

# LAMPIRAN

## Lampiran 1. Surat Izin Uji Instrumen



### KEMENTERIAN RISET, TEKNOLOGI, DAN PENDIDIKAN TINGGI

#### UNIVERSITAS NEGERI YOGYAKARTA FAKULTAS TEKNIK

Alamat : Kampus Karangmalang, Yogyakarta, 55281  
Telp. (0274) 586168 psw. 276,289,292 (0274) 586734 Fax. (0274) 586734  
Laman: ft.uny.ac.id E-mail: ft@uny.ac.id, teknik@uny.ac.id

Nomor : 43/UN34.15/LT/2019  
Lamp. : 1 Bendel Proposal  
Hal : Permohonan Izin Uji Instrumen Penelitian

9 September 2019

Yth. Kepala Sekolah SMK Negeri 1 Sedayu  
Desa Argomulyo, Kec. Sedayu, Kemusuk Lor, Argomulyo, Bantul, Daerah Istimewa Yogyakarta 55753

Kami sampaikan dengan hormat kepada Bapak/Ibu, bahwa mahasiswa kami berikut ini:

Nama : Yana Pratama Putra  
NIM : 15503244007  
Program Studi : Pend. Teknik Mesin - S1  
Judul Tugas Akhir : KEMAMPUAN MEMBACA GAMBAR PROYEKSI PADA SISWA SMK NEGERI 1 SEYEGAN YOGYAKARTA  
Waktu Uji Instrumen : 9 September - 7 Oktober 2019

bermaksud melaksanakan uji instrumen untuk keperluan penulisan Tugas Akhir. Untuk itu kami mohon dengan hormat Ibu/Bapak berkenan memberikan izin dan bantuan seperlunya.

Atas izin dan bantuannya diucapkan terima kasih.



Tembusan :  
1. Sub. Bagian Pendidikan dan Kemahasiswaan ;  
2. Mahasiswa yang bersangkutan.

Dr. Ir. Drs. Widarto, M.Pd.  
NIP. 19631230 198812 1 001



**PEMERINTAH DAERAH DAERAH ISTIMEWA YOGYAKARTA  
DINAS PENDIDIKAN, PEMUDA, DAN OLAHRAGA  
S M K NEGERI 1 SEDAYU**

Alamat : Kemusuk, Argomulyo Sedayu, Bantul, Yogyakarta . Telp./ Fax. (0274) 798084  
Website: smkn1sedayu.sch.id, Email : smkn\_sedayu@yahoo.com, Kode Pos : 55753

**BLANGKO PERSETUJUAN IJIN PENELITIAN/ OBSERVASI/ SURVEY/ WAWANCARA  
SMK N 1 SEDAYU**

Yang bertanda tangan dibawah ini Kepala Program :

Nama : Tri Atmoko  
NIP : 19670106200704011  
Jabatan : Ketua Prog. Tek Pemerintahan .

Memberi tugas kepada :

Nama : Waskitha, SPd .  
NIP :  
Jabatan : Guru  
Mengampu : Mapel. Tek Gambar .

Untuk mendampingi kegiatan saudara/ saudari :

| NO | NAMA               | NIM         | FAKULTAS | PERGURUAN TINGGI | JURUSAN                 |
|----|--------------------|-------------|----------|------------------|-------------------------|
| 1  | Yana Pratama Putra | 15503244007 | Teknik   | UNY              | Pendidikan Teknik Mesin |
|    |                    |             |          |                  |                         |
|    |                    |             |          |                  |                         |
|    |                    |             |          |                  |                         |
|    |                    |             |          |                  |                         |

Kegiatan yang dilaksanakan : Tesis/Skripsi/Observasi/Wawancara  
Pelaksanaan Kegiatan : Tanggal 12 September 2019 s.d 30 September 2019  
Judul Tesis/ Skripsi/ Observasi untuk :  
Kemampuan Membaca Gambar Proyeksi Pada Siswa SMK Negeri 1 Seyegan  
Yogyakarta

Demikian surat persetujuan ini semoga dapat dipergunakan sebagaimana mestinya.

yang meminta persetujuan

Yana Pratama Putra

Sedayu,  
Guru Yang diberi tugas

Waskitha SPd  
NIP. 197504152006041011

Mengetahui/tembusan

| No | Nama                 | Jabatan       | TTD |
|----|----------------------|---------------|-----|
| 1  | Alrosyid Ridlo, S.Pd | WKS Kurikulum |     |
| 2  |                      |               |     |



### Lampiran 3. Surat Izin Penelitian



KEMENTERIAN RISET, TEKNOLOGI, DAN PENDIDIKAN TINGGI  
UNIVERSITAS NEGERI YOGYAKARTA  
FAKULTAS TEKNIK

Alamat : Kampus Karangmalang, Yogyakarta, 55281  
Telp. (0274) 586168 psw. 276,289,292 (0274) 586734 Fax. (0274) 586734  
Laman: ft.uny.ac.id E-mail: ft@uny.ac.id, teknik@uny.ac.id

10 Oktober 2019

Nomor : 529/UN34.15/LT/2019  
Lamp. : 1 Bendel Proposal  
Hal : Izin Penelitian

Yth . 1. Kepala Dinas Pendidikan, Pemuda, dan Olahraga (Dikpora) Provinsi DIY  
2. Kepala SMK Negeri 1 Seyegan  
Jalan Kebonagung, KM. 8,5, Margomulyo, Seyegan, Mriyan, Margomulyo, Kec. Seyegan, Kabupaten  
Sleman, Daerah Istimewa Yogyakarta 55561

Kami sampaikan dengan hormat, bahwa mahasiswa tersebut di bawah ini:

Nama : Yana Pratama Putra  
NIM : 15503244007  
Program Studi : Pend. Teknik Mesin - S1  
Tujuan : Memohon izin mencari data untuk penulisan Tugas Akhir Skripsi (TAS)  
Judul Tugas Akhir : Kemampuan Membaca Gambar Proyeksi Pada Siswa SMK Negeri 1 Seyegan Yogyakarta  
Waktu Penelitian : 11 Oktober - 11 November 2019

Untuk dapat terlaksananya maksud tersebut, kami mohon dengan hormat Bapak/Ibu berkenan memberi izin dan bantuan seperlunya.

Demikian atas perhatian dan kerjasamanya kami sampaikan terima kasih.



Tembusan :  
1. Sub. Bagian Pendidikan dan Kemahasiswaan ;  
2. Mahasiswa yang bersangkutan.

Prof. Drs. Herman Dwi Surjono, M.Sc., MT., Ph.D.  
NIP. 19640205 198703 1 001

Surat Izin Penelitian - Pengajuan Ijin Penelitian Online- Dinas Di... [http://dikpora.jogjaprovo.go.id/izinpenelitian/users/cetak\\_surat\\_izi...](http://dikpora.jogjaprovo.go.id/izinpenelitian/users/cetak_surat_izi...)



**PEMERINTAH DAERAH DAERAH ISTIMEWA YOGYAKARTA**  
**DINAS PENDIDIKAN, PEMUDA, DAN OLAAHRAAGA**  
 Jalan Cendana No. 9 Yogyakarta, Telepon (0274) 550330, Fax. 0274 513132  
 Website : [www.dikpora.jogjaprovo.go.id](http://www.dikpora.jogjaprovo.go.id), email : [dikpora@jogjaprovo.go.id](mailto:dikpora@jogjaprovo.go.id), Kode Pos 55166

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Nomor : 070/10296  
 Lamp : -  
 Hal : Pengantar Penelitian

Yogyakarta, 10 Oktober 2019  
 Kepada Yth.  
 1. Kepala SMK Negeri 1 Seyegan

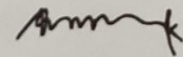
Dengan hormat, memperhatikan surat dari Fakultas Teknik Universitas Negeri Yogyakarta nomor 529/UN34.15/LT/2019 tanggal 10 Oktober 2019 perihal Penelitian, kami sampaikan bahwa Dinas Pendidikan, Pemuda, dan Olahraga DIY memberikan ijin kepada:

|               |                                                                                |
|---------------|--------------------------------------------------------------------------------|
| Nama          | : Yana Pratama Putra                                                           |
| NIM           | : 15503244007                                                                  |
| Prodi/Jurusan | : Pendidikan Teknik Mesin - S1                                                 |
| Fakultas      | : Teknik                                                                       |
| Universitas   | : Universitas Negeri Yogyakarta                                                |
| Judul         | : KEMAMPUAN MEMBACA GAMBAR PROYEKSI PADA SISWA SMK NEGERI 1 SEYEGAN YOGYAKARTA |
| Lokasi        | : SMK Negeri 1 Seyegan,                                                        |
| Waktu         | : 11 Oktober 2019 s.d 11 November 2019                                         |

Sehubungan dengan hal tersebut, kami mohon bantuan Saudara untuk membantu pelaksanaan penelitian dimaksud.

Atas perhatian dan kerjasamanya, kami menyampaikan terimakasih.

a.n Kepala  
 Kepala Bidang Perencanaan dan Pengembangan Mutu Pendidikan



**Didik Wardaya, S.E., M.Pd.,MM**  
 NIP 19660530 198602 1 002

Tembusan Yth :

1. Kepala Dinas Dikpora DIY
2. Kepala Bidang Pendidikan Menengah

**Catatan:**  
 Hasil print out dan bukti rekomendasi ini sudah berlaku tanpa Cap



\*Scan kode untuk cek validnya surat ini.

1 dari 1

10/10/2019 20.17





PEMERINTAH DAERAH DAERAH ISTIMEWA YOGYAKARTA  
DINAS PENDIDIKAN PEMUDA DAN OLAH RAGA  
**SEKOLAH MENENGAH KEJURUAN NEGERI 1 SEYEGAN**  
BIDANG STUDI KEAHLIAN TEKNOLOGI DAN REKAYASA

Jalan Kebonagung Km. 8, Jamblangan, Margomulyo, Seyegan, Sleman 55561  
Telp. (0274) 866-442, Fax (0274) 867-670; email : smkn1seyegan@gmail.com

**SURAT KETERANGAN**

Nomor : 070 / 1019 / 947

Yang bertanda tangan di bawah ini Kepala SMK Negeri 1 Seyegan Kabupaten Sleman menerangkan dengan sesungguhnya bahwa :

Nama : YANA PRATAMA PUTRA  
NIM : 15503244007  
Jurusan/Prodi : Pendidikan Teknik Mesin  
Universitas : Universitas Negeri Yogyakarta

Telah melaksanakan penelitian di SMK Negeri 1 Seyegan, pada tanggal 11 s.d. 25 Oktober 2019 dengan judul penelitian : "Kemampuan Membaca Gambar Proyeksi Pada Siswa SMK Negeri 1 Seyegan Yogyakarta".

Nama Dosen Pembimbing : Drs. Jarwo Puspita, M.P.  
NIP : 19630108 198901 1 001

Demikian, surat keterangan dibuat agar dapat di gunakan sebagaimana mestinya.

