



BHARTIYA SKILL DEVELOPMENT UNIVERSITY

Registration No.:

School of Manufacturing Skills

Session: 2021-22 (Winter Semester)

B. Voc. Program, 3rd Semester,

2nd In-Sem. Examination

Course Code: GEN1302

Time: 1 Hour

Course Name: Computer Aided Drawing

Max. Marks: 20

Instructions:

1. Attempt all questions.
2. Use of Calculators is Prohibited.
3. Section A contains 05 Questions. Each question carries 1 Marks.
4. Section B contains 03 Questions. Each question carries 2 Marks.
5. Section C contains 03 Questions. Each question carries 3 Marks.

Section – A

05X1= 5 Marks

1. Which of the following constitutes graphics?
 - a) images
 - b) diagrams
 - c) designs
 - d) both A and C
2. Which of the following instruments is used for indirect measurement?
 - a) divider
 - b) set squares
 - c) scale
 - d) None of the above
3. Given a pencil and an eraser; specify whether it is an instrument or accessory?
 - a) instrument
 - b) accessory
 - c) none of the above
 - d) information given is not enough
4. Which among the following is the darkest pencil of all?
 - a) HB
 - b) 2H
 - c) 3H
 - d) 1H
5. Which of the following countries has the drawing standard denoted by DIN?
 - a) USA
 - b) India



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- c) Germany
- d) Japan

Section- B

02X3= 6 Marks

6. Give the exact size of the A4 drawing sheet?
7. Why does A0 size paper have exactly the size of 841 X 1189 mm?
8. Describe the set squares angles with the help of a diagram.

Section- C

03X3= 9 Marks

9. Differentiate between instruments and accessories.
10. What do you mean by the layout of an engineering drawing, explain with the help of a diagram?
11. What information should be available in an engineering drawing?

Pranav



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Answer Key

Section- A

05X1= 5 Marks

1. Which of the following constitutes graphics?
 - a) images
 - b) diagrams
 - c) designs
 - d) both A and C

2. Which of the following instruments is used for indirect measurement?
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 - b) set squares
 - c) scale
 - d) None of the above

3. Given a pencil and an eraser; specify whether it is an instrument or accessory?
 - a) instrument
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4. Which among the following is the darkest pencil of all?
 - a) HB
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5. Which of the following countries has the drawing standard denoted by DIN?
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Section- B

02X3= 6 Marks

6. Give the exact size of the A4 drawing sheet?

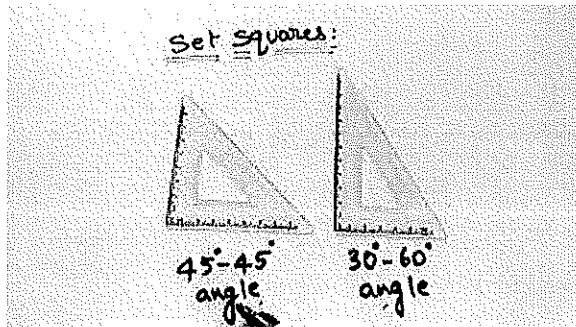
Ans: 210 x 297 mm

7. Why does A0 size paper have exactly the size of 841 X 1189mm?

Ans: We have standardized the A0 area as 1 square meter in rectangle form therefore it is deduced as 841 x 1189 mm.

8. Describe the set squares angles with the help of a diagram?

Ans: Set squares comes in the pair of two having angles $90^\circ:45^\circ:45^\circ$ and $90^\circ:30^\circ:60^\circ$



Section- C

03X3= 9 Marks

9. Differentiate between instruments and accessories?

Ans:

