Shantilal Shah Engineering College Bhavnagar Mechanical Engineering Department

Sub Name: Engineering Graphics & Design Sub Code: 3110013

Academic Year: 2021-22 Sem.2 (For all Branch Remedial students)

Syllabus for Remedial Progressive Assessment Test

Date of Exam. 08/07/2022 Time of Exam. : 11:00 am to 12:15 pm

| Topic No. | Content | Weightage % | Contribution to Course Outcome | % Distribution of Theory Marks |
|--------------|--|----------------|--------------------------------------|--|
| 1. | Introduction to Engineering Graphics: Drawing instruments and accessories, BIS – SP 46. Use of plane scales, Diagonal Scales and RF | 20% | CO-1 & CO-2 | R- 25 U -30 A -30 N -05 E -05 C -05 |
| 2. | Loci of Points: Path of the points moving on Simple mechanisms, Slider crank mechanism, Four bar mechanism | | CO-2 | |
| 3. | Engineering Curves: Classification and application of Engineering Curves, Construction of Conics, Cycloidal Curves, Involutes and Spirals along with normal and tangent to each curve | | CO-2 | |
| 4. | Projections of Points and Lines: Introduction to principal planes of projections, Projections of the points located in same quadrant and different quadrants, Projections of line with its inclination to one reference plane and with two reference planes. True length and inclination with the reference planes | 20% | CO-3 | |
| 5. | Projections of Planes: Projections of planes (polygons, circle and ellipse) with its inclination to one reference plane and with two reference planes, Concept of auxiliary plane method for projections of the plane | 20% | CO-3 | |
| 6. | Development of Surfaces: | 10% | CO-4 | |
| 7. | Orthographic Projections: Fundamental of projection along with classification, Projections from the pictorial view of the object on the principal planes for view from front, top and sides using first angle projection method and third angle projection method, full sectional view | 20% | CO-4 & CO-5 | |
| 8. | Computer Aided Drawing: Intro. to AutoCAD, Basic commands for 2D drg. like: Line, Circle, Polyline, Rectangle, Hatch, Fillet, Chamfer, Trim, Extend, Offset, Dim style, etc | 10% | CO-6 | |

Legends: R: Remembrance; U: Understanding; A: Application, N: Analyze and E: Evaluate C: Create