Seyegan, 28 Oktober 2019  
Kepala Sekolah,



Yon Fatkhunal Huda, S.Pd., M.Eng.  
Penata Tk.I, III/d  
NIP 19730108 200501 1 012



Lampiran 5. Hasil Validasi Instrumen *SPSS 25 for Windows*

| Item-Total Statistics |                               |                                   |                                      |                                    |                                        |
|-----------------------|-------------------------------|-----------------------------------|--------------------------------------|------------------------------------|----------------------------------------|
|                       | Scale Mean if<br>Item Deleted | Scale Variance<br>if Item Deleted | Corrected Item-<br>Total Correlation | Squared<br>Multiple<br>Correlation | Cronbach's<br>Alpha if Item<br>Deleted |
| b1                    | 42.11                         | 114.256                           | .849                                 | .                                  | .978                                   |
| b2                    | 42.04                         | 116.114                           | .830                                 | .                                  | .978                                   |
| b3                    | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b4                    | 42.11                         | 114.256                           | .849                                 | .                                  | .978                                   |
| b5                    | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b6                    | 42.04                         | 116.499                           | .762                                 | .                                  | .978                                   |
| b7                    | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b8                    | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b9                    | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b10                   | 42.04                         | 116.114                           | .830                                 | .                                  | .978                                   |
| b11                   | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b12                   | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b13                   | 42.11                         | 114.256                           | .849                                 | .                                  | .978                                   |
| b14                   | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b15                   | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b16                   | 42.11                         | 114.256                           | .849                                 | .                                  | .978                                   |
| b17                   | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b18                   | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b19                   | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b20                   | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b21                   | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b22                   | 42.04                         | 116.114                           | .830                                 | .                                  | .978                                   |
| b23                   | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b24                   | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b25                   | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b26                   | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b27                   | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b28                   | 42.07                         | 114.071                           | .992                                 | .                                  | .977                                   |
| b29                   | 42.00                         | 118.538                           | .569                                 | .                                  | .979                                   |
| b30                   | 42.00                         | 118.538                           | .569                                 | .                                  | .979                                   |
| b31                   | 42.07                         | 119.610                           | .178                                 | .                                  | .979                                   |
| b32                   | 42.33                         | 120.692                           | .002                                 | .                                  | .981                                   |
| b33                   | 42.48                         | 119.028                           | .151                                 | .                                  | .981                                   |
| b34                   | 42.74                         | 124.584                           | -.402                                | .                                  | .982                                   |
| b35                   | 42.26                         | 118.276                           | .244                                 | .                                  | .980                                   |
| b36                   | 42.81                         | 122.541                           | -.214                                | .                                  | .981                                   |

|     |       |         |       |   |      |
|-----|-------|---------|-------|---|------|
| b37 | 42.00 | 118.538 | .569  | . | .979 |
| b38 | 42.00 | 118.538 | .569  | . | .979 |
| b39 | 42.07 | 114.071 | .992  | . | .977 |
| b40 | 42.04 | 116.114 | .830  | . | .978 |
| b41 | 42.00 | 118.538 | .569  | . | .979 |
| b42 | 42.04 | 116.114 | .830  | . | .978 |
| b43 | 42.04 | 116.499 | .762  | . | .978 |
| b44 | 42.00 | 118.538 | .569  | . | .979 |
| b45 | 42.07 | 121.994 | -.161 | . | .980 |
| b46 | 42.04 | 119.345 | .265  | . | .979 |
| b47 | 42.00 | 118.538 | .569  | . | .979 |
| b48 | 42.00 | 118.538 | .569  | . | .979 |
| b49 | 42.04 | 116.499 | .762  | . | .978 |
| b50 | 42.07 | 114.071 | .992  | . | .977 |



Lampiran 6. Hasil Reliabilitas menggunakan *SPSS 25*

| Reliability Statistics |                                                       |            |
|------------------------|-------------------------------------------------------|------------|
| Cronbach's<br>Alpha    | Cronbach's<br>Alpha Based on<br>Standardized<br>Items | N of Items |
| .979                   | .983                                                  | 50         |

## INSTRUMEN PENELITIAN

### KEMAMPUAN MEMBACA GAMBAR PROYEKSI

#### PETUNJUK Pengerjaan Soal

1. Tulis terlebih dahulu nama, kelas dan nomor absen pada lembar jawaban yang telah disediakan.
2. Tuliskan jawaban yang paling tepat sesuai dengan petunjuk!
3. Waktu pengerjaan 55 menit.
4. Lembar soal dikembalikan.
5. Sifat ***Close Book***

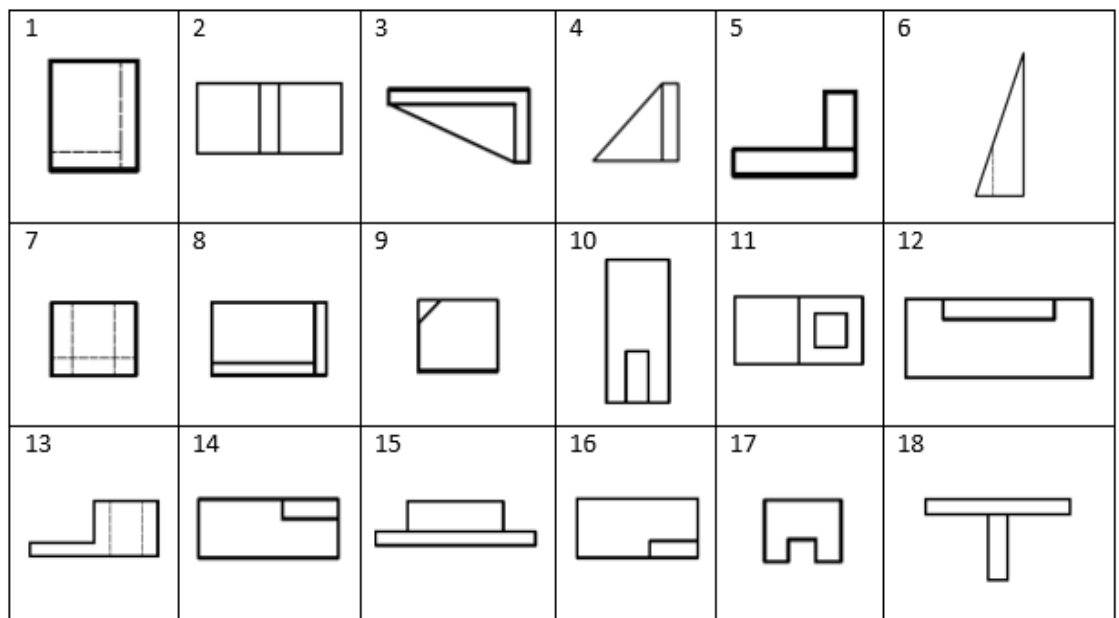
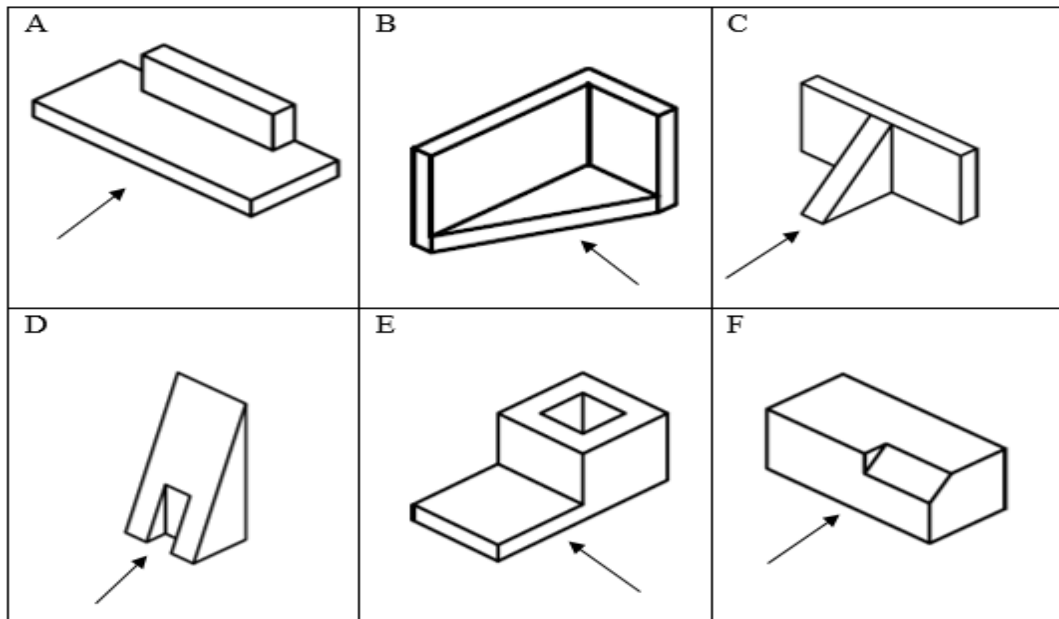
Nama :

Kelas :

No. Absen :

Untuk Soal no 1-17 !

Di bawah ini disajikan gambar suatu benda (A s.d F) dan gambar pandangan Ortogonalnya (1 s.d 18). Tentukanlah pandangan depan, pandangan kanan, dan pandangan atas dari benda tersebut dengan cara memilih gambar ortogonalnya yang telah disediakan yang sesuai. Tuliskan nomornya saja ke dalam tabel yang telah disediakan.





**Contoh : Gambar (A) pandangan depannya adalah no. 15**

| <b>Gambar</b>          | <b>A</b>    | <b>B</b>    | <b>C</b>    | <b>D</b>    | <b>E</b>    | <b>F</b>    |
|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Pandangan Depan</b> | <b>15</b>   | 1<br>.....  | 2<br>.....  | 3<br>.....  | 4<br>.....  | 5<br>.....  |
| <b>Pandangan Atas</b>  | 6<br>.....  | 7<br>.....  | 8<br>.....  | 9<br>.....  | 10<br>..... | 11<br>..... |
| <b>Pandangan Kanan</b> | 12<br>..... | 13<br>..... | 14<br>..... | 15<br>..... | 16<br>..... | 17<br>..... |

Untuk Soal no. 18-28!

