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)

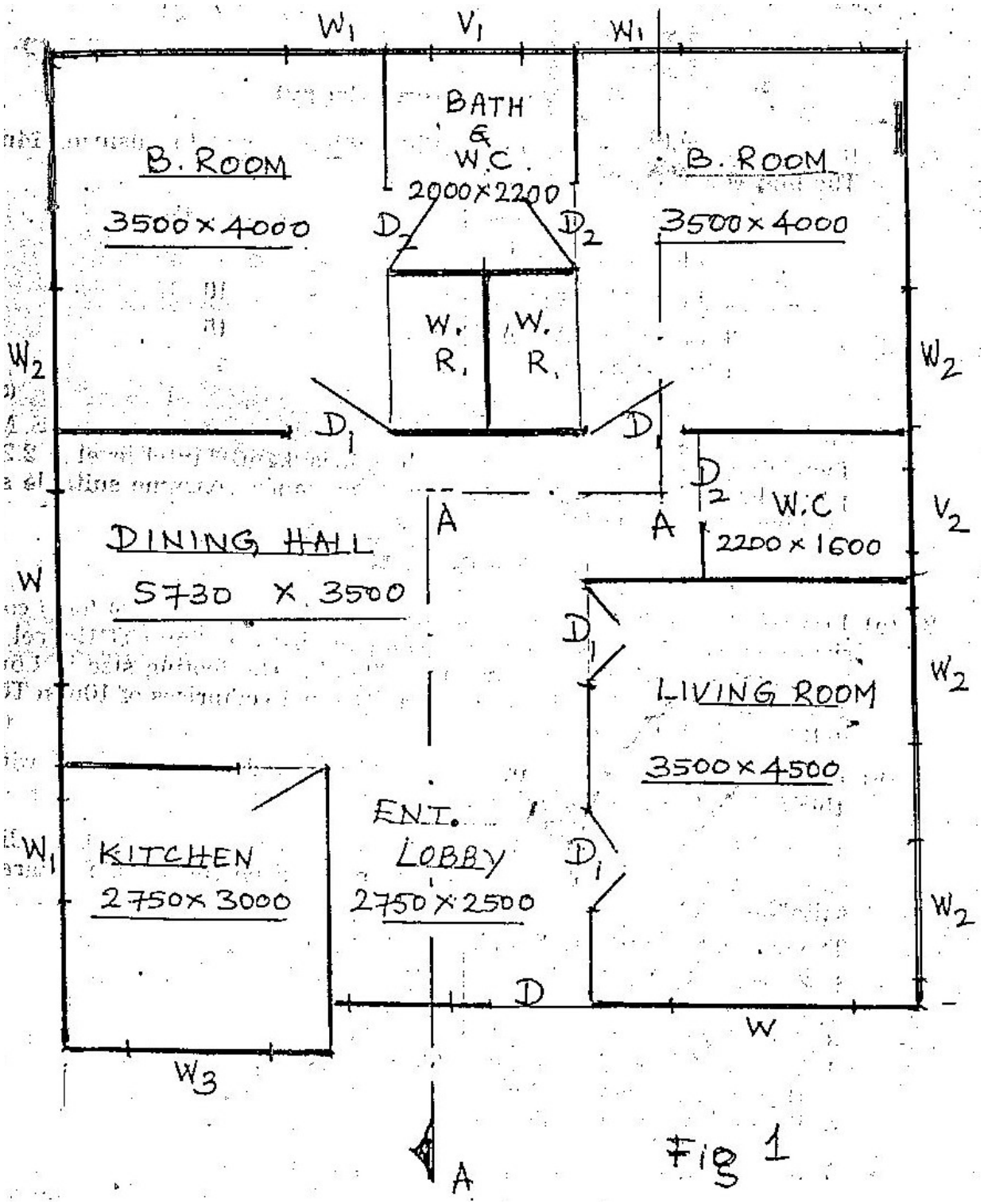
b. Draw to a suitable scale plan and sectional elevation of a staircase for an office building with the following data:
(i) Staircase room ---- 6000mm x 4500mm
(ii) Height between floors --- 3750mm
(iii) Thickness of a floor slab --- 150mm
(10 marks)

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^2
2.Adminstrative office -60m^2
3.Assistant Engineer office – 20m^2
4.Technical Assistant room – 40m^2
5.Draughtsman's room -- 40m^2

6.Blueprint and record room - $30m^2$
7.Store - $20m^2$
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)



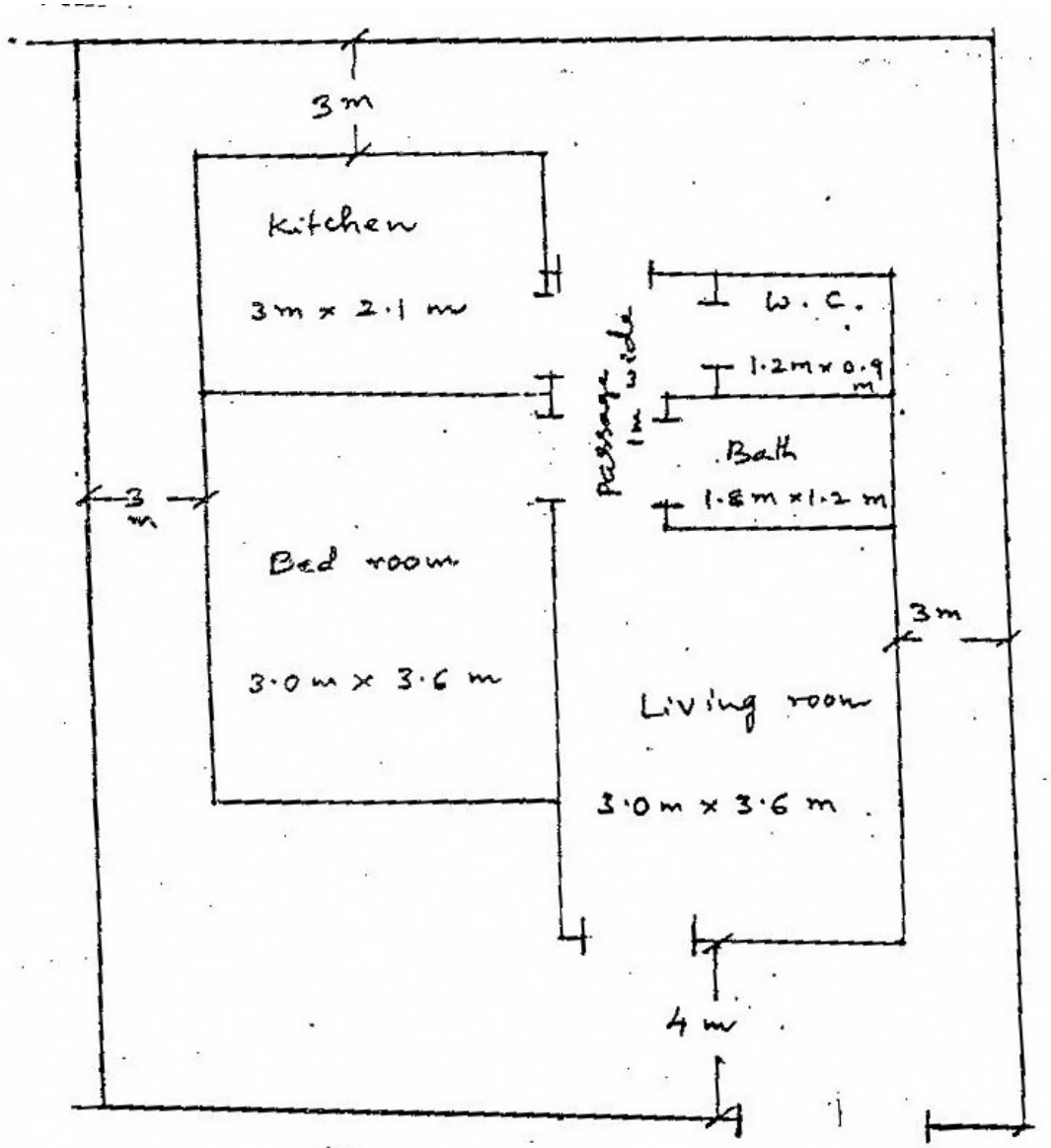

3m
Kitchen
