QP Code: 28570

## OLD COURSE

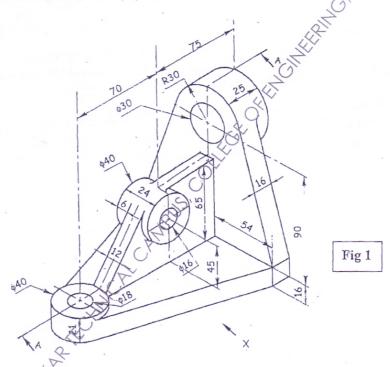
Time: 3 Hrs

Max Marks: 75

N.B. (1) Question No. 1 is compulsory

- (2) Attempt any Four questions from remaining Six questions
- (3) Use drawing sheets for answering
- (4) Figures to the right indicates full marks
- (5) All dimensions in figure are in mm
- (6) Use your own judgment for any unspecified dimensions
- (7) Use only First Angle Method of Projection

Fig 1 shows pictorial view of an object, Draw following views (i) Sectional Front View along AA, (ii) Top View and (iii) LHSV



2. A pentagonal pyramid has a height of 60mm and side of base 30mm. The pyramid is resting with one side of the base on HP such that triangular face containing that side is perpendicular to HP and inclined to VP at 30°. Draw the projections. (15)

**[TURN OVER** 

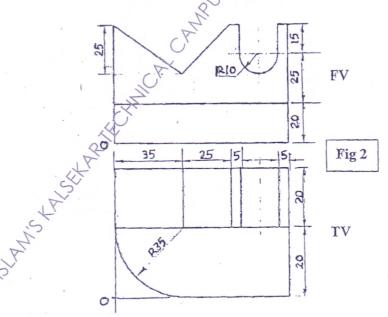
GE-Con.12531-16.

- 3. A cylinder 60mm diameter and 80mm long resting on its circular base on the HP. A section plane perpendicular to V.P. and inclined at 60° to HP cuts the axis at a point 20mm from its top end. Draw the sectional top view, sectional side view and true shape of the section.
  (15)
- 4. (a) A semi cone of base diameter 80 and axis length 90mm is resting on its semi circular base on HP such that the triangular face of the semi cone is parallel to VP and away from the observer. It is cut by a section plane perpendicular to VP and inclined at 45° to HP passing through the midpoint of the axis of the cone. Draw the development of the remaining part of the cone.
  - (b) Draw free hand sketches of the following (Two Views)

(5)

- (i) Hexagonal headed bolt
- (ii) Wing Nut
- 5. (a) The plan of a 75mm long line PQ measures 65mm, while the length of its elevations is 50mm. Its one end P is in the HP and 12mm in front of the VP. Draw its projections of PQ and find its inclinations with HP and VP.
  - (b) A circle of 50mm diameter rolls along a straight line without slipping. Draw the curve traced out by a point P on the circumference for one complete revolution of the circle. Name the curve. Draw also tangent and normal.

6. (a) Fig 2 Draw isometric view by using true scale (11)



**ITURN OVER** 

GE-Con.12531-16.

- (b) Draw free hand sketches of the following (Two Views)

- (i) Square Nut
- (ii) Eye Foundation Bolt
- 7. Fig 3 Draw sectional Front view, Top view and Left hand side view