Di bawah ini disajikan Gambar suatu benda dan gambar proyeksi Ortogonalnya dalam sistem Amerika. Cocokkanlah antara Gambar dengan proyeksi ortogonalnya, dengan menuliskan huruf dan angka ke dalam daftar yang telah disediakan di bawah ini.

|       |        |        |        |
|-------|--------|--------|--------|
| A<br> | B<br>  | C<br>  | D<br>  |
| E<br> | F<br>  | G<br>  | H<br>  |
| I<br> | J<br>  | K<br>  | L<br>  |
| 1<br> | 2<br>  | 3<br>  | 4<br>  |
| 5<br> | 6<br>  | 7<br>  | 8<br>  |
| 9<br> | 10<br> | 11<br> | 12<br> |

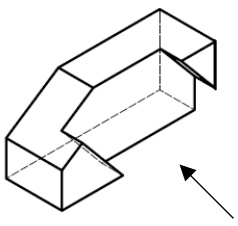
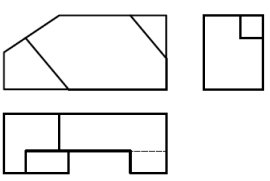
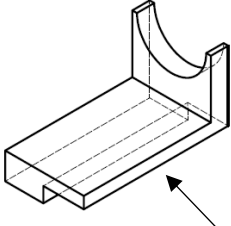
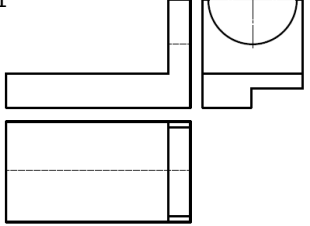
**Contoh : Gambar Benda A gambar ortogonalnya adalah no 10**

| <b>Gambar Isometrik</b> | <b>A</b>  | <b>B</b>    | <b>C</b>    | <b>D</b>    | <b>E</b>    | <b>F</b>    | <b>G</b>    | <b>H</b>    | <b>I</b>    | <b>J</b>    | <b>K</b>    | <b>L</b>    |
|-------------------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Gambar Ortogonal</b> | <b>10</b> | 18<br>..... | 19<br>..... | 20<br>..... | 21<br>..... | 22<br>..... | 23<br>..... | 24<br>..... | 25<br>..... | 26<br>..... | 27<br>..... | 28<br>..... |

Untuk soal no 29-33

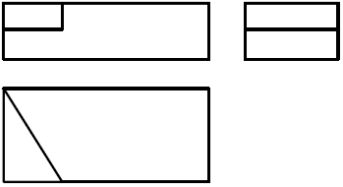
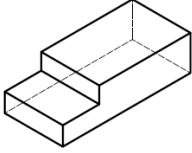
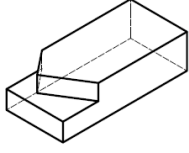
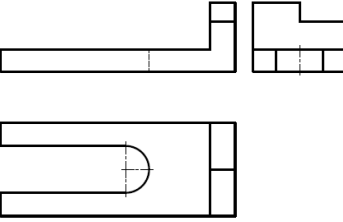
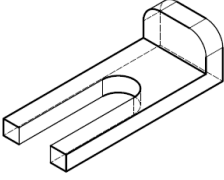
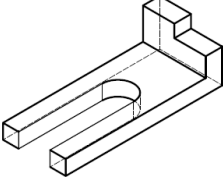
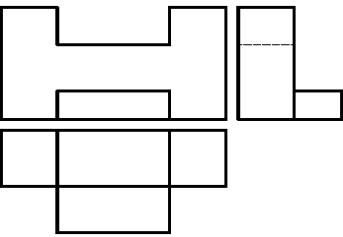
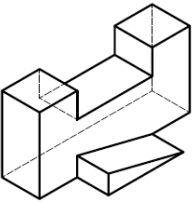
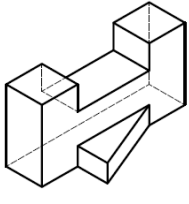
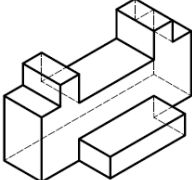
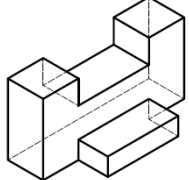
Di bawah ini disajikan gambar isometrik suatu benda dan pada sebelah kanan disediakan gambar ortogonalnya dalam sistem Eropa. Tentukanlah apakah gambar pandangan ortogonalnya Benar atau Salah , dengan cara melingkari B – S yang telah disediakan pada kolom sebelah kanan

Contoh : Gambar ortogonalnya no X B - S

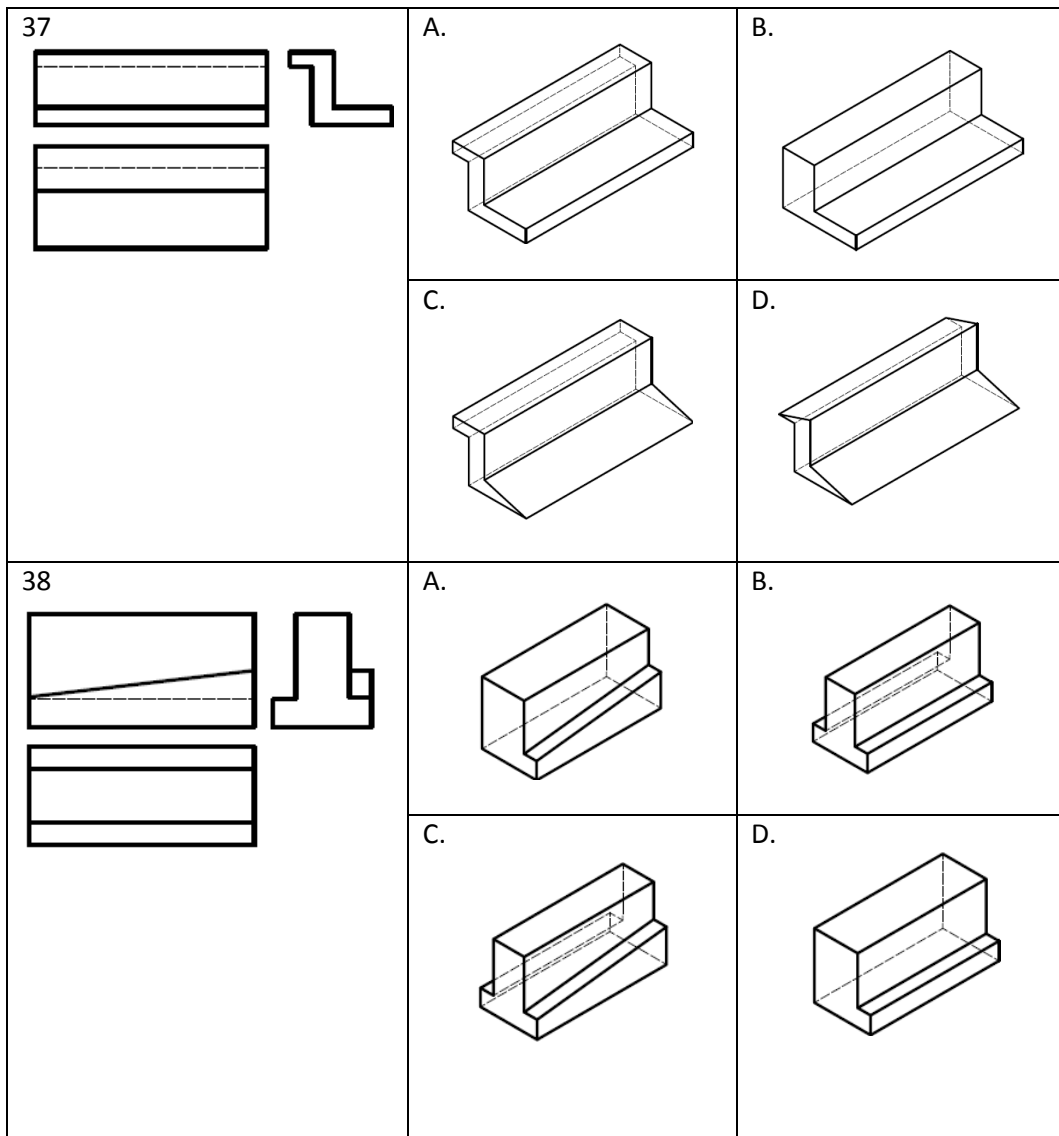
|                                                                                    |                                                                                                                                                                                                                                                                                                                                                 |                                                     |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
|   | <div style="text-align: center;">X</div>  <div style="display: flex; justify-content: space-between;"> <span>29</span> </div> <div style="display: flex; justify-content: space-between;"> <span>30</span> </div>                                             | <p>X. (B) - S</p> <p>29. B - S</p> <p>30. B - S</p> |
|  | <div style="display: flex; justify-content: space-between;"> <span>31</span> </div>  <div style="display: flex; justify-content: space-between;"> <span>32</span> </div> <div style="display: flex; justify-content: space-between;"> <span>33</span> </div> | <p>31. B - S</p> <p>32. B - S</p> <p>33. B - S</p>  |

Untuk Soal no 34-38

Di bawah ini disajikan proyeksi orthogonal suatu benda dalam sistem Eropa. Tentukanlah gambar dari gambar proyeksi orthogonal tersebut , dengan melingkari salah satu alternatif jawaban yang disediakan (A,B,C,D) yang anda anggap paling benar.

|                                                                                               |                                                                                               |                                                                                                 |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <p>34</p>    | <p>A.</p>    | <p>B.</p>    |
| <p>35</p>   | <p>A.</p>   | <p>B.</p>   |
| <p>36</p>  | <p>A.</p>  | <p>B.</p>  |
|                                                                                               | <p>C.</p>  | <p>D.</p>  |

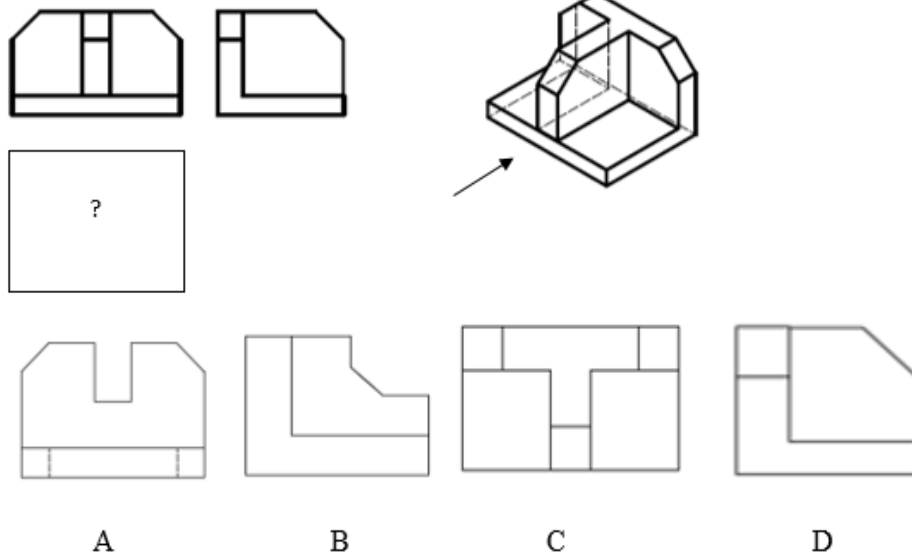




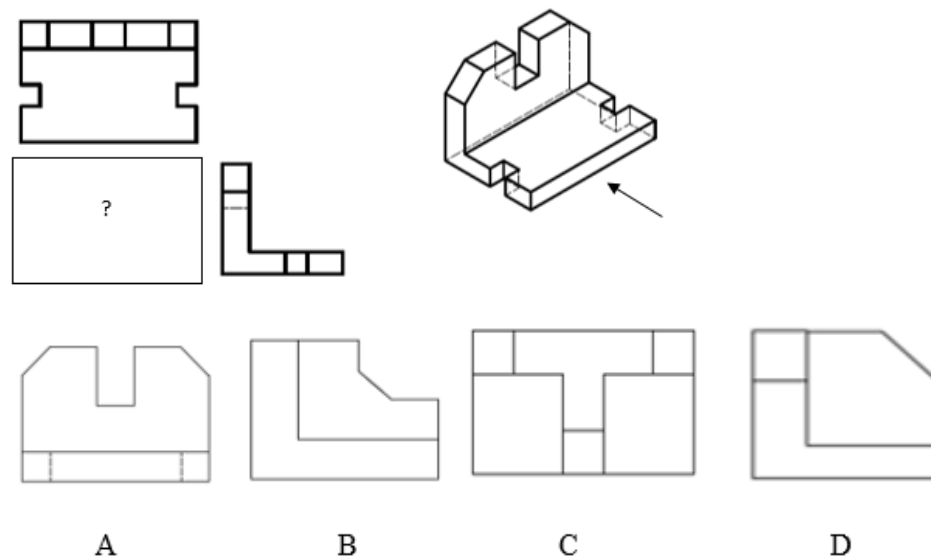
Untuk Soal no 39-42

Berikut ini adalah gambar proyeksi ortogonal sistem Eropa dan Amerika dari suatu benda/ salah satu pandangan dari gambar ortogonal tersebut ada yang tidak lengkap. Lengkapilah pandangan yang dihilangkan tersebut, dengan memilih salah satu alternatif jawaban (A,B,C,D) yang anda anggap paling benar dengan membelingkari.