3m x 2.1 m
W.C.
1.2m x 0.9 m
Passage 1m wide
Bath
1.8m x 1.2 m
3 m
Bed room
3.0m x 3.6 m
3m
Living room
3.0m x 3.6 m
4 m

Fig. 2.

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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 is1.5m.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)

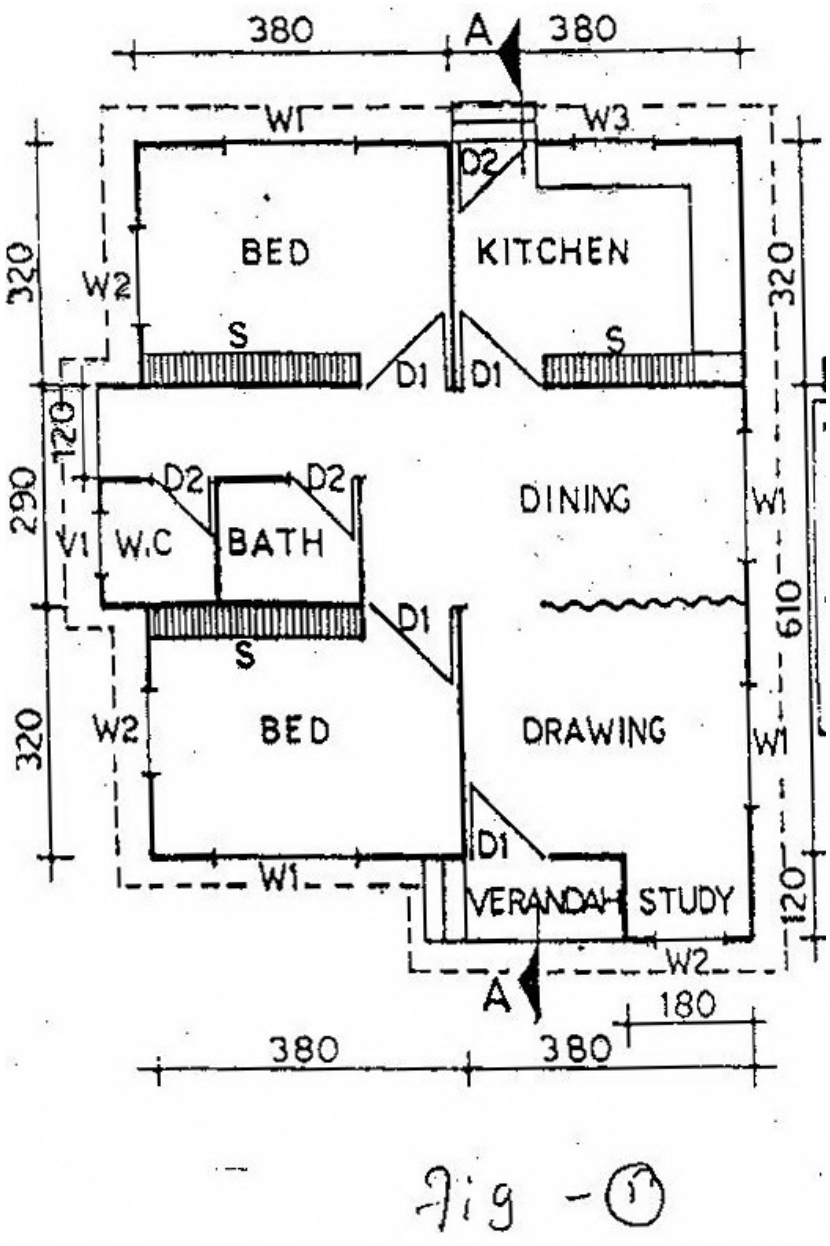

Fig - (1)