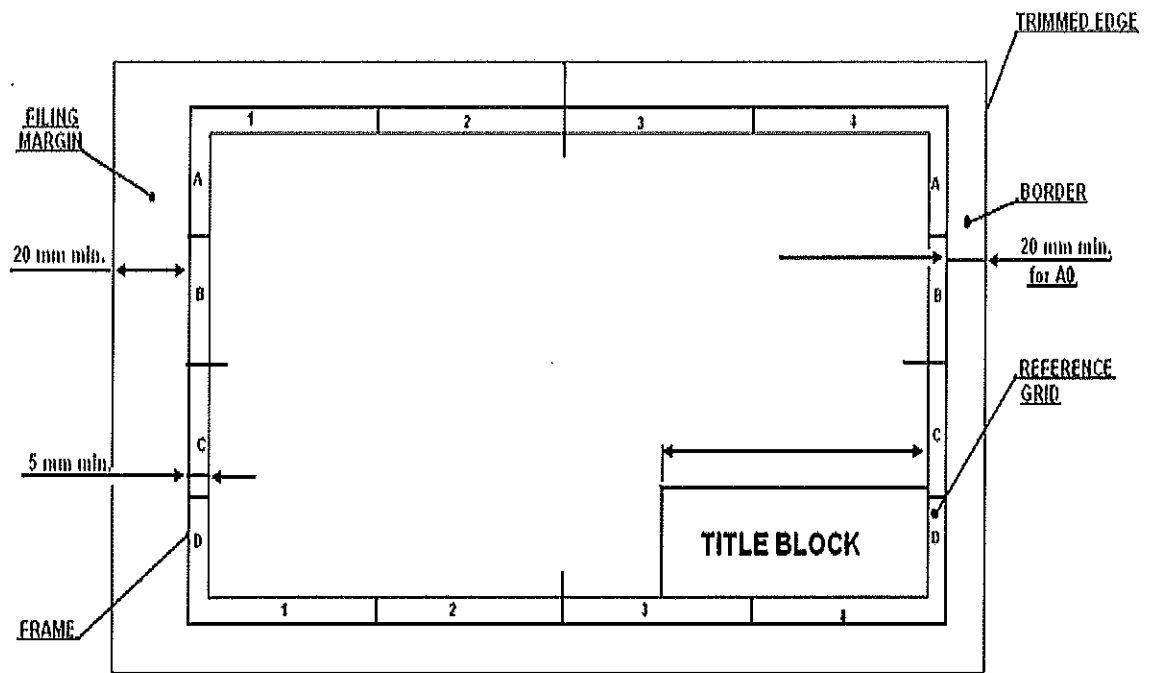
<u>Instrument</u>	<u>Accessories</u>
1. <u>Instrument</u> : instruments are the things which are prime work doing devices without which work can't be completed	1. <u>accessories</u> are the things which when attached with instruments results in the efficiency of the instruments.
2. For making sketch pencil is an instrument	2. For making sketch eraser is an accessory

10. What do you mean by the layout of an engineering drawing, explain with the help of a diagram?

Ans: Any engineering drawing has to follow a standard format. The drawing sheet consists of drawing space, title block and sufficient margins.

A typical drawing sheet consist of the following:

- a) Borders
- b) Filling margin
- c) Grid reference system
- d) Title box



11. What information should be available in an engineering drawing?

Ans:

- Shape of an object
- Exact Sizes and tolerances of various parts of the object
- The finish of the product
- Machine cost
- Machining sequence
- The details of materials
- Catalogue no. of the product
- Date on which the drawing was made
- The person who made the drawing
- The company's name



School of Manufacturing Skills

Session: 2021-22 (Winter Semester)

B. Voc. Program, III Semester,

2nd In-Sem. Examination

Course Code: GEN1305

Course Name: Elementary Drawing

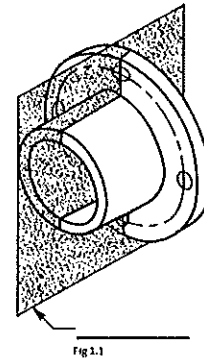
Time: 1 Hour

Max. Marks: 20

Answer Key
Section – A

05X01 = 05 Marks

1. What does this plane called as shown in fig 1.1?
 - a) Side plane.
 - b) Front plane.
 - c) Cutting plane.
 - d) None of the above
2. The largest permeable size is known as
 - a) **Maximum size**
 - b) Minimum size
 - c) Tolerance
 - d) Actual size
3. The combination of nominal size and deviation is called
 - a) Upper deviation
 - b) Lower deviation
 - c) **Fit dimension**
 - d) deviation
4. How many numbers of basic tolerance grades are there?
 - a) 15
 - b) **20**
 - c) 15
 - d) 7





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5. What proportion of scale we use to draw a Centre line?
- 6:2
 - 6:1
 - 6:3
 - 6:4