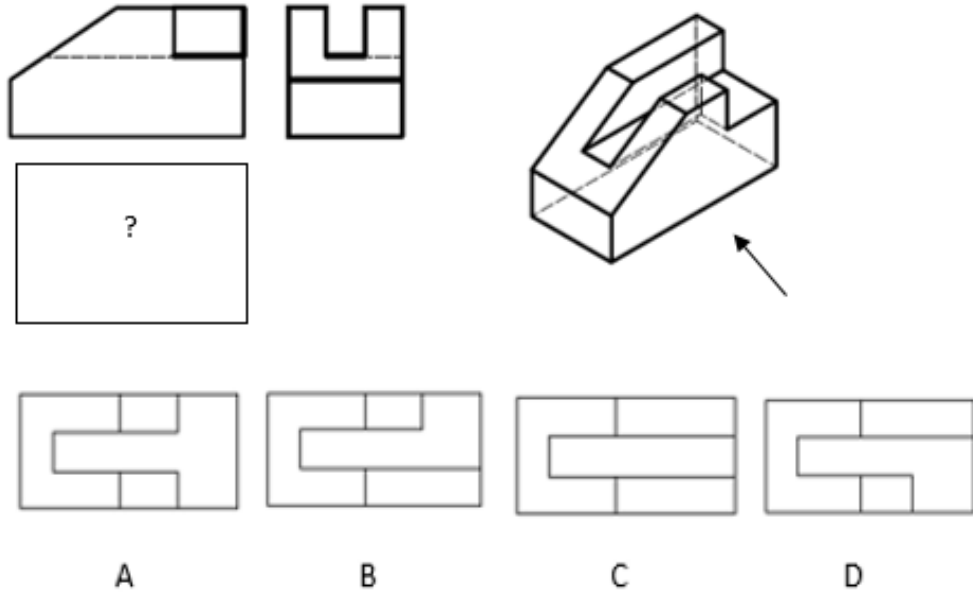
39.



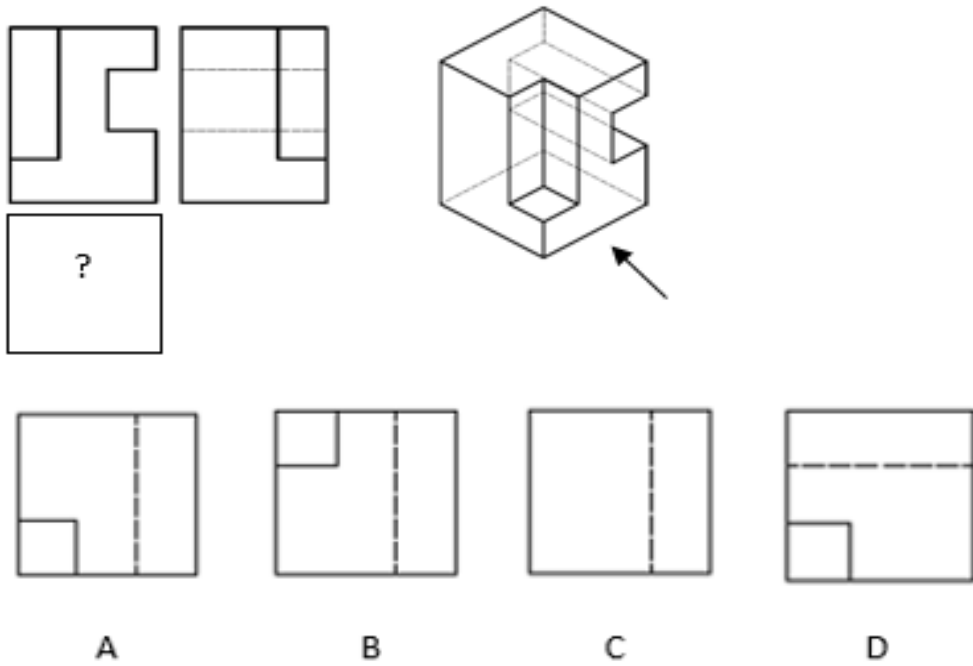
40.



41.



42.



## Lampiran 8. Uji Instrumen Soal Oleh Siswa

### INSTRUMEN PENELITIAN

#### KEMAMPUAN MEMBACA GAMBAR PROYEKSI

#### PETUNJUK Pengerjaan Soal

1. Tulis terlebih dahulu nama, kelas dan nomor absen pada lembar jawaban yang telah disediakan.
2. Tuliskan jawaban yang paling tepat sesuai dengan petunjuk!
3. Waktu pengerjaan 55 menit.
4. Lembar soal dikembalikan.
5. Sifat *Close Book*

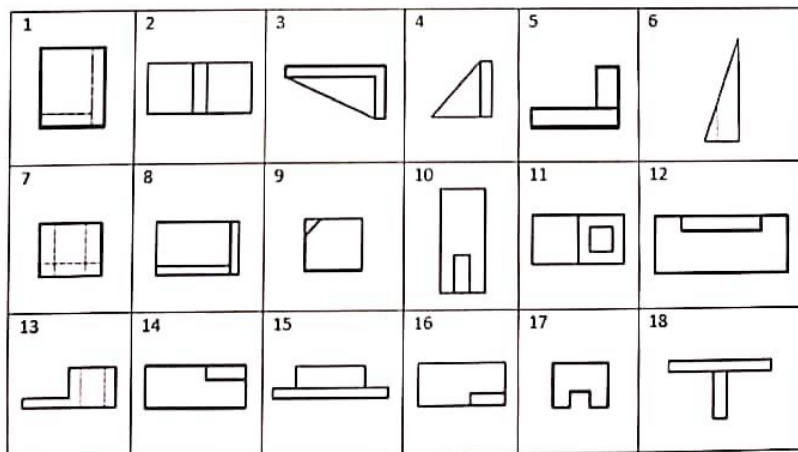
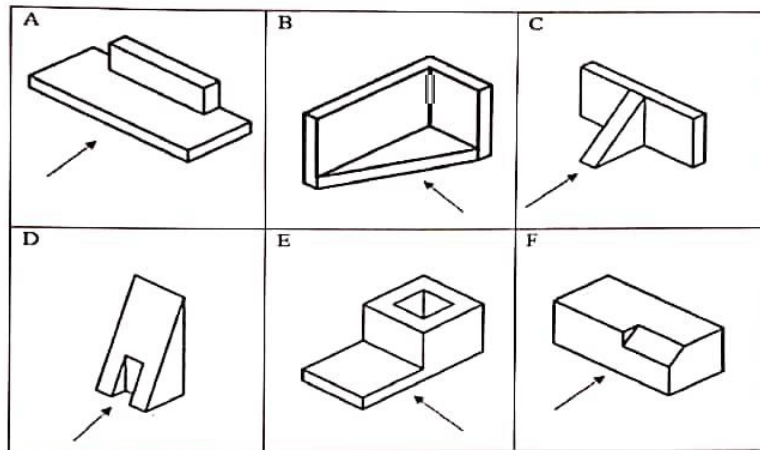
Nama : Muhammad Andhika

Kelas : XI TFLM 2

No. Absen : 015

Untuk Soal no 1-17 !

Di bawah ini disajikan gambar isometrik suatu benda (A s.d F) dan gambar Ortogonalnya (1 s.d 18). Tentukanlah pandangan depan, pandangan kanan, dan pandangan atas dari benda tersebut dengan cara memilih gambar ortogonalnya yang telah disediakan yang sesuai. Tuliskan nomornya saja ke dalam tabel yang telah disediakan.

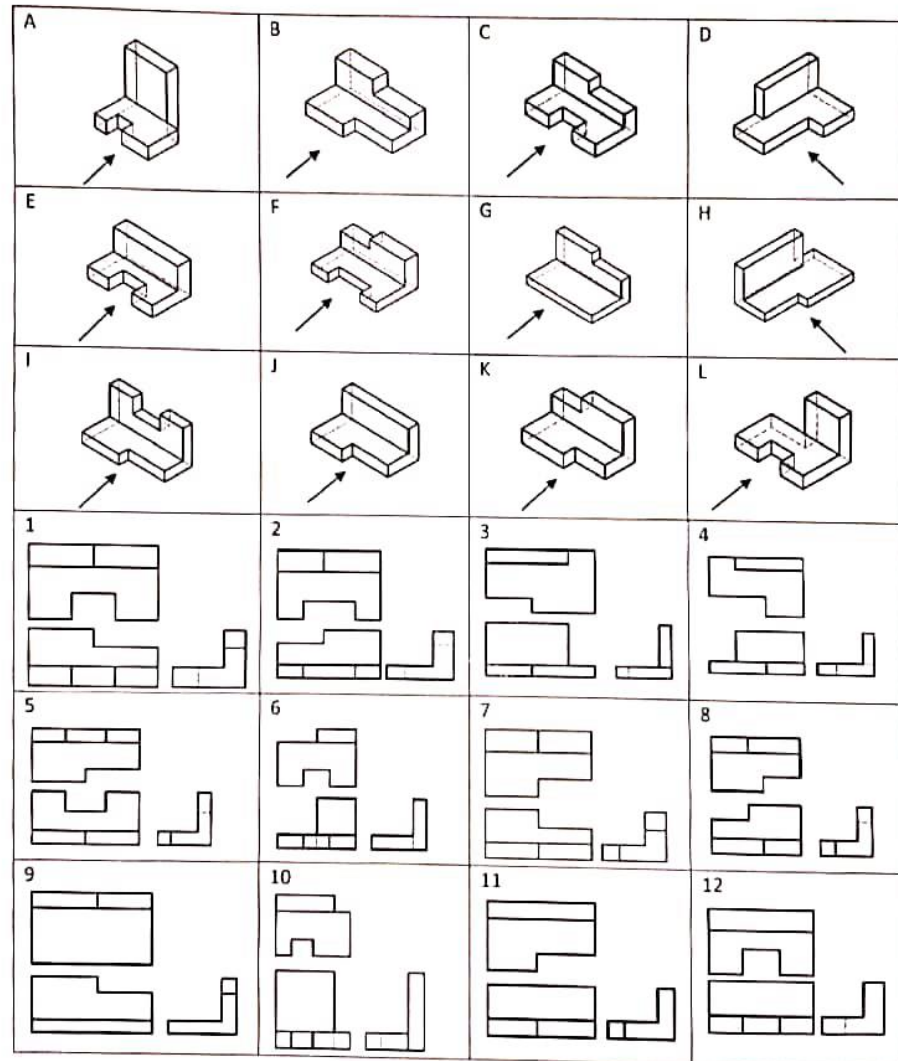


Contoh : Gambar (A) pandangan depannya adalah no. 15

| Gambar          | A  | B  | C  | D  | E  | F  |
|-----------------|----|----|----|----|----|----|
| Pandangan Depan | 15 | 10 | 14 | 2  | 8  | 13 |
| Pandangan Atas  | 3  | 12 | 11 | 18 | 17 | 16 |
| Pandangan Kanan | 9  | 7  | 1  | 5  | 4  | 6  |

Untuk Soal no. 18-28!

