## Fifth Semester B.E. Degree Examination, December 2018 (CIVIL ENGINEERING)

## COMPUTER AIDED BUILDING PLANNING AND DRAWING

Time: 3 Hours

Max. Marks: 80

**Note:** Answer any *TWO* full questions. Assume any missing data suitably.

Q1. Draw the cross section of Lintel beam and chejja for the following details:

Size of opening of the window =1.5m

Bearing of lintel =0.2m

Thickness of wall=0.23m

Depth of lintel beam=0.2m

Projection of chejja =0.6m

Thickness of chejja at face of lintel=100 mm and at end 50 mm.

Reinforcement details in lintel at bottom =3#10 @ top 2#8

Stirrups 2LVS 8mm dia @150 mm c/c

Chejja main rft #8@100 mm c/c Distribution 6mm dia @150 mm c/c.

(30 Marks)

OR

- Q2. A One way slab for a hall of internal dimension 7.0 m x 11.77m has the following details:
  - a. Thickness of slab=150mm
  - b. Wall thickness =230mm
  - c. Mail steel along short span = 10 mm #@100mm c/c
  - d. Distribution steel=8 mm #@150mm c/c

Draw to suitable scale the following

- 1. Plan showing the reinforcement details
- 2. Cross section of slab @mid span along short span
- 3. Cross section of slab @mid span along long span

(30 Marks)

- Q3. The line diagram of a residential building is given in Fig Q3. Draw to scale the following:
  - a. Plan at sill.
  - b. Front elevation.
  - c. Section along XX.
  - d. Schedule of openings.

(50 Marks)

OR

- Q4. The line diagram of a School building is given in Fig Q4. Draw to scale the following:
  - a. Plan at sill.
  - b. Front elevation.
  - c. Section along XX.
  - d. Schedule of openings.

(50 Marks)

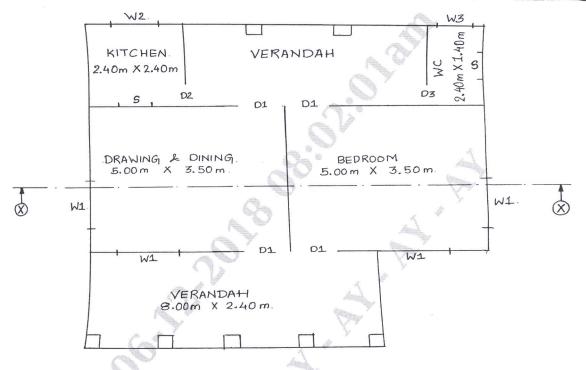


Fig. Q3

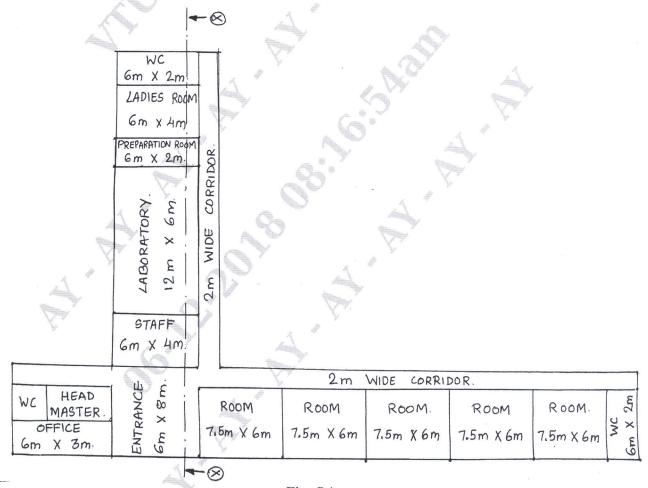


Fig. Q4