# **MODEL QUESTION PAPER-I**

#### B.E DEGREE IV SEMESTER CIVIL ENGINEERING

#### SUBJECT: CV –46 BUILDING PLANNNING AND DRAWING

Time: 4 Hours Maximum marks: 100

NOTE: 1. Question No.1 from section - I is compulsory and answer any two Questions from section-II

2. Assume any suitable data in case if not provided

#### SECTION -I

Q .No. 1 Draw the plan, elevation, and sectional elevation for the line diagram of the building shown in figure No. 1 and also write the schedule of openings.

(i) Plan of the building ----- 25 marks (ii) Elevation ----- 15 marks (iii) Section along AA ----- 15 marks (iv) Schedule of opening ---- 05 marks

## **SECTION-II**

- Q .No. 1 a. Draw to a suitable scale, the section and elevation of a double shutter partly panelled and glazed door? (10 marks)
  - b. Draw to a suitable scale plan and sectional elevation of a staircase for an office building with the following data:

(i) Staircase room ---- 6000mm x 4500mm

(ii) Height between floors --- 3750mm (iii) Thickness of a floor slab --- 150mm

(10 marks)

- Q.No. 2 Prepare a bubble diagram (connectivity diagram) and develop a line diagram for canteen building of a college with student strength of 2000 and requirements for the building are:
  - 1. Dinning area for boys and girls separately
  - 2.Dining area for staff
  - 3.Kitchen
  - 4. Stores for kitchen
  - 5. Utilities attached to kitchen

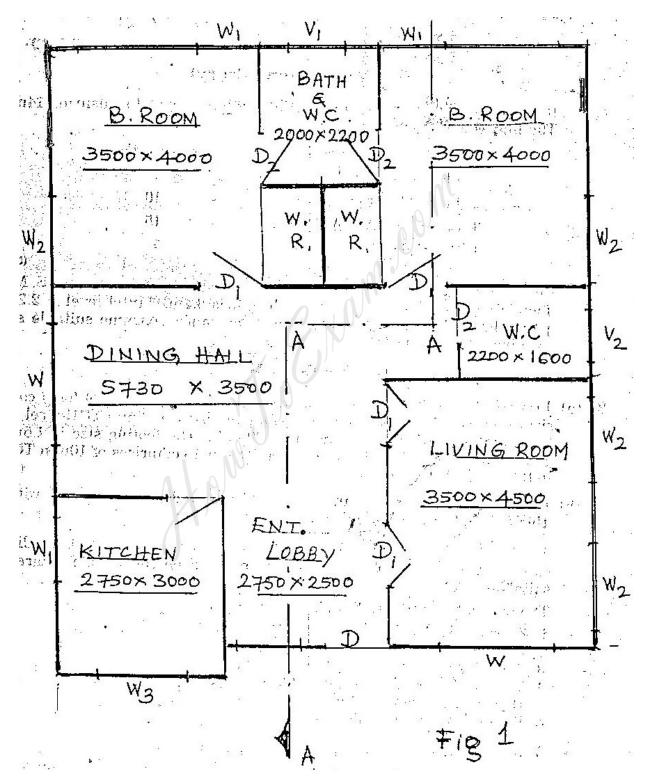
(20 marks)

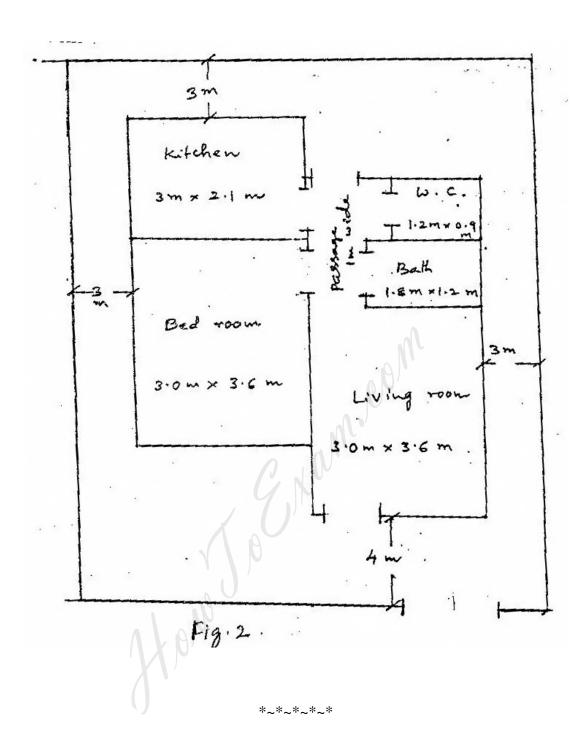
- Q.No. 3 .Prepare a bubble diagram (connectivity diagram) and develop a line diagram with suitable scale for P.W.D Sub- divisional office building .The requirements for the building are:
  - 1.Entrance hall 25m<sup>2</sup>
  - 2. Adminstrative office -60m<sup>2</sup>
  - 3. Assistant Engineer office 20m<sup>2</sup>
  - 4. Technical Assistant room 40m<sup>2</sup>
  - 5.Draughtsman's room -- 40m<sup>2</sup>