Section – B

03X02 = 06 Marks

6. What is orthographic projection?

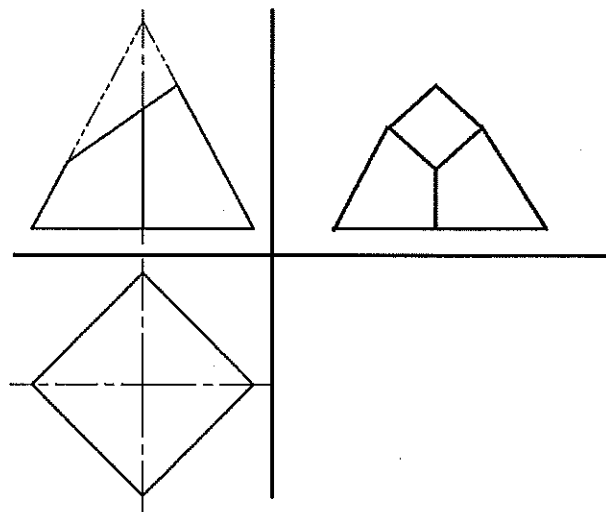
Ans Orthographic projection is a Parallel Projection Technique in which the plane of projection is perpendicular to the parallel line of sight.

There are two ways of drawing in orthographic - First Angle and Third Angle.

7. Explain is first angle projection?

Ans

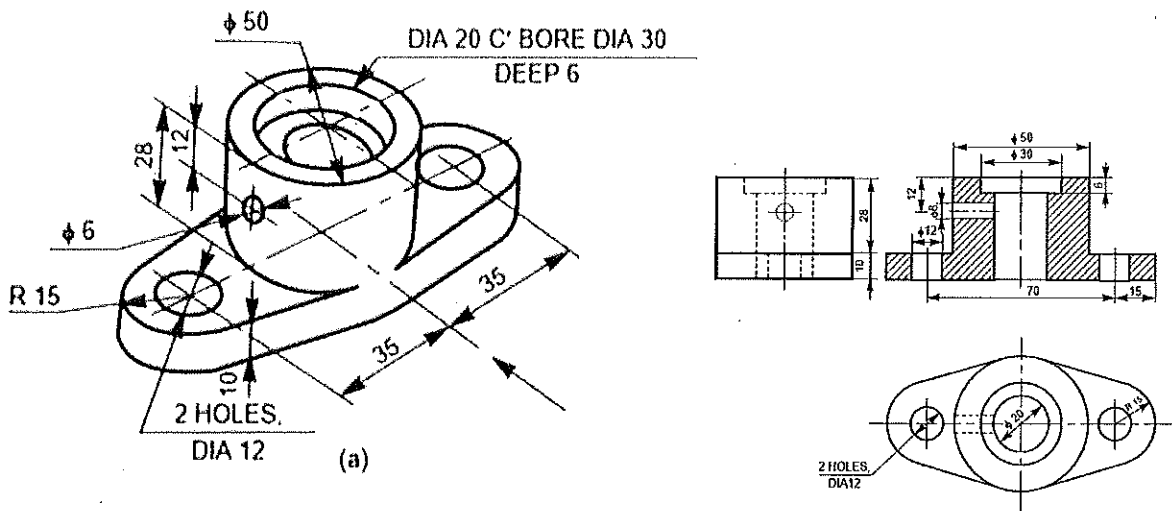
- In this the object is assumed to be positioned in the first quadrant
 - The object is assumed to be positioned in between the projection planes and the observer. The views are obtained by projecting the images on the respective planes.
 - Note that the right-hand side view is projected on the plane placed at the left of the object.
 - After projecting on to the respective planes, the bottom plane and left plane is unfolded on to the front view plane. i.e. the left plane is unfolded towards the left side to obtain the Right-hand side view on the left side of the Front view and aligned with the Front view. The bottom plane is unfolded towards the bottom to obtain the Top view below the Front view and aligned with the Front View.
8. Draw the missing view from given figure?



