

170307

B. Voc. Automotive Manufacturing/ Mechatronics

Subject: Engineering Graphics and Drawing

Subject Code: BME-103

Semester- 1st Re-appear (2017-20)

Theory (External): 30

Time: 03 hours

Instructions to the Students

1. This Question paper consists of two Sections. All sections are compulsory.
2. **Section A** comprises 10 questions of objective type in nature. All questions are compulsory. Each question carries 1 mark.
3. **Section B** comprises 6 essay type questions out of which students need to do any 5. Each question carries 4 marks.
4. Read the questions carefully and write the answers in the answer sheets provided.
5. Do not write anything on the question paper.
6. Wherever necessary, the diagram drawn should be neat and properly labelled

Roll Number

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SECTION –A (OBJECTIVE TYPE QUESTIONS)

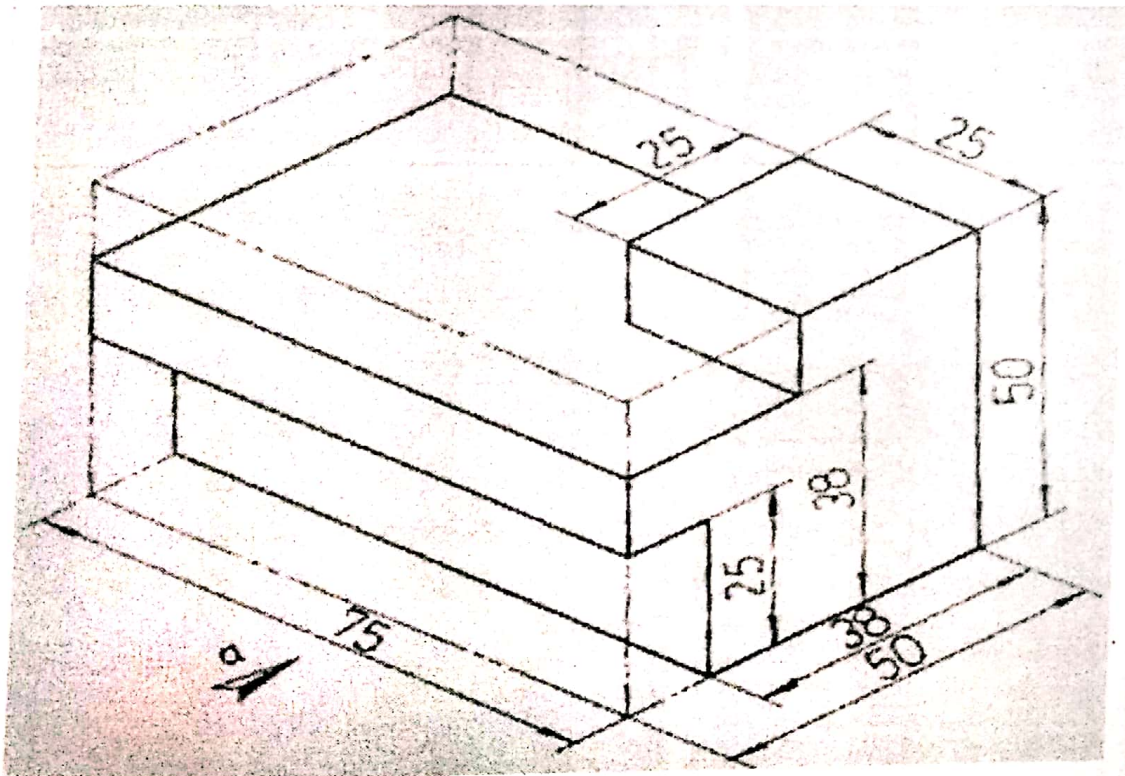
(10x1=10 Marks)

- 1 (a) What are the standard sizes of drawing sheets?
- (b) What are main requirement of lettering?
- (c) Define representative fraction.
- (d) What is the application of projection of plane?
- (e) Write the name of any method to find the true length of a line.
- (f) What is an isometric view?
- (g) What is plane of reference?
- (h) What is the use of array command in CAD?
- (i) What is the use of extrude command in CAD?
- (j) What are the dimensioning methods?

SECTION -B (ESSAY TYPE QUESTIONS)

(5x4=20 Marks)

- 2 Why drawing boards are not made from one piece? List out the information contained in a typical title- block. What should be the grade of pencil used for lettering and why?
- 3 On a plane a line 22 cm long represents a distance of 440 m. Draw a diagonal scale for the plane to read upto single metre. Measure and mark a distance of 287 m on the scale.
- 4 Differentiate between first and third angle projection. A line AB 60 mm long has its end B 20 mm away from HP and 40 mm away from VP. The line is parallel to both the principle planes. Draw its projections in first and third quadrant.
- 5 Draw the following view of given figure 1.1 (i) Front view (ii) Top view (iii) Left side view'



- 6 A frustum of cone, top diameter 40mm, bottom diameter 60mm and height 60 mm is placed centrally on a square prism of 80 mm side and 40 mm height. Draw the isometric projection of the solid.
- 7 Explain the preparation of drawing environment in CAD. Explain the various coordinates systems used in CAD.

-----End of Paper-----