Di bawah ini disajikan Gambar Isometrik suatu benda dan gambar proyeksi Ortogonalnya dalam sistem Amerika. Cocokkanlah antara Gambar Isometrik dengan proyeksi ortogonalnya, dengan menuliskan huruf dan angka ke dalam daftar yang telah disediakan di bawah ini.





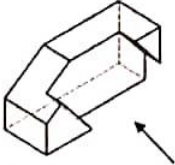
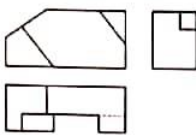
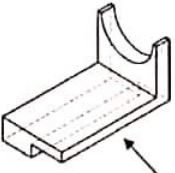
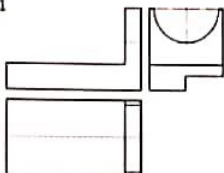
Contoh : Gambar Isometrik Benda A gambar ortogonalnya adalah no 10

| Gambar Isometrik | A  | B            | C            | D            | E            | F            | G             | H            | I             | J            | K            | L            |
|------------------|----|--------------|--------------|--------------|--------------|--------------|---------------|--------------|---------------|--------------|--------------|--------------|
| Gambar Ortogonal | 10 | <del>6</del> | <del>Ø</del> | <del>9</del> | <del>5</del> | <del>4</del> | <del>11</del> | <del>2</del> | <del>12</del> | <del>3</del> | <del>1</del> | <del>Ø</del> |

Untuk soal no 29-33

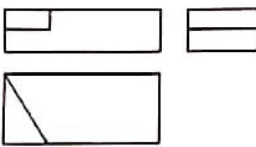
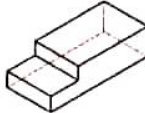
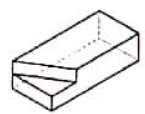
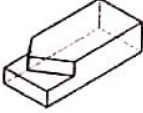
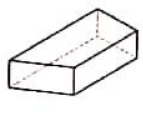
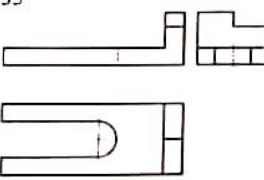
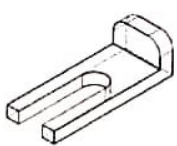
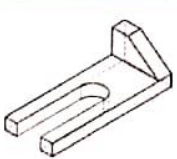
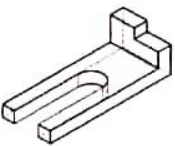
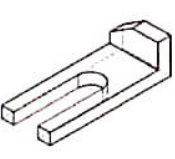
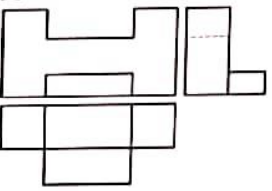
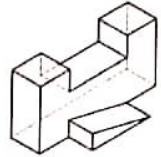
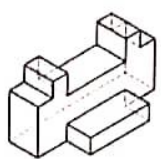
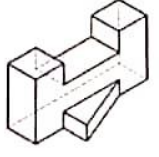
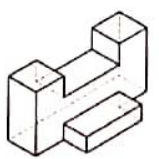
Di bawah ini disajikan gambar isometrik suatu benda dan pada sebelah kanan disediakan gambar ortogonalnya dalam sistem Eropa. Tentukanlah apakah gambar pandangan ortogonalnya Benar atau Salah , dengan cara melingkari B – S yang telah disediakan pada kolom sebelah kanan

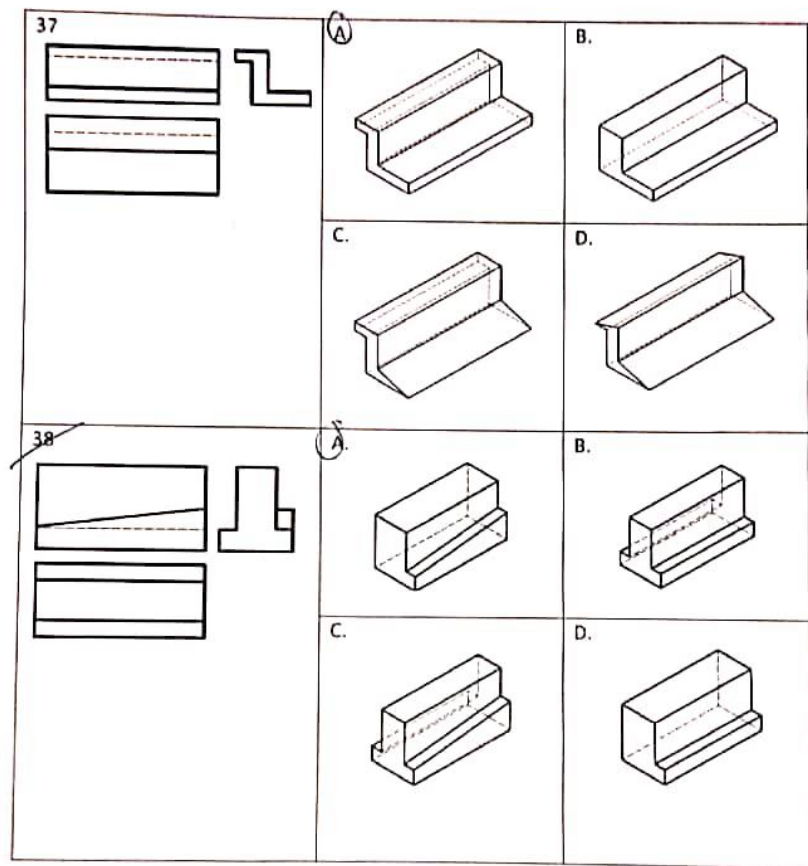
Contoh : Gambar ortogonalnya no X (B) - S

|                                                                                   |                                                                                                                  |                                                          |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
|  | <p>X</p>  <p>29</p> <p>30</p>  | <p>X. (B) - S</p> <p>29. B - (S)</p> <p>30. (B) - S</p>  |
|  | <p>31</p>  <p>32</p> <p>33</p> | <p>31. (B) - S</p> <p>32. (B) - S</p> <p>33. (B) - S</p> |

Untuk Soal no 34-38

Di bawah ini disajikan proyeksi orthogonal suatu benda dalam sistem Eropa. Tentukanlah gambar isometrik dari gambar orthogonal tersebut, dengan melingkari salah satu alternatif jawaban yang disediakan (A,B,C,D) yang anda anggap paling benar.

|                                                                                               |                                                                                                                                                                                                                          |                                                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>34</p>    | <p>A.</p>  <p><input checked="" type="radio"/> C.</p>  | <p>B.</p>  <p>D.</p>                                       |
| <p>35</p>   | <p>A.</p>  <p>C.</p>                                 | <p><input checked="" type="radio"/> B.</p>  <p>D.</p>    |
| <p>36</p>  | <p>A.</p>  <p>C.</p>                               | <p>B.</p>  <p><input checked="" type="radio"/> D.</p>  |



Untuk Soal no 39-42

Berikut ini adalah gambar proyeksi ortogonal sistem Eropa dan Amerika dari suatu benda/ salah satu pandangan dari gambar ortogonal tersebut ada yang tidak lengkap. Lengkapilah pandangan yang dihilangkan tersebut, dengan memilih salah satu alternatif jawaban (A,B,C,D) yang anda anggap paling benar dengan membelingkari.

39.

?

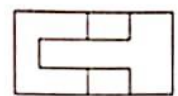
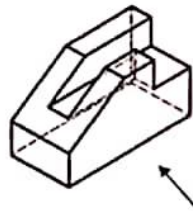
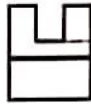
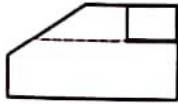
(A) B C D

40.

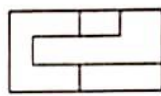
?

(A) B C D

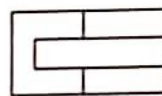
41.



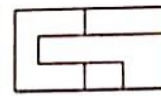
A



B

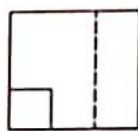
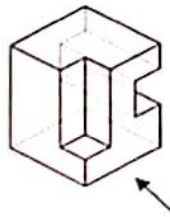


C

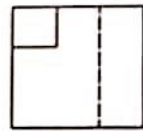


(D)

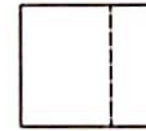
42.