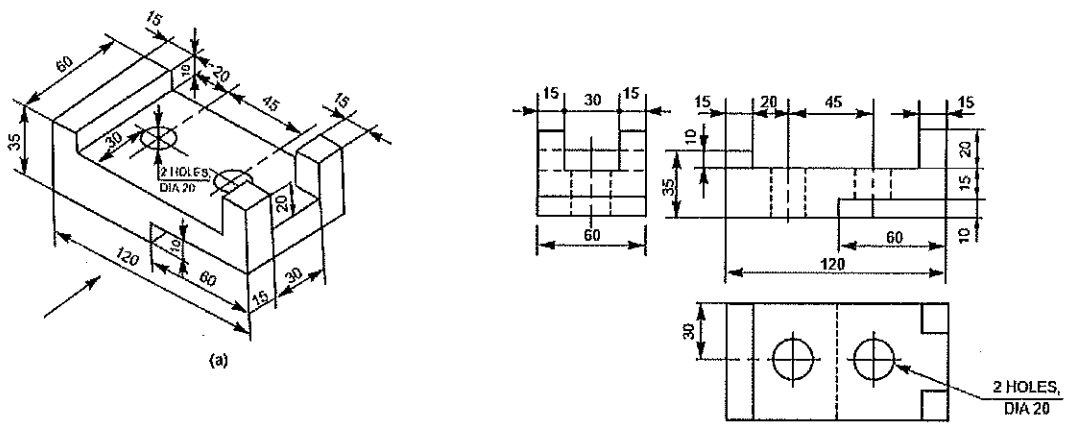
Section – C

03X03 = 09 Marks

9. Draw the orthographic projection of given view?



10. Draw the orthographic projection of given view



11. Write a short note on engineering drawing?

An engineering drawing is a type of technical drawing that is used to convey information about an object. A common use is to specify the geometry necessary for the construction of a component and is called a detail drawing. Usually, a number of drawings are necessary to completely specify even a simple component. The drawings are linked together by a master drawing or assembly drawing which gives the *drawing numbers* of the subsequent detailed components, quantities required, construction materials and possibly 3D images that can be used to locate individual items. Although mostly consisting of pictographic representations, abbreviations and symbols are used for brevity and additional textual explanations may also be provided to convey the necessary information.



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Section – A

05X01 = 05 Marks

1. What does this plane called as shown in fig 1.1?
 - a) Side plane.
 - b) Front plane.
 - c) Cutting plane.
 - d) None of the above
2. The largest permeable size is known as
 - a) Maximum size
 - b) Minimum size
 - c) Tolerance
 - d) Actual size
3. The combination of nominal size and deviation is called
 - a) Upper deviation
 - b) Lower deviation
 - c) Fit dimension
 - d) deviation
4. How many numbers of basic tolerance grades are there?
 - a) 15
 - b) 20
 - c) 15
 - d) 7

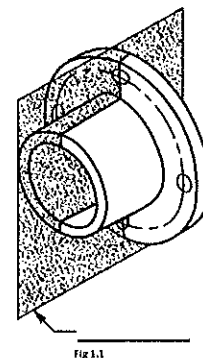


Fig 1.1



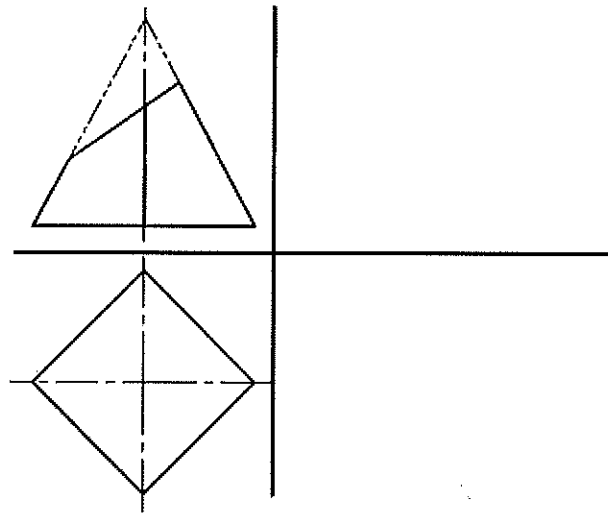
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5. What proportion of scale we use to draw a Centre line?
- a) 6:2
 - b) 6:1
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Section – B

03X02 = 06 Marks

6. What is orthographic projection?
7. Explain is first angle projection?
8. Draw the missing view from given figure?



Section – C

03X03 = 09 Marks

9. Draw the orthographic projection of given view?