- 6.Blueprint and record room 30m<sup>2</sup> 7.Store - 20m<sup>2</sup>
- 8. Sanitary units of Standard sizes

(20 marks)

Q .No. 4 The line diagram of a residential building is shown in fig.no.2 . Prepare water supply and sanitary layout plans with suitable notation. (20 marks)





# VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM

## MODEL QUESTION PAPER-II

#### B.E DEGREE IV SEMESTER CIVIL ENGINEERING

SUBJECT: CV -46 BUILDING PLANNNING AND DRAWING

Time: 4 Hours Maximum marks: 100

- NOTE: 1. Question No.1 from section I is compulsory and answer any two Questions from section-II
  - 2. Assume any suitable data in case if not provided

#### **SECTION-I**

Q.No. 1 The line diagram of the plan is as shown in fig no.1.

Prepare to suitable scale the following working drawings

1.Plan ----- 25 marks

2.Elevation ----- 15 marks

3. Sectional elevation ---- 15 marks

4. Schedule of openings ---- 05 marks

Specifications The foundation and basement are of SS masonry in CM 1:6 and pointed with CM 1:4. The foundation is 60cms wide and 90cms deep footing. The basement is 45 cms height and 45cms wide. The superstructure is brick masonry wall with CM 1:6. Provide suitable lintels and Chajja where ever necessary. The roof is RCC 10cms thick slab with clear headroom of 300cms.

# **SECTION-II**

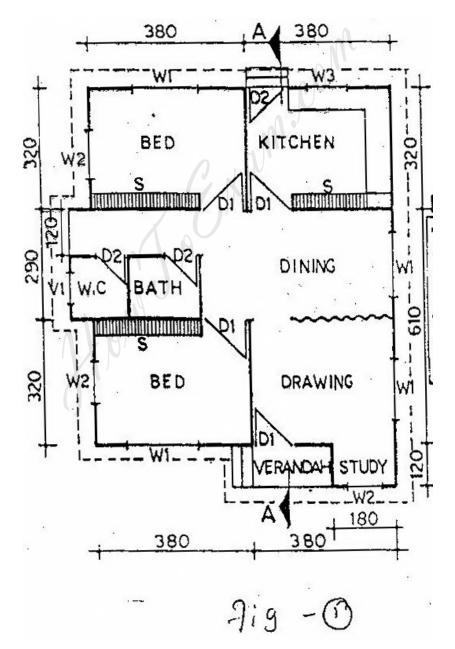
- Q .No. 1 a. Draw a section and plan of a RCC Doglegged stair for a public building. Floor to floor height is 360cms. Width of stairs is 1.5m. Rise and tread are 15cms and 30cms respectively (10 marks)
  - b. Prepare a working drawing for an isolated footing for a column of size 230mmx300m reinforced with 8nos of 12mm diameter HYSD bars together with 8mm dia HYSD bars in stirrups @200mmc/c.Footing size is 1.1m x1.4m with thickness of footing slab = 400mm. The mat compromises of 10mmdia HYSD bars @120mm c/c both ways.? (10 marks)
- Q .No. 2 Prepare a bubble diagram (connectivity diagram) and develop a line diagram for primary school building for first to seventh standard with student strength of 280 and requirements for the building are:
  - 1. Classrooms for 40 students each
  - 2.Headmaster'room
  - 3.Office room
  - 4.Sports room
  - 5. Teacher's room
  - 6.Library
  - 7. Toilets to be provided separately for boys and girls

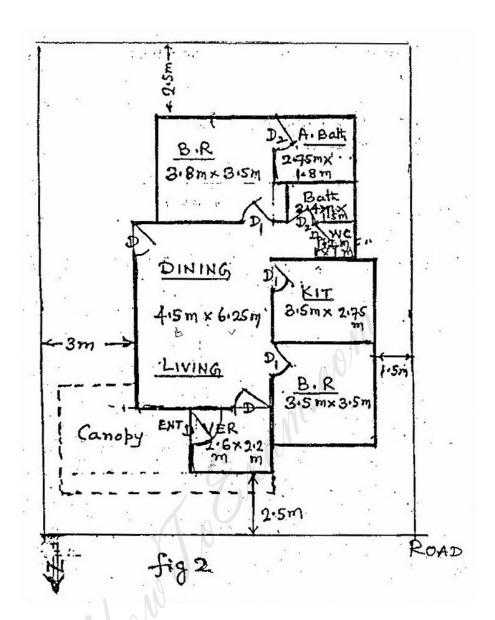
(20marks)

- Q .No.3 . Prepare a bubble diagram (connectivity diagram) and develop a line diagram for Taluka headquarters building with the following requirements:
  - 1.Manager's room
  - 2. Public waiting hall
  - 3.Office room
  - 4.Record room
  - 5.Store room
  - 6.Meeting hall
  - 7.Recreation/Tiffin room
  - 8. Sanitary units

(20marks)

Q .No. 4 Sketch sanitary and electrical layout details for a residential building as shown with line diagram in figure no.2. (20marks)





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