ENGINEERING GRAPHICS (310)

Syllabus for Class 12

CUET Entrance Exam

AglaSem.Com

ENGINEERING GRAPHICS-310

Note:
There will be one Question Paper which will have 50 questions out of which 40 questions need to be attempted.

ISOMETRIC PROJECTION OF SOLIDS

Unit 1: Construction of isometric scale showing main divisions of 10mm and smaller divisions of 1mm, also showing the leading angles.
Isometric projection (drawn to isometric scale) of solids such as cube; regular prisms and pyramids (triangular, square, pentagonal and hexagonal); cone; cylinder; sphere; hemisphere; keeping the base side of the solid parallel orperpendicular to HP/VP. The axis of the solid should be either perpendicular to HP / VP or parallel to HP and VP.

ISOMETRIC PROJECTION OF SOLIDS

Unit 2: Combination of any two above-mentioned solids keeping the base side parallel or perpendicular to HP/VP and placed centrally together (Axis of both the solids should not be given parallel to HP).

Machine Drawing (Machine Parts**)**

Unit 3: Drawing to full size scale with instruments.
Introduction of threads: Standard profiles of screw threads - Square, Knuckle, B.S.W., Metric (external and internal); Bolts – Square head, Hexagonal head; Nuts – Square head, Hexagonal head; Plain washer; combination of nut and bolt with or without washer for assembling two parts together.

Machine Drawing (Machine Parts**)**

Unit 4: Free-hand sketches
Conventional representation of external and internal threads; Types of studs – Plain stud, Square-neck stud, Collar stud; Types of rivets – Snap head, Flat head, Pan head (without tapered neck), 60^0 Counter Sunk Flat head.

Machine Drawing (Assembly and Dis-assembly**)**

Unit 5: Bearings
(i) Open-Bearing
(ii) Bush- Bearing

Unit 6: Rod Joint
(i) Cotter-joints for round-rods (Sleeve and cotter joint)
(ii) Cotter-joints for square rods (Gib and cotter-joint)

Unit 7: Tie-rod and Pipe-joint
(i) Turnbuckle
(ii) Flange pipe joints *are to be shown.*