

AR—1834

Faculty of Engineering & Technology
B.Arch. Semester-I (CGS) Examination
ARCHITECTURE GRAPHICS-I
(10002)

Paper—01 AR 02

Time : Four Hours]

[Maximum Marks : 80

INSTRUCTIONS TO CANDIDATES

- (1) All questions carry equal marks.
- (2) Question No. 7 is compulsory.
- (3) Due credit will be given to neatness and adequate dimensions.
- (4) Assume suitable data wherever necessary.
- (5) Retain the construction lines.
- (6) Illustrate your answers wherever necessary with the help of neat sketches.
- (7) Use pen of Blue/Black ink/refill only for writing the answer book.

SECTION—A

1. (a) Construct a diagonal scale of RF = $\frac{1}{32}$ showing yards, feet and inches and to measure upto 4.5 yards. 10
- (b) Explain the following (any two) : 10
 - (i) Types of Scales
 - (ii) Difference between pyramids and prism
 - (iii) Different types of lines used in Architectural Drawing
 - (iv) Use of graphics codes and symbols in Architecture.

OR

2. Show the symbols of the following terms : 20
- | | |
|------------------|-------------------|
| (i) Metal | (ii) Section Line |
| (iii) Stone | (iv) Glass work |
| (v) Ground line | (vi) Earth |
| (vii) RCC | (viii) Woodwork |
| (ix) UCR Masonry | (x) PCC |
3. A Regular pentagon of 45 mm side has an edge on the ground and inclined at 45° to the V.P. Its plane makes angle of 30° with the H.P. Draw its projection. 20

OR

4. A vertical cylinder of 75 mm diameter is penetrated by another cylinder of 50 mm diameter, the axis of which is parallel to both the H.P. and the V.P.; the two axes are 9 mm apart. Draw the projection show curved of intersection. 20
5. A Regular Hexagon of side 45 mm is resting on one of its edges on the H.P. and parallel to & 20 mm in front of V.P. It is tilted about that side so that its highest corner rests in the V.P. Draw the projection of the hexagon. 20

OR

6. A regular square pyramid with its sides 30 mm and height 80 mm rests on one of the edges of the base. The base is tilted until its apex is 50 mm above the level of the edge of the base on which it rests. Draw the projection of the pyramid when the edge on which it rests is parallel to the V.P. and the apex of the pyramid points towards V.P. 20

7. Assume suitable scale and draw plan elevation and section of HOD cabin of your college with facilitation (show position of table, chair, cupboards and sofa in room) scale 1 : 50.

(i) Room size = 3.4×4.5 m

(ii) Room height = 3.35 m

(iii) Wall thk = 0.23 m

(iv) Thickness of slab = 0.15 m

(v) Sill LUL = 0.90 m

(vi) Lintel LUL = 2.10 m

(vii) Plinth LUL = 0.75 m

(viii) Foundation — Load bearing type.

Show and consider suitable size of doors and window opening also.

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