ಸಂಕೇತ ಸಂಖ್ಯೆ : **72**

Code No. : 72

CCE RR

ವಿಷಯ : ಇಂಜಿನಿಯರಿಂಗ್ ಡ್ರಾಯಿಂಗ್

Subject : ENGINEERING DRAWING

(ಹೊಸ ಪಠ್ಯಕ್ರಮ / New Syllabus)

(ಪುನರಾವರ್ತಿತ ಶಾಲಾ ಅಭ್ಯರ್ಥಿ/ Regular Repeater)

General Instructions :

i) The Question-cum-Answer Booklet consists of 5 objective and subjective types of questions.

ii) Space has been provided against each objective type question. You have to choose the correct choice and write the complete answer in the space provided.

iii) For subjective type questions enough space for each question has been provided. You have to answer the questions in the space.

iv) Follow the instructions given against both the objective and subjective types of questions.

v) Candidate should not write the answer with pencil. Answers written in pencil will not be evaluated (Except Graphs, Diagrams & Maps).

vi) In case of Multiple Choice, Fill in the blanks and Matching questions, scratching / rewriting / marking is not permitted, thereby rendering to disqualification for evaluation.

vii) For reading the questions 15 minutes of extra time has been provided.

viii) Do not write anything in the space provided in the right side margin.

Instructions :

i) Answer *all* the questions.

ii) Retain the constructional details.

iii) All dimensions are in mm.

iv) Use first angle projection only.

v) Missing dimensions may be assumed.

vi) All drawings should be drawn in drawing sheet only.

1. a) Fill in the blanks with the correct figure/word(s) by selecting from the choices given in the brackets : $5 \times 1 = 5$

i) In orthographic projections the visual rays are assumed to ..... .

(*diverge from station point, converge from station point, be parallel*)

ii) Objects that are symmetric can be shown effectively using ..... .

(*full section, half section, quarter section*)

iii) The front view of an object is projected on the ..... .

(*horizontal plane, vertical plane, profile plane*)

iv) A right circular cone when cut by a plane parallel to its generator, the curve obtained is a/an ..... .

(*ellipse, parabola, circle*)

v) The length of scale with R.F. = $\frac{1}{40}$ to measure up to 6 metre will be ..... .

(*15 cm, 10 cm, 12 cm*)

b) Match the following : 5 × 1 = 5

Group A	*Group B*
i) Knuckle thread	a) used for transmission of power
ii) Acme thread	b) used in the screw of a bench vice
iii) Square thread	c) used in the two railway carriage coupling
iv) Buttress thread	d) used in the lead screw of a lathe
v) B.A. thread	e) used for small instrument screws
	f) used for gas steam or water pipes.

2. a) Draw three circles inside a hexagon of 40 mm side such that each circle touches two sides of the hexagon and two other circles. 5

b) Print the following in single stroke inclined capital letters of height 18 mm with 6 : 5 ratio. 5

'BRAZING'

3. a) Construct an ellipse having major axis 100 mm and minor axis 65 mm by concentric circle method. 5

b) Two points *A* and *B* are 110 mm apart. Point *C* is 90 mm and 60 mm from *A* and *B* respectively. Draw a parabola passing through points *A, B* and *C*. 5

4. a) Configure (draw) lines of length of 100 mm used for

i) Visible outlines

ii) Dimension lines

iii) Hidden lines. 3

b) The pictorial view of an object is shown in Figure No. 1. Draw the following orthographic views and mark the dimensions : 7

(i) Front view — Looking in the direction of arrow 'X'

(ii) Top view — Looking in the direction of arrow 'Y'

(iii) Side view — Looking in the direction of arrow 'Z'.

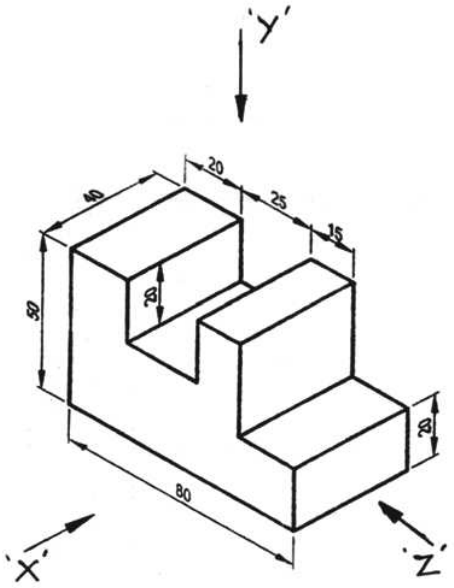
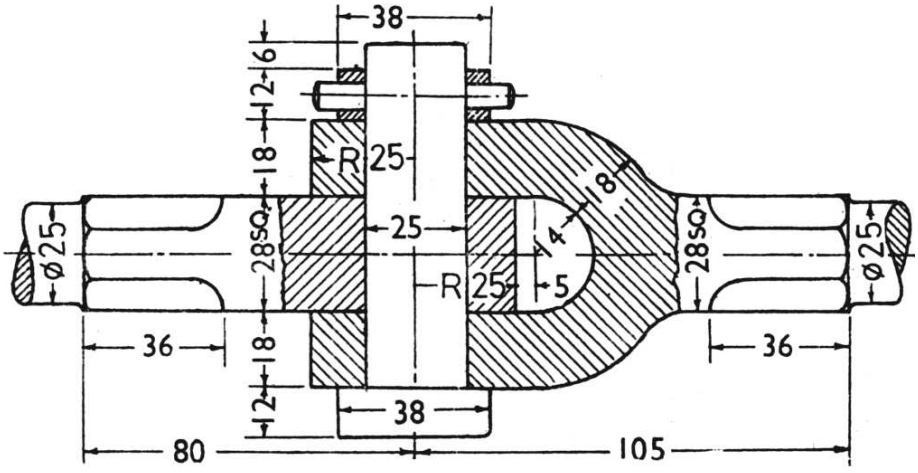


Figure No. 1

5. Figure No. 2 shows the sectional elevation of a pin joint or knuckle joint. Draw the sectional elevation in full size (1 : 1 size). 10



PIN JOINT OR KNUCKLE JOINT

Figure No. 2