



SIDDHARTH GROUP OF INSTITUTIONS :: PUTTUR

Siddharth Nagar, Narayanavