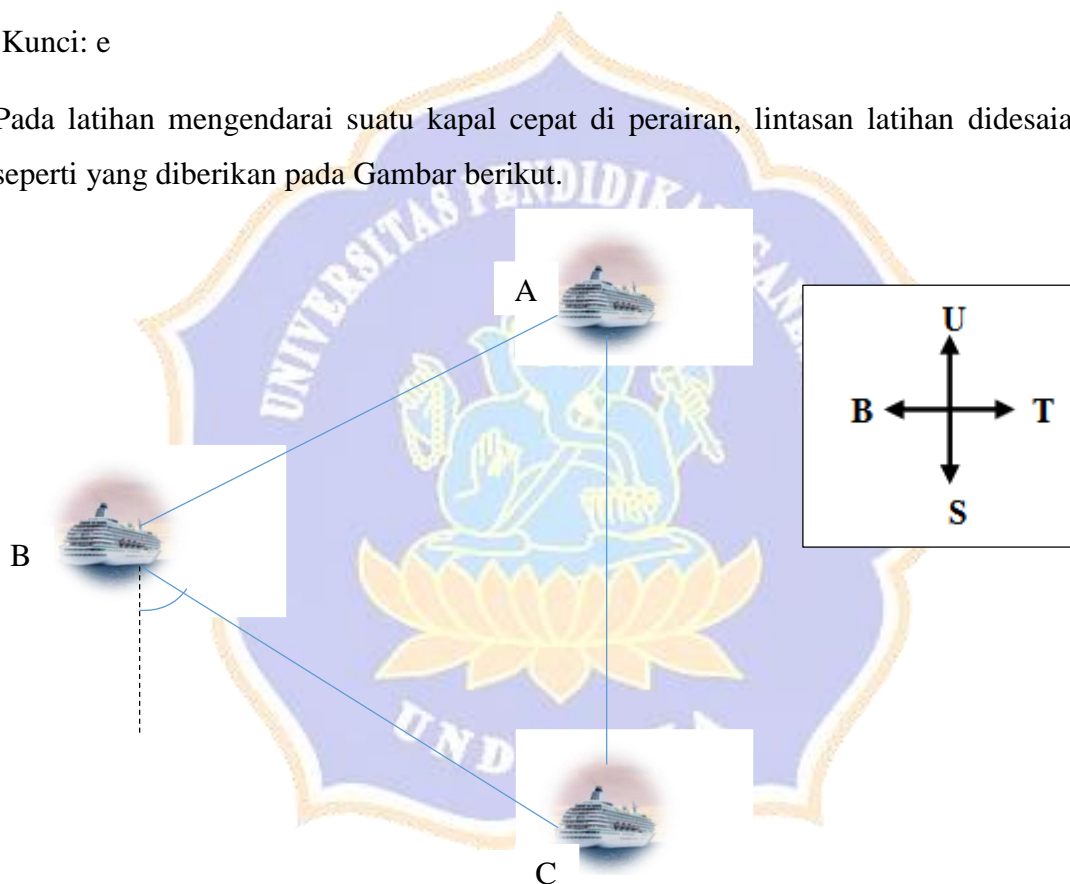


Seorang pekerja sedang membersihkan kolam ikan, pekerja tersebut berjalan sejauh 4 meter dari titik A ke titik B, kemudian berputar 60° dan berjalan sejauh 2 meter ke titik C. Panjang AC adalah...

- a. $\sqrt{4}$ m
- b. $\sqrt{6}$ m
- c. $\sqrt{8}$ m
- d. $\sqrt{10}$ m
- e. $\sqrt{12}$ m

Kunci: e

26. Pada latihan mengendarai suatu kapal cepat di perairan, lintasan latihan didesain seperti yang diberikan pada Gambar berikut.



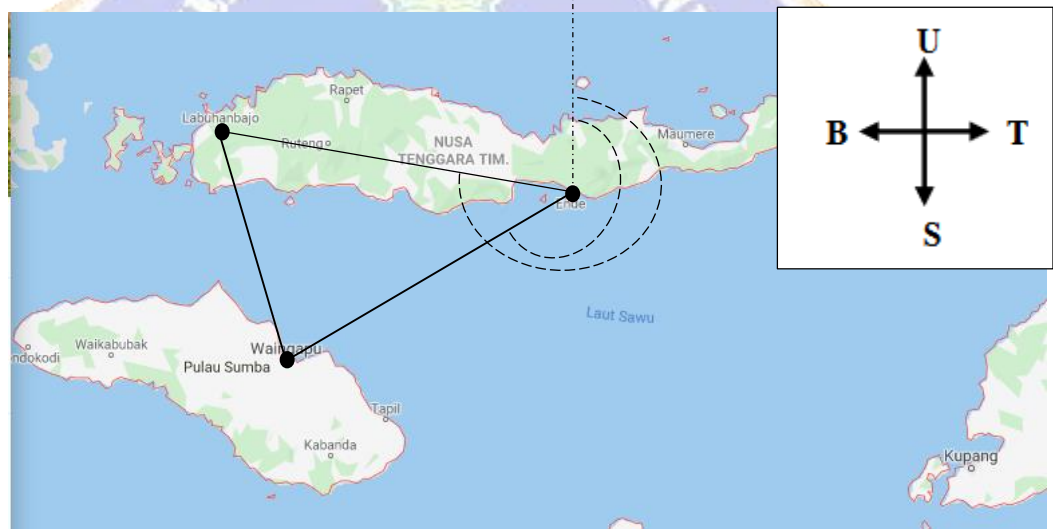
Pengemudi harus mulai dari titik A, dan bergerak ke arah barat daya dengan membentuk sudut 52° ke titik B, kemudian bergerak ke arah tenggara dengan membentuk sudut 40° ke titik C, dilanjutkan kembali ke titik A. Jarak titik A ke C sejauh 8 km. Hitung panjang lintasan yang ditempuh.

- a. 19,52 km
- b. 20,02 km

- c. 21,52 km
- d. 22,02 km
- e. 23, 52 km

Kunci: a

27. Pesawat Wings berangkat dari Bandara Hasan Aroeboesman Ende menuju Bandara Komodo Labuan Bajo dengan azimuth 280° dan pesawat Transnusa dari Bandara Hasan Aroeboesman Ende menuju bandara Umu Mehang Kunda Waingapu dengan azimuth 200° . Jarak antara Bandara Hasan Aroeboesman Ende Bandara Komodo Labuan Bajo adalah 300 km dan Jarak antara Bandara Hasan Aroeboesman Ende dengan bandara Umu Mehang Kunda Waingapu 550 km. Situasi ini ditunjukkan dalam gambar berikut.



Keterangan : Azimuth merupakan sudut searah jarum jam yang terbentuk pada arah suatu titik/lokasi terhadap titik/ lokasi lain dan diukur dari arah Utara sebagai patokan dasar 0 .

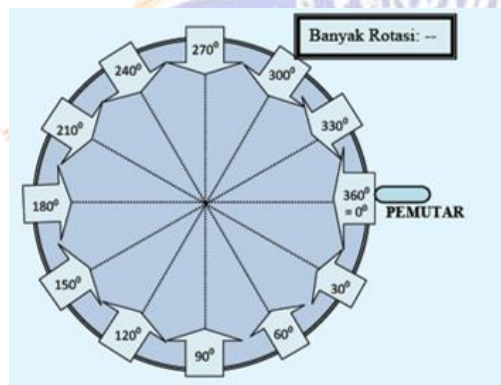
Dari permasalahan diatas, maka jarak Antara Bandara Komodo Labuan Bajo dengan bandara Umu Mehang Kunda Waingapu adalah....

- a. 470 km
- b. 490 km
- c. 510 km

- d. 530 km
- e. 550 km

Kunci: e

28. Eko, Putra, Indra, Reza, dan Anton melakukan permainan lingkaran berputar dalam menentukan yang pertama naik sepeda. Yang berhak mendapatkan kesempatan pertama jika nilai cos besar sudut yang dihasilkan putaran adalah $\frac{1}{2}$. Eko memutar papan dengan banyak rotasi 3 dan berhenti di sudut 30° , Putra memutar papan dengan banyak rotasi 3 dan berhenti di sudut 60° , Indra memutar papan dengan banyak rotasi 1 dan berhenti di sudut 90° , Reza memutar papan dengan banyak rotasi 4 dan berhenti di sudut 30° , dan Anton memutar papan dengan banyak rotasi 2 dan berhenti di sudut 45° . Roda sepeda Eko dapat diilustrasikan seperti berikut.



Dari kelima anak tersebut siapakah yang mendapat kesempatan pertama untuk naik sepeda?

- a. Eko
- b. Putra
- c. Indra
- d. Reza

Kunci: b

C. Lembar Penilaian Pakar

1. Relevansi Soal dengan Materi Yang Ditetapkan Dalam Indikator

| Nomor Butir | Penilaian Pakar | | Catatan |
|-------------|-----------------|---------------|---------|
| | Relevan | Tidak Relevan | |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| 11 | | | |
| 12 | | | |
| 13 | | | |
| 14 | | | |
| 15 | | | |
| 16 | | | |
| 17 | | | |
| 18 | | | |
| 18 | | | |
| 19 | | | |
| 20 | | | |
| 21 | | | |
| 22 | | | |
| 23 | | | |
| 24 | | | |
| 25 | | | |
| 26 | | | |
| 27 | | | |
| 28 | | | |

2. Relevansi Soal dengan HOTS (Minimal C4, K2)

| Nomor Butir | Penilaian Pakar | | Catatan |
|-------------|-----------------|---------------|---------|
| | Relevan | Tidak Relevan | |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |

| Nomor Butir | Penilaian Pakar | | Catatan |
|-------------|-----------------|---------------|---------|
| | Relevan | Tidak Relevan | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| 11 | | | |
| 12 | | | |
| 13 | | | |
| 14 | | | |
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| 16 | | | |
| 17 | | | |
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| 20 | | | |
| 21 | | | |
| 22 | | | |
| 23 | | | |
| 24 | | | |
| 25 | | | |
| 26 | | | |
| 27 | | | |
| 28 | | | |

3. Relevansi Soal dengan Konstruksi Soal Pilihan Ganda

| Nomor Butir | Penilaian Pakar | | Catatan |
|-------------|-----------------|---------------|---------|
| | Relevan | Tidak Relevan | |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| 11 | | | |

| Nomor Butir | Penilaian Pakar | | Catatan |
|-------------|-----------------|---------------|---------|
| | Relevan | Tidak Relevan | |
| 12 | | | |
| 13 | | | |
| 14 | | | |
| 15 | | | |
| 16 | | | |
| 17 | | | |
| 18 | | | |
| 18 | | | |
| 19 | | | |
| 20 | | | |
| 21 | | | |
| 22 | | | |
| 23 | | | |
| 24 | | | |
| 25 | | | |
| 26 | | | |
| 27 | | | |
| 28 | | | |



Lampiran 11. Foto Penelitian





PEMERINTAH PROVINSI NUSA TENGGARA TIMUR
DINAS PENDIDIKAN DAN KEBUDAYAAN
SEKOLAH MENENGAH ATAS NEGERI 2 BORONG
Alamat :Jln. Jendral Sudirman;Kembur;Kelurahan Satar Peot
KabupatenManggaraiTimur
Email:-



SURAT KETERANGAN
NO. : 0612/422/SMAN2 BRG/VII/2020

Yang bertanda tangan di bawah ini :

Nama : DRA.SAKA BENEDIKTA
Nip : 19610505 199903 2 001
Pangkat/Golongan : PEMBINA/IV a
Jabatan : KEPALA SMAN 2 BORONG

Dengan ini menerangkan bahwa Mahasiswi yang namanya tercantum di bawah ini,telah menyelesaikan Penelitian pada tanggal 21 Juli 2020 di SMA Negeri 2 Borong:

NAMA : KAMELIA OLGA LITNA
N I M : 1829021002
PRODI : PENELITIAN DAN EVALUASI PENDIDIKAN
NAMA KAMPUS : UNIVERSITAS PENDIDIKAN GANESHA.

Demikian Surat Keterangan ini dibuat untuk dipergunakan sebagaimana mestinya.

Borong, 21 Juli 2020

Kepala SMAN 2 Borong,

DRA.SAKA BENEDIKTA
NIP. 19610505 199903 2 001



SURAT KETERANGAN SELESAI PENELITIAN

Nomor : *BIB/308/SMANS KK/MN/Jul/2020*

Yang bertanda tangan di bawah ini

Nama : Marselinus Junardi, S.Pd
NIP : 19850605 201001 1 032
Jabatan : Kepala SMA Negeri 5 Kota Komba

Dengan ini menerangkan bahwa:

Nama : Kamelia Olga Litna
NIM : 1829021002
Program Studi : Penelitian dan Evaluasi Pendidikan (S2),
Universitas Pendidikan Ganesha

Memang benar mahasiswa yang bersangkutan telah melakukan penelitian dengan judul
“**Pengembangan Instrumen Tes *Higher Order Thinking Skills (HOTS) Matematika SMA Kelas X***” di SMA Negeri 5 Kota Komba.

Demikian surat keterangan ini dibuat untuk dapat dipergunakan sebagaimana mestinya.

Ditetapkan di : Ketang.
Pada Tanggal : 18 Juli 2020

Kepala Sekolah,

Marselinus Junardi, S.Pd
NIP. 19850605 201001 1 032



PEMERINTAH PROVINSI NUSA TENGGARA TIMUR
DINAS PENDIDIKAN DAN KEBUDAYAAN
SMA NEGERI 7 BORONG
Alamat: Jln. Borong Waling, Ds Gurung Liwut, Kec Borong
Kab Manggarai Timur



SURAT KETERANGAN
No. : 422/SMAN7 /65/07/ 2020

Yang bertanda tangan di bawah ini

Nama : Rudolfus Supratman, S.Pd
NIP : 19800630 200604 1 015
Jabatan : Kepala SMA Negeri 7 Borong

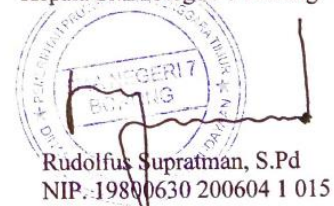
Dengan ini menerangkan bahwa:

Nama : Kamelia Olga Litna
NIM : 1829021002
Program Studi : Penelitian dan Evaluasi Pendidikan (S2),
Universitas Pendidikan Ganesha

Memang benar mahasiswa yang bersangkutan telah melakukan penelitian dari tanggal 13 sampai tanggal 27 Juli 2020, dengan judul "**Pengembangan Instrumen Tes *Higher Order Thinking Skills (HOTS) Matematika SMA Kelas X***".

Demikian surat keterangan ini dibuat dengan sebenarnya untuk dapat digunakan sebagaimana mestinya.

Tongkalawa, 27 Juli 2020
Kepala SMA Negeri 7 Borong


Rudolfus Supratman, S.Pd
NIP. 19800630 200604 1 015



**PEMERINTAH PROVINSI NUSA TENGGARA TIMUR
DINAS PENDIDIKAN DAN KEBUDAYAAN
SMA NEGERI 7 KOTA KOMBA**

Alamat : Jl. Trans Flores Waerana, Kel. Ronggakoe, kec. Kota Komba, Kab. Manggarai Timur

SURAT KETERANGAN

No.422/SMAN7KK/057/VII/2020

Saya yang bertandatangan dibawah ini :

Nama : Robertus Riser, S.Sos
Nip : 19750331 201001 1 013
Pangkat / Gol : Penata / IIIc
Jabatan : Kepala Sekolah
Unit Kerja : SMAN 7 Kota Komba
Alamat : Waerana, Kelurahan Ronggakoe kec. Kota Komba

Menerangkan dengan sesungguhnya bahwa :


Nama : Kamelia Olga Litna
Nim : 1829021002
Asal Perguruan Tinggi : Universitas Pendidikan Ganesha
Program Studi : Penelitian dan Evaluasi Pendidikan (S2)


Telah melaksanakan Penelitian di SMA Negeri 7 Kota Komba mulai April sampai dengan Juli 2020 untuk memperoleh data guna penyusunan Tugas Akhir Tesis dengan Judul:

“Pengembangan Instrumen Tes Higher Order Thinking Skill (Host) Matematika SMA Kelas X”

Demikian Surat Keterangan ini dibuat untuk dipergunakan sebagaimana mestinya.

Dikeluarkan : di Waerana
Tanggal : 20 Juli 2020

Kepala sekolah

Robertus Riser, S.Sos
NIP. 19750331 201001 1 013



RIWAYAT HIDUP



Kamelia Olga Litna, dilahirkan di Kabupaten Manggarai Timur-Nusa Tenggara Timur, Watu Mese pada tanggal 19 Desember 1995 dari pasangan Nikolaus Jehabut dan Maria Sermina Seli. Pendidikan Dasar ditempuh di SDK Warat, kemudian dilanjutkan ke jenjang pendidikan menengah pertama di SMP St. Klaus Kuwu, Ruteng-Nusa Tenggara Timur dan pendidikan menengah atas di SMA St. Klaus Kuwu, Ruteng-Nusa Tenggara Timur. Pendidikan tinggi ditempuh di Universitas Mahasaraswati Denpasar lulus tahun 2017. Selanjutnya pada tahun 2018 melanjutkan studi S2 di UNDIKSHA Singaraja dengan mengambil Program Studi Penelitian dan Evaluasi Pendidikan.

