DRAUGHTSMAN CIVIL
(PRACTICAL)
SEMESTER - III

TIME: 8 HRS.

Note: Attempt any three questions. All questions carry equal marks.

1. Draw to a suitable scale, the longitudinal sectional, a cross section near support and a cross section in the centre of span of a rectangular R.C.C beam simply supported with the following data: Clear span: 4.8m, effective span: 5.00m, width of the beam: 30cm, overall depth of beam: 50cm, effective depth of beam: 47.5cm, main reinforcement consists of 20mm Φ bars, out of 5 bars, 2 numbers alternative bars bent up; one bar bent up at L/7 and the other at L/4 from the centre of supports. provide 2 no’s bar of 12mm Φ as anchor bars. provide two-legged stirrups of 6mm Φ @ 15cm C/C, prepare bar bending schedule.

2. Draw the detail of bath room and water closets.

3. Draw half sectional elevation and half top and half bottom plan of a masonry arch 2 span bridge from the following data: Number of spans: 2, span: 8.00m, rise: 2.00m, height of springing from river bed = 6.00m, width of Road way = 6.50m, Foundation are to be taken to the hard rock, which is available at a depth of 1.5m. Use thumb rules to calculate standard proportions.

4. Draw with a suitable scale of typical cross-section of railway tracks cutting & embankment (single lane), showing all the details.