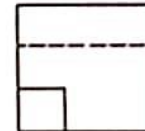
A



B



C



(D)

B = 11

| <b>Statistics</b>  |         |        |
|--------------------|---------|--------|
| Skor_Siswa         |         |        |
| N                  | Valid   | 44     |
|                    | Missing | 0      |
| Mean               |         | 29.32  |
| Std. Error of Mean |         | 1.310  |
| Median             |         | 32.00  |
| Mode               |         | 33     |
| Std. Deviation     |         | 8.690  |
| Variance           |         | 75.524 |
| Range              |         | 33     |
| Minimum            |         | 8      |
| Maximum            |         | 41     |



Lampiran 10. Rekapitulasi Jawaban Siswa

| Nama Siswa              | Jawaban Siswa |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-------------------------|---------------|----|----|----|----|----|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                         | 1             | 2  | 3  | 4  | 5  | 6  | 7 | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| Adi Febrianto           | 8             | 2  | 10 | 7  | 14 | 12 | 3 | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 13 | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 3  | 5  | 11 | 8  | 6  |
| Aditya Dika Rahmadi     | 7             | 2  | 10 | 15 | 1  | 12 | 3 | 18 | 6  | 11 | 14 | 5  | 16 | 4  | 6  | 13 | 10 | 8  | 6  | 4  | 12 | 1  | 9  | 7  | 5  | 11 | 2  | 3  |
| Afrizal Rizki Pratama   | 8             | 7  | 10 | 13 | 14 | 12 | 3 | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 2  | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 3  | 5  | 11 | 8  | 10 |
| Ahmad Bayu Nugroho      | 8             | 2  | 10 | 13 | 14 | 12 | 3 | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 3  | 5  | 11 | 8  | 6  |
| Ahmad Devianto          | 3             | 4  | 6  | 13 | 10 | 12 | 3 | 18 | 6  | 11 | 14 | 5  | 16 | 4  | 6  | 13 | 18 | 8  | 6  | 4  | 12 | 1  | 9  | 7  | 5  | 11 | 2  | 3  |
| Ahmad Rizki Khoirudin   | 3             | 4  | 6  | 13 | 10 | 12 | 3 | 18 | 6  | 11 | 14 | 5  | 16 | 4  | 6  | 13 | 18 | 8  | 6  | 4  | 12 | 1  | 9  | 7  | 5  | 11 | 2  | 3  |
| Anggi Febrianto         | 8             | 2  | 10 | 13 | 14 | 12 | 3 | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 3  | 5  | 11 | 8  | 6  |
| Bisma Aprilian Riantiko | 3             | 4  | 17 | 8  | 15 | 1  | 2 | 5  | 6  | 9  | 11 | 13 | 14 | 16 | 15 | 12 | 7  | 5  | 6  | 7  | 8  | 9  | 11 | 12 | 1  | 2  | 3  | 4  |
| Dhani Chandra Kurniawan | 3             | 18 | 10 | 2  | 8  | 12 | 4 | 7  | 13 | 11 | 9  | 5  | 6  | 1  | 14 | 16 | 17 | 3  | 2  | 4  | 1  | 5  | 6  | 7  | 6  | 9  | 11 | 12 |
| Dika Irawan             | 8             | 2  | 10 | 13 | 14 | 12 | 3 | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 3  | 5  | 11 | 8  | 6  |
| Faiz Ahmad Nasrulloh    | 3             | 4  | 6  | 13 | 10 | 12 | 3 | 18 | 17 | 11 | 14 | 5  | 16 | 4  | 6  | 13 | 18 | 8  | 6  | 4  | 12 | 1  | 9  | 7  | 5  | 11 | 2  | 3  |
| Hendri Susila           | 3             | 18 | 16 | 13 | 10 | 12 | 3 | 18 | 6  | 11 | 14 | 5  | 16 | 4  | 6  | 13 | 18 | 8  | 6  | 4  | 12 | 1  | 9  | 7  | 5  | 11 | 2  | 3  |
| Ignatius Rezky Agung P  | 3             | 18 | 10 | 2  | 8  | 12 | 4 | 7  | 13 | 11 | 9  | 5  | 6  | 1  | 14 | 16 | 17 | 3  | 2  | 4  | 1  | 5  | 6  | 7  | 8  | 9  | 11 | 12 |
| Ilham Wisudawan         | 8             | 2  | 10 | 13 | 14 | 12 | 3 | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 7  | 1  | 4  | 12 | 10 | 9  | 3  | 5  | 11 | 8  | 6  |
| Matus Beny Wicaksana    | 3             | 4  | 6  | 13 | 10 | 5  | 8 | 12 | 17 | 11 | 9  | 14 | 16 | 1  | 7  | 2  | 18 | 8  | 6  | 4  | 12 | 1  | 9  | 7  | 5  | 11 | 2  | 3  |
| Muhammad Rizky Dwi S    | 8             | 2  | 10 | 13 | 14 | 12 | 3 | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 3  | 5  | 11 | 8  | 6  |
| Nur Syamsudin Fuad      | 8             | 2  | 10 | 13 | 14 | 12 | 3 | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 3  | 5  | 11 | 8  | 6  |
| Pius Calfin Alfian N    | 8             | 4  | 6  | 13 | 10 | 12 | 3 | 18 | 6  | 11 | 14 | 5  | 16 | 4  | 6  | 13 | 18 | 8  | 6  | 4  | 12 | 1  | 9  | 7  | 5  | 11 | 2  | 3  |
| Restu Pambudi           | 3             | 18 | 8  | 13 | 10 | 12 | 3 | 18 | 6  | 11 | 14 | 5  | 16 | 11 | 6  | 13 | 18 | 8  | 6  | 4  | 12 | 1  | 9  | 7  | 5  | 11 | 2  | 3  |
| Tri Faisal Gardana      | 3             | 4  | 6  | 13 | 10 | 5  | 8 | 12 | 17 | 11 | 9  | 14 | 16 | 1  | 7  | 2  | 18 | 8  | 6  | 4  | 12 | 1  | 9  | 7  | 5  | 11 | 2  | 3  |
| Yustinus Rio Saputra U  | 3             | 4  | 6  | 13 | 10 | 12 | 3 | 18 | 6  | 11 | 14 | 5  | 16 | 4  | 6  | 13 | 18 | 8  | 6  | 4  | 12 | 1  | 9  | 7  | 5  | 11 | 2  | 3  |
| Agus Gunawan            | 8             | 7  | 10 | 13 | 14 | 12 | 3 | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 2  | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 3  | 5  | 11 | 8  | 10 |
| Abdhi Rahmat Syah       | 8             | 2  | 10 | 7  | 14 | 12 | 3 | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 13 | 9  | 4  | 1  | 9  | 12 | 2  | 7  | 9  | 5  | 11 | 8  | 6  |
| Afiat Subekti           | 8             | 2  | 10 | 7  | 10 | 12 | 3 | 18 | 17 | 11 | 18 | 5  | 1  | 4  | 6  | 13 | 9  | 8  | 1  | 3  | 12 | 2  | 11 | 4  | 5  | 9  | 8  | 6  |
| Aldi Dwi Prabowo        | 8             | 2  | 10 | 13 | 14 | 12 | 3 | 18 | 17 | 11 | 16 | 5  | 7  | 4  | 6  | 1  | 9  | 8  | 1  | 13 | 12 | 2  | 11 | 3  | 5  | 9  | 8  | 6  |
| Arya Mahesa Vinaedi     | 1             | 8  | 10 | 13 | 14 | 2  | 3 | 18 | 17 | 11 | 16 | 5  | 7  | 4  | 6  | 13 | 9  | 7  | 1  | 4  | 12 | 8  | 9  | 3  | 5  | 11 | 8  | 6  |
| Dimas Aji Pangestu      | 8             | 2  | 10 | 13 | 14 | 12 | 3 | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 3  | 5  | 11 | 8  | 6  |
| Eri Setiawan            | 8             | 2  | 10 | 13 | 14 | 12 | 3 | 18 | 12 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 8  | 1  | 3  | 12 | 2  | 11 | 4  | 5  | 9  | 8  | 6  |
| Estu Hidayat Nur W      | 8             | 2  | 10 | 13 | 14 | 12 | 3 | 18 | 17 | 11 | 16 | 5  | 7  | 4  | 6  | 1  | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 3  | 5  | 11 | 8  | 6  |
| Kunci Jawaban           | 8             | 2  | 10 | 13 | 14 | 12 | 3 | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 3  | 5  | 11 | 8  | 6  |



| Nama Siswa              | Jawaban Siswa |    |    |    |    |    |    |    |    |    |    |    |    |    | 41 | 42 |
|-------------------------|---------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                         | 29            | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 |    |    |
| Adi Febriyanto          | S             | B  | S  | S  | B  | C  | B  | D  | A  | C  | C  | A  | D  | A  |    |    |
| Aditya Dika Rahmadi     | S             | S  | B  | S  | S  | C  | B  | C  | A  | C  | C  | A  | D  | A  |    |    |
| Afrizal Rizki Pratama   | B             | S  | B  | S  | S  | C  | B  | C  | A  | C  | C  | A  | D  | A  |    |    |
| Ahmad Bayu Nugroho      | S             | S  | B  | S  | S  | C  | B  | C  | A  | C  | C  | A  | D  | A  |    |    |
| Ahmad Devianto          | S             | S  | B  | S  | S  | C  | B  | C  | A  | C  | C  | A  | D  | A  |    |    |
| Ahmad Rizki Khoirudin   | S             | S  | B  | S  | S  | C  | B  | C  | A  | C  | C  | A  | D  | A  |    |    |
| Anggi Febrianto         | S             | S  | B  | S  | S  | C  | B  | C  | A  | C  | C  | A  | D  | A  |    |    |
| Bisma Aprilian Riantiko | B             | S  | S  | S  | S  | D  | B  | D  | A  | C  | C  | A  | A  | D  |    |    |
| Dhani Chandra Kurniawan | S             | B  | B  | B  | B  | C  | B  | C  | A  | C  | D  | C  | B  | D  |    |    |
| Dika Irawan             | S             | S  | B  | B  | B  | D  | A  | B  | A  | A  | C  | A  | D  | A  |    |    |
| Faiz Ahmad Nasrulloh    | S             | S  | B  | S  | S  | C  | B  | D  | A  | C  | C  | A  | D  | A  |    |    |
| Hendri Susila           | S             | S  | B  | S  | S  | C  | B  | C  | A  | C  | C  | A  | D  | A  |    |    |
| Ignatius Rezky Agung P  | S             | B  | B  | B  | B  | C  | B  | C  | A  | C  | D  | A  | B  | D  |    |    |
| Ilham Wisudawan         | B             | S  | B  | S  | S  | C  | B  | D  | A  | A  | C  | A  | D  | A  |    |    |
| Matus Beny Wicaksana    | S             | S  | B  | S  | S  | C  | B  | C  | A  | C  | C  | A  | D  | A  |    |    |
| Muhammad Rizky Dwi S    | S             | S  | B  | S  | S  | C  | B  | C  | A  | C  | C  | A  | D  | A  |    |    |
| Nur Syamsudin Fuad      | S             | S  | B  | B  | B  | C  | B  | D  | A  | A  | C  | A  | D  | A  |    |    |
| Pius Calfin Alfian N    | S             | S  | B  | S  | S  | C  | B  | D  | A  | C  | C  | A  | D  | A  |    |    |
| Restu Pambudi           | S             | S  | B  | S  | S  | C  | B  | C  | A  | C  | C  | A  | D  | A  |    |    |
| Tri Faisal Gardana      | S             | S  | B  | S  | S  | C  | B  | C  | A  | C  | C  | A  | D  | A  |    |    |
| Yustinus Rio Saputra U  | S             | S  | B  | S  | S  | C  | B  | D  | A  | C  | C  | A  | D  | A  |    |    |
| Agus Gunawan            | S             | S  | B  | S  | S  | C  | B  | C  | A  | C  | C  | A  | C  | A  |    |    |
| Abdhi Rahmat Syah       | S             | B  | B  | B  | B  | C  | B  | D  | A  | A  | A  | A  | D  | D  |    |    |
| Afiat Subekti           | S             | B  | B  | B  | B  | C  | B  | D  | A  | A  | A  | A  | D  | D  |    |    |
| Aldi Dwi Prabowo        | S             | B  | S  | S  | S  | C  | B  | D  | A  | A  | A  | A  | D  | D  |    |    |
| Arya Mahesa Vinaedi     | S             | S  | B  | S  | S  | C  | B  | D  | A  | C  | C  | A  | D  | A  |    |    |
| Dimas Aji Pangestu      | S             | B  | S  | B  | B  | C  | B  | D  | A  | C  | C  | A  | D  | D  |    |    |
| Eri Setiawan            | S             | B  | B  | B  | B  | C  | B  | D  | A  | A  | A  | A  | D  | D  |    |    |
| Estu Hidayat Nur W      | S             | B  | S  | B  | S  | D  | A  | D  | A  | A  | A  | A  | D  | D  |    |    |
| Kunci Jawaban           | S             | B  | S  | B  | B  | C  | B  | D  | A  | C  | C  | A  | D  | A  |    |    |

