

JK LAKSHMIPAT UNIVERSITY, JAIPUR
INSTITUTE OF ENGINEERING AND TECHNOLOGY
End Term Examination (Backlog), November-December 2015
B. Tech, Semester I

Roll No.....

CE 102 ENGINEERING GRAPHICS

Time: 3 hours

Max. Marks: 100

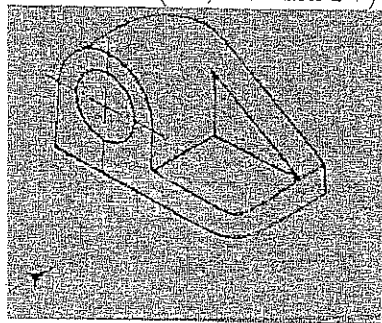
Instructions to students:

1. Do not write anything other than your roll number on question paper.
2. Assume suitable data wherever required and mention it clearly.
3. Writing appropriate units, nomenclature, and drawing neat sketches/schematics/ flow chart wherever, required are an integral part of the answer.

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|---|----|
| Q.1A Objective type multiple choice questions (10 questions @ 1 mark) | 10 |
| i. To draw a small gear in wrist watch the RF would be
(a) 1:20 (b) 20:1 (c) 1:1 (d) none of the above | |
| ii. Centre line is used to indicate
(a) axis of cylinder (b) centre line of the hole
(c) axis of symmetry (d) all of the above | |
| iii. A1 size sheet has the dimensions (in mm)
(a) 841 x 1189 (b) 594x841 (c) 420x 594 (d) 148x 210 | |
| iv. The TV of a rectangular shaped room will show
(a) length and height (b) length and width (c) width and height
(d) none of the above | |
| v. A short break line is used to indicate a
(a) broken part (b) part to be broken (c) long part of uniform cross
section (d) short part of non-uniform cross section | |
| vi. The command used to draw the multiple copies of an object in a systematic
manner
(a) COPY (b) ARRAY (c) MIRROR (d) none of these | |
| vii. When the drawing is drawn of the same scale size as that of the object, the scale
used is..... | |
| viii. Uses of the T-square, set-squares, scale and protractor are combined in
the..... | |
| ix. In the first angle projection method,
(I) the object comes between the and the..... | |
| x. In the third angle projection method,
(I) the comes between the and the observer. | |
| Q.2 Short answer type questions (4 questions @ 2.5 marks) | 10 |
| I. Differentiate between isometric projection I and isometric projection II. | |
| II. What is the ratio of length to width dimension for 'A' series? | |
| III. What are the Standard Views used in orthographic projection? | |
| IV. What are the elements of projection? | |

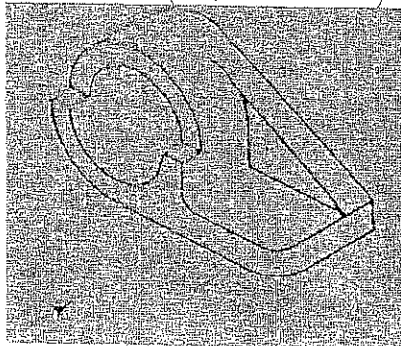
- Q.3A What is isometric projection and what are the advantages of isometric projection? 05
- Q.3B Draw symbolic representations for I- and III - quadrant method of projection. Explain both the methods of projection. 05
- Q.4A Define the following commands
LINE, CIRCLE, ARC, HATCH, MIRROR, ARRAY, ROTATE AND ISOCIRCLE. 05
- Q.4B What are the reasons for implementing a CAD system? 05
- Q.5A What is axonometric projection? What are the types of axonometric projection? 05
- Q.5B Why LSV on PP comes on the right side of FV and RSV on PP comes on the left side of FV in case of I-quadrant method of projection? 05

- Q.6A What do you mean by principal planes? Discuss them. 05
- Q.6B Draw the first angle projection views (FV, TV and SV) of the pictorial views. 05



OR

- Q.6B Draw the first angle projection views (FV, TV and SV) of the pictorial views. 05



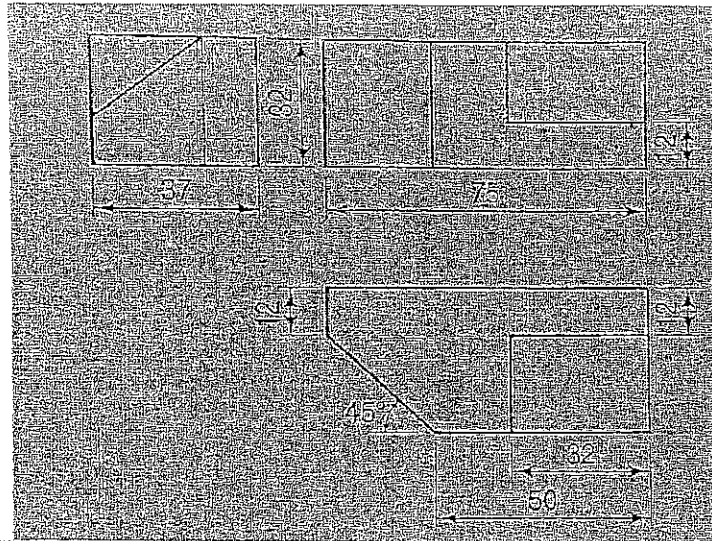
- Q.7A What is orthographic projection and categories of orthographic projection? 05
- Q.7B Write short notes on reference planes, reference line and projector. 05