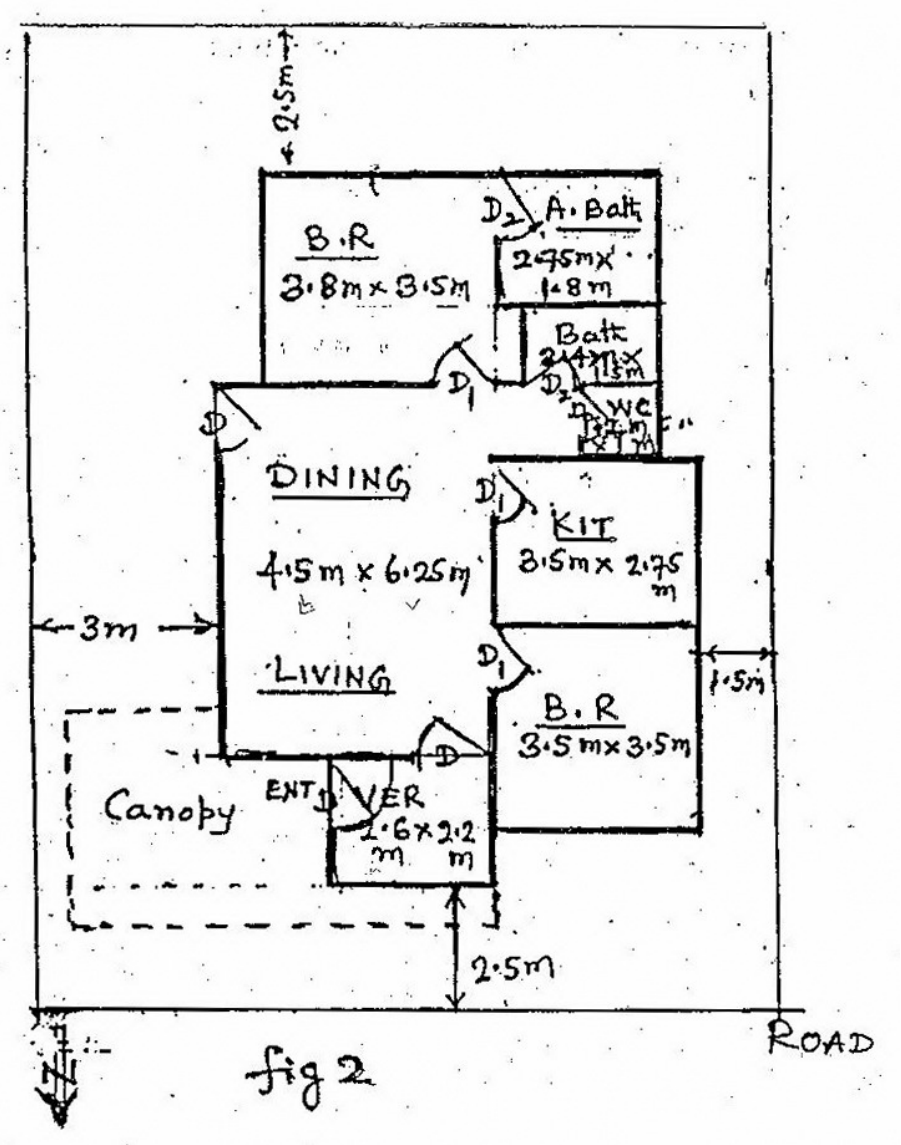
2.5m
B.R
3.8m x 3.5m
D2
A. Bath
2.75m x 1.8m
Batt
2.4m x 1.5m
D1
D2
WC
1.2m x 1.2m
DINING
4.5m x 6.25m
D1
KIT
3.5m x 2.75 m
3m
LIVING
D1
1.5m
B.R
3.5m x 3.5m
D
Canopy
ENT
VER
1.6 x 2.2 m m
2.5m
ROAD
N

fig 2

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