| Nama Siswa               | Jawaban Siswa |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|--------------------------|---------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                          | 1             | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| Fajar Dwi Darmawan       | 8             | 2  | 10 | 13 | 14 | 12 | 3  | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 8  | 1  | 3  | 12 | 2  | 11 | 4  | 5  | 9  | 8  | 6  |
| Fika Fajar Qurniawan     | 8             | 2  | 10 | 13 | 14 | 12 | 3  | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 8  | 1  | 3  | 12 | 2  | 11 | 4  | 5  | 9  | 8  | 6  |
| Hendriawan Aji Bachtiar  | 8             | 2  | 10 | 13 | 14 | 12 | 3  | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 3  | 1  | 4  | 12 | 2  | 9  | 10 | 5  | 11 | 8  | 6  |
| Ikhsan Zukhruf Al Rasyid | 8             | 2  | 10 | 13 | 14 | 12 | 3  | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 10 | 5  | 11 | 8  | 6  |
| Ikhwani Nur salam        | 8             | 2  | 10 | 13 | 14 | 12 | 3  | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 3  | 5  | 11 | 8  | 6  |
| Muhammad Andhika R S     | 10            | 14 | 2  | 8  | 13 | 3  | 12 | 11 | 18 | 17 | 16 | 9  | 7  | 1  | 5  | 4  | 6  | 6  | 8  | 9  | 5  | 4  | 11 | 2  | 12 | 3  | 1  | 8  |
| Muhammad Fauzan          | 10            | 14 | 2  | 8  | 13 | 3  | 12 | 11 | 18 | 17 | 16 | 9  | 2  | 1  | 5  | 4  | 6  | 8  | 1  | 3  | 12 | 2  | 11 | 4  | 5  | 9  | 8  | 6  |
| Nur Fathur Rozzaq        | 8             | 2  | 10 | 13 | 14 | 12 | 3  | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 3  | 5  | 11 | 8  | 6  |
| Pradita Tri Kurniawan    | 8             | 2  | 10 | 13 | 14 | 12 | 3  | 18 | 12 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 8  | 1  | 3  | 12 | 2  | 11 | 4  | 5  | 9  | 8  | 6  |
| Rezki Adi Purnama        | 8             | 1  | 10 | 7  | 14 | 12 | 3  | 18 | 17 | 11 | 16 | 5  | 8  | 2  | 6  | 13 | 17 | 3  | 1  | 4  | 12 | 2  | 9  | 3  | 6  | 11 | 8  | 10 |
| Satriyo Widagdo          | 8             | 2  | 10 | 13 | 14 | 12 | 3  | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 8  | 1  | 3  | 12 | 2  | 11 | 4  | 5  | 9  | 8  | 6  |
| Setiyo Budi Saputro      | 8             | 2  | 10 | 13 | 14 | 12 | 3  | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 10 | 5  | 11 | 8  | 6  |
| Tri Julian Alfii         | 8             | 2  | 10 | 13 | 14 | 12 | 3  | 18 | 1  | 11 | 14 | 9  | 1  | 4  | 6  | 13 | 9  | 8  | 5  | 11 | 12 | 2  | 9  | 3  | 1  | 4  | 6  | 7  |
| Trigas Wawan Saptino     | 1             | 2  | 10 | 7  | 14 | 12 | 9  | 18 | 17 | 11 | 16 | 5  | 8  | 4  | 6  | 13 | 9  | 7  | 2  | 3  | 12 | 11 | 8  | 4  | 5  | 9  | 2  | 6  |
| Yogi Wahyu Pranata       | 8             | 2  | 10 | 13 | 14 | 12 | 3  | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 3  | 5  | 11 | 8  | 6  |
| Kunci Jawaban            | 8             | 2  | 10 | 13 | 14 | 12 | 3  | 18 | 17 | 11 | 16 | 5  | 1  | 4  | 6  | 7  | 9  | 7  | 1  | 4  | 12 | 2  | 9  | 3  | 5  | 11 | 8  | 6  |

| Nama Siswa               | Jawaban Siswa |    |    |    |    |    |    |    |    |    |    |    |    |    | Kunci Jawaban |
|--------------------------|---------------|----|----|----|----|----|----|----|----|----|----|----|----|----|---------------|
|                          | 29            | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 |               |
| Fajar Dwi Darmawan       | S             | B  | B  | B  | B  | C  | B  | D  | A  | A  | A  | A  | D  | D  |               |
| Fika Fajar Qurniawan     | S             | B  | B  | S  | B  | C  | B  | D  | A  | A  | A  | A  | D  | D  |               |
| Hendriawan Aji Bachtiar  | S             | S  | B  | S  | B  | C  | B  | A  | A  | C  | A  | A  | C  | C  |               |
| Ikhsan Zukhruf Al Rasyid | S             | S  | B  | S  | B  | C  | B  | A  | A  | C  | A  | A  | C  | C  |               |
| Ikhsan Nur salam         | S             | B  | B  | S  | B  | C  | B  | D  | A  | C  | C  | A  | D  | A  |               |
| Muhammad Andhika R S     | S             | B  | B  | B  | B  | C  | B  | D  | A  | A  | A  | A  | D  | D  |               |
| Muhammad Fauzan          | S             | B  | B  | B  | B  | C  | B  | D  | A  | A  | A  | A  | D  | D  |               |
| Nur Fathur Rozzaq        | S             | B  | S  | B  | S  | C  | B  | D  | A  | C  | C  | A  | D  | A  |               |
| Pradita Tri Kurniawan    | S             | B  | B  | B  | B  | C  | B  | D  | A  | A  | A  | A  | D  | D  |               |
| Rezki Adi Purnama        | S             | B  | S  | B  | B  | D  | A  | C  | A  | A  | C  | A  | D  | A  |               |
| Satriyo Widagdo          | S             | B  | B  | B  | B  | C  | B  | D  | A  | A  | A  | A  | D  | D  |               |
| Setiyo Budi Saputro      | S             | S  | S  | B  | B  | C  | B  | D  | A  | C  | C  | A  | C  | C  |               |
| Tri Julian Alfii         | S             | B  | B  | B  | B  | C  | B  | D  | A  | C  | C  | D  | B  | C  |               |
| Trigas Wawan Saptino     | S             | B  | B  | B  | B  | C  | B  | D  | A  | A  | A  | A  | D  | D  |               |
| Yogi Wahyu Pranata       | S             | B  | B  | S  | B  | C  | B  | D  | A  | C  | C  | A  | D  | A  |               |
| Kunci Jawaban            | S             | B  | S  | B  | B  | C  | B  | D  | A  | C  | C  | A  | D  | A  |               |



| Nama Siswa              | Skor Butir |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-------------------------|------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                         | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| Adi Febriyanto          | 1          | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |
| Aditya Dika Rahmadi     | 0          | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1  | 0  | 1  | 0  | 1  | 1  | 0  | 0  | 0  | 0  | 1  | 1  | 1  | 0  | 1  | 0  | 1  | 1  | 0  |
| Afrizal Rizki Pratama   | 1          | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  |
| Ahmad Bayu Nugroho      | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |
| Ahmad Devianto          | 0          | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1  | 0  | 1  | 0  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 1  | 1  | 0  | 1  | 0  | 1  | 1  | 0  |
| Ahmad Rizki Khoirudin   | 0          | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1  | 0  | 1  | 0  | 1  | 1  | 0  | 0  | 0  | 0  | 1  | 1  | 0  | 1  | 0  | 1  | 1  | 0  | 0  |
| Anggi Febrianto         | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |
| Bisma Aprilian Riantiko | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| Dhani Chandra Kurniawan | 0          | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| Dika Irawan             | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |
| Faiz Ahmad Nasrulloh    | 0          | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1  | 0  | 1  | 0  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 1  | 1  | 0  | 1  | 0  | 1  | 1  | 0  |
| Hendri Susila           | 0          | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1  | 0  | 1  | 0  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 1  | 1  | 0  | 1  | 0  | 1  | 1  | 0  |
| Ignatius Rezky Agung P  | 0          | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| Ilham Wisudawan         | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  |
| Matus Beny Wicaksana    | 0          | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 1  | 0  | 1  | 1  | 0  | 0  |
| Muhammad Rizky Dwi S    | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |
| Nur Syamsudin Fuad      | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |
| Pius Calfin Alfian N    | 0          | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1  | 0  | 1  | 0  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 1  | 1  | 0  | 1  | 0  | 1  | 1  | 0  |
| Restu Pambudi           | 0          | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1  | 0  | 1  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 1  | 1  | 0  | 1  | 0  | 1  | 1  | 0  |
| Tri Faisal Gardana      | 0          | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 1  | 0  | 1  | 0  | 1  | 1  | 0  |
| Yustinus Rio Saputra U  | 0          | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1  | 0  | 1  | 0  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 1  | 1  | 0  | 1  | 0  | 1  | 1  | 0  |
| Agus Gunawan            | 1          | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  |
| Abdhi Rahmat Syah       | 1          | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 0  | 1  | 0  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  |
| Afiat Subekti           | 1          | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 0  | 1  | 0  | 1  | 1  | 0  | 0  | 1  | 0  | 1  |
| Aldi Dwi Prabowo        | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 0  | 1  | 0  | 1  | 0  | 1  | 1  | 0  | 1  | 1  | 0  | 1  |
| Arya Mahesa Vinaedi     | 0          | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  |
| Dimas Aji Pangestu      | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |
| Eri Setiawan            | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 0  | 1  | 1  | 0  | 1  | 0  | 1  | 1  |
| Estu Hidayat Nur W      | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |

| Nama Siswa              | Skor Butir |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  | Total Skor |
|-------------------------|------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|------------|
|                         | 29         | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 |    |  |            |
| Adi Febriyanto          | 1          | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 39 |  |            |
| Aditya Dika Rahmadi     | 1          | 0  | 0  | 1  | 0  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 24 |  |            |
| Afrizal Rizki Pratama   | 0          | 0  | 0  | 0  | 0  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 33 |  |            |
| Ahmad Bayu Nugroho      | 1          | 0  | 0  | 1  | 0  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 38 |  |            |
| Ahmad Devianto          | 1          | 0  | 0  | 1  | 0  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 23 |  |            |
| Ahmad Rizki Khoirudin   | 1          | 0  | 0  | 1  | 0  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 23 |  |            |
| Anggi Febrianto         | 1          | 0  | 0  | 1  | 0  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 38 |  |            |
| Bisma Aprilian Riantiko | 0          | 0  | 1  | 1  | 0  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 8  |  |            |
| Dhani Chandra Kurniawan | 1          | 1  | 0  | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 0  | 0  | 0  | 0  | 13 |  |            |
| Dika Irawan             | 1          | 0  | 0  | 1  | 1  | 0  | 0  | 0  | 1  | 0  | 1  | 1  | 1  | 1  | 36 |  |            |
| Faiz Ahmad Nasrulloh    | 1          | 0  | 0  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 25 |  |            |
| Hendri Susila           | 1          | 0  | 0  | 1  | 0  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 23 |  |            |
| Ignatius Rezky Agung P  | 1          | 1  | 0  | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 0  | 1  | 0  | 0  | 14 |  |            |
| Ilham Wisudawan         | 0          | 0  | 0  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 36 |  |            |
| Matius Beny Wicaksana   | 1          | 0  | 0  | 1  | 0  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 18 |  |            |
| Muhammad Rizky Dwi S    | 1          | 0  | 0  | 1  | 0  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 38 |  |            |
| Nur Syamsudin Fuad      | 1          | 0  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 39 |  |            |
| Pius Calfin Alfian N    | 1          | 0  | 0  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 24 |  |            |
| Restu Pambudi           | 1          | 0  | 0  | 1  | 0  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 22 |  |            |
| Tri Faisal Gardana      | 1          | 0  | 0  | 1  | 0  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 18 |  |            |
| Yustinus Rio Saputra U  | 1          | 0  | 0  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 24 |  |            |
| Agus Gunawan            | 1          | 0  | 0  | 1  | 0  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 0  | 1  | 34 |  |            |
| Abdhi Rahmat Syah       | 1          | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 1  | 1  | 0  | 33 |  |            |
| Afiat Subekti           | 1          | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 1  | 1  | 0  | 29 |  |            |
| Aldi Dwi Prabowo        | 1          | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 0  | 0  | 1  | 1  | 0  | 32 |  |            |
| Arya Mahesa Vinaedi     | 1          | 0  | 0  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 33 |  |            |
| Dimas Aji Pangestu      | 1          | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 41 |  |            |
| Eri Setiawan            | 1          | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 1  | 0  | 32 |  |            |
| Estu Hidayat Nur W      | 1          | 1  | 1  | 1  | 0  | 0  | 0  | 1  | 1  | 0  | 0  | 1  | 1  | 0  | 34 |  |            |

| Nama Siswa               | Skor Butir |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
|--------------------------|------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
|                          | 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |   |
| Fajar Dwi Darmawan       | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 0  | 1  | 1  | 0  | 0  | 1  | 0  | 1  | 1  | 1 |
| Fika Fajar Qurniawan     | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 0  | 1  | 1  | 0  | 0  | 1  | 0  | 1  | 1  | 1 |
| Hendriawan Aji Bachtiar  | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1 |
| Ikhsan Zukhruf Al Rasyid | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1 |
| Ikhwani Nur salam        | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1 |
| Muhammad Andhika R S     | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0 |
| Muhammad Fauzan          | 0          | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 1  | 1  | 0  | 0  | 1  | 0  | 1  | 1  | 1 |
| Nur Fathur Rozzaq        | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1 |
| Pradita Tri Kurniawan    | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 0  | 1  | 0  | 0  | 1  | 0  | 1  | 1  | 1 |
| Rezki Adi Purnama        | 1          | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 0  | 0  | 1  | 0  | 0  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 0  | 1 |
| Satriyo Widagdo          | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 0  | 1  | 1  | 0  | 0  | 1  | 0  | 1  | 1  | 1 |
| Setiyo Budi Saputro      | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1 |
| Tri Julian Alfii         | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1  | 0  | 0  | 1  | 1  | 1  | 0  | 1  | 0  | 0  | 0  | 1  | 1  | 1  | 1  | 0  | 0  | 0  | 0  | 0 |
| Trigas Wawan Saptino     | 0          | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1  | 1  | 1  | 0  | 1  | 1  | 0  | 1  | 1  | 1  | 0  | 0  | 1  | 0  | 0  | 1  | 0  | 0  | 1  | 1 |
| Yogi Wahyu Pranata       | 1          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1 |



| Nama Siswa               | Skor Butir |    |    |    |    |    |    |    |    |    |    |    |    |    | Total Skor |    |
|--------------------------|------------|----|----|----|----|----|----|----|----|----|----|----|----|----|------------|----|
|                          | 29         | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 |            |    |
| Fajar Dwi Darmawan       | 1          | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 1  | 1  | 0          | 33 |
| Fika Fajar Qurniawan     | 1          | 1  | 0  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 1  | 1  | 0          | 32 |
| Hendriawan Aji Bachtiar  | 1          | 0  | 0  | 0  | 1  | 1  | 1  | 0  | 1  | 1  | 0  | 1  | 0  | 1  | 0          | 33 |
| Ikhsan Zukhruf Al Rasyid | 1          | 0  | 0  | 0  | 1  | 1  | 1  | 0  | 1  | 1  | 0  | 1  | 0  | 1  | 0          | 34 |
| Ikhwani Nur salam        | 1          | 1  | 0  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1          | 40 |
| Muhammad Andhika R S     | 1          | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 1  | 1  | 0          | 11 |
| Muhammad Fauzan          | 1          | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 1  | 1  | 0          | 17 |
| Nur Fathur Rozzaq        | 1          | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1          | 41 |
| Pradita Tri Kurniawan    | 1          | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 1  | 1  | 0          | 32 |
| Rezki Adi Purnama        | 1          | 1  | 1  | 1  | 1  | 0  | 0  | 0  | 1  | 0  | 1  | 1  | 1  | 1  | 1          | 29 |
| Satriyo Widagdo          | 1          | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 1  | 1  | 0          | 33 |
| Setiyo Budi Saputro      | 1          | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0          | 38 |
| Tri Julian Alfii         | 1          | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 0          | 27 |
| Trigas Wawan Saptino     | 1          | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 1  | 1  | 0          | 26 |
| Yogi Wahyu Pranata       | 1          | 1  | 0  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1          | 40 |





**UNIVERSITAS NEGERI YOGYAKARTA**  
**FAKULTAS TEKNIK**  
**KARTU BIMBINGAN TUGAS AKHIR SKRIPSI**

Nama Mahasiswa : Yana Pratama Putra

NIM : 15503244007

Dosen Pembimbing : Drs. Jarwo Puspito, M.P

Judul Tugas Akhir Skripsi: Kemampuan Membaca Gambar Proyeksi Pada Siswa SMK Negeri 1

Seyegan Yogyakarta.

| Bimb.<br>Ke | Hari/Tanggal             | Materi Bimbingan | Catatan Dosen Pembimbing                                                                                                   | Tanda Tangan<br>Dosen<br>Pembimbing |
|-------------|--------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 1           | Rabu, $\frac{6}{2}$ 19   |                  | Orientasi Penelitian<br>Secara garis besar.                                                                                |                                     |
| 2           | Kamis, $\frac{28}{2}$ 19 |                  | 1. Tata tulis (Sub judul)<br>2. Penulisan kutipan.<br>3. BAB II perlu ditambah<br>terkait STHC.                            |                                     |
| 3           | Jumat, $\frac{15}{3}$ 19 |                  | 1. Penyajian gambar<br>backgroundnya<br>jangan gelap.<br>2. Lanjutkan BAB II                                               |                                     |
| 4           | Jumat, $\frac{3}{5}$ 19  |                  | 1. Def. Op. Remungkan.<br>2. Validitas Ins. Pict.<br>Cari yg. Tugan.<br>3. Pengaruh Ins. Pict.<br>di jelaskan lanjutannya. |                                     |
| 5           | Rabu, $\frac{22}{5}$ 19  |                  | 1. Popul & Sampel jelaskan<br>2. Vol. yg digunakan<br>3. Sumber Tuliskan<br>4. Instrumen penelitian                        |                                     |



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| Bimb.<br>Ke | Hari/Tanggal       | Materi Bimbingan | Catatan Dosen Pembimbing                                                                                                                                                                                                                                                                                                 | Tanda Tangan<br>Dosen<br>Pembimbing |
|-------------|--------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 6           | Jumat<br>12-7-2019 |                  | - Bagaimana penyusunan<br>sampel untuk TPLM1<br>dan TPLM2 harus di<br>pelajari<br>- Foto tulis hal. 37, 39<br>- belahkiri di bagian<br>BAB IV                                                                                                                                                                            |                                     |
| 7           | Kamis<br>25-7-2019 |                  | → salah ketik h.9, h.24,<br>→ hal 24 Tentang Instrumen penelitian harus diawali<br>dgn Def. Operasional Variabel Tentang Kemampuan<br>membaca gambar proyeksi. dan mestinya di tabel 3.1.<br>indikatornya. hanya/dibatasi tentang kemampuan<br>membaca gambar proyeksi saja (sesuai dg judul)<br>→ Betulkan Instrumennya |                                     |
| 8           | Jumat<br>2-8-2019  |                  | Instrumen masih<br>belum betul<br>(Monoton)                                                                                                                                                                                                                                                                              |                                     |



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Judul Tugas Akhir Skripsi: Kemampuan Membaca Gambar Proyeksi Pada Siswa SMK Negeri 1

Seyegan Yogyakarta.

| Bimb.<br>Ke | Hari/Tanggal       | Materi Bimbingan                                                                                                     | Catatan Dosen Pembimbing                                                  | Tanda Tangan<br>Dosen<br>Pembimbing |
|-------------|--------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------|
| 9           | Senin<br>26-8-2019 | Instrumen                                                                                                            | Gambar Geometrik<br>pada instrumen<br>jangan di Filil<br>(wide frame aja) |                                     |
| 10          | Rabu<br>28-8-2019  | Instrumen                                                                                                            | Instrumen OK<br>hanya Perlu di<br>Perjelas garis-garis<br>gambaranya      |                                     |
| 11          | Jumat<br>30-8-2019 | Lanjutan<br>untuk mencari val & Relis.<br>Tata tulis perhatikan, pulsat<br>Tabel yg penuh diberi heading<br>(hal 38) | uji coba instrumen                                                        |                                     |
| 12          | Senin<br>7-10-2019 | Lanjutan<br>Persetoran<br>diurus lebih dulu                                                                          | mengambil data<br>untuk ambil data<br>diurus lebih dulu                   |                                     |
|             |                    |                                                                                                                      |                                                                           |                                     |



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Seyegan Yogyakarta.

| Bimb.<br>Ke | Hari/Tanggal            | Materi Bimbingan | Catatan Dosen Pembimbing                                                                | Tanda Tangan<br>Dosen<br>Pembimbing |
|-------------|-------------------------|------------------|-----------------------------------------------------------------------------------------|-------------------------------------|
| 13          | Jumat<br>22 Des<br>2019 | BAB IV           | • Jj di luput/di coret<br>segera benahi<br>• harus ada<br>pembahasan<br>di akhir bab IV |                                     |
| 14          | Rabu<br>11 Des 2019     |                  | Pembahasan isi<br>portofolio                                                            |                                     |
| 15          | Jumat<br>20 Des 19      |                  | Ok Kaplan<br>proses lanjut<br>untuk ujian                                               |                                     |
|             |                         |                  |                                                                                         |                                     |
|             |                         |                  |                                                                                         |                                     |