OR

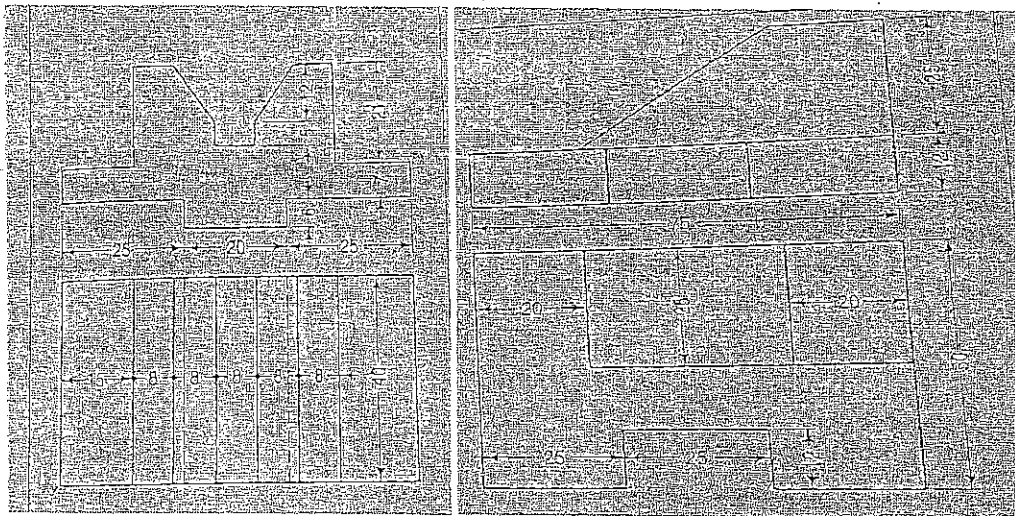
- Q.7B What are the relative positions of an object, observer and plane of projection in I and III quadrant methods of projection? 05
- Q.8A Explain the types of line and their applications in detail. 10

Q.9A Draw them in third angle projection method:

10



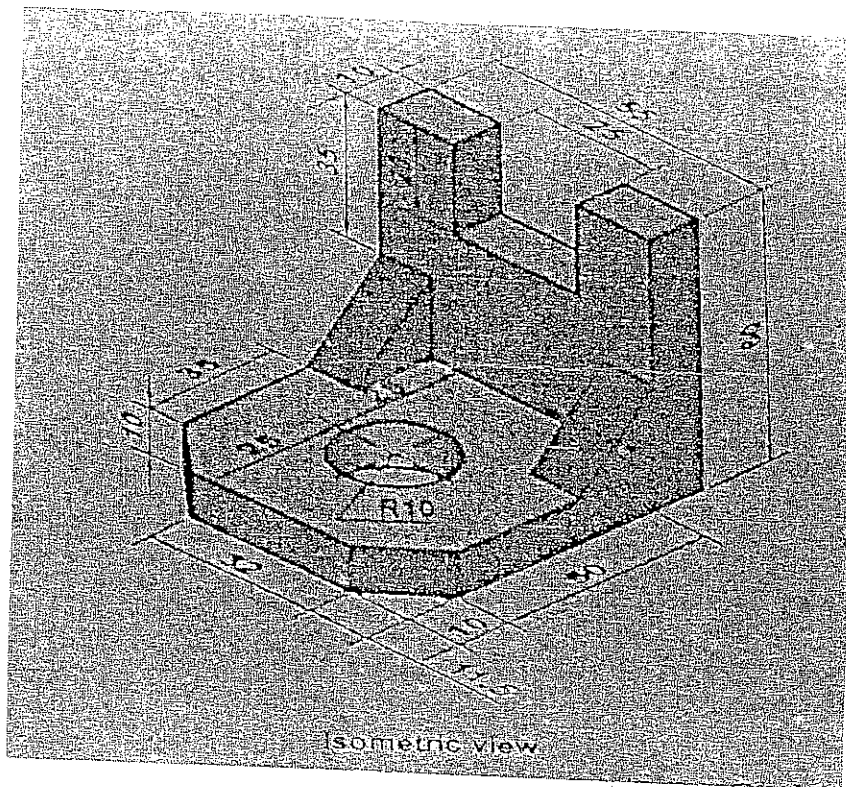
Q.9B Projections of casting of various shapes are given in figures. Draw the isometric views. 10



OR

Q.9B Figure show the isometric view, draw it's the orthographic projections

10



ALL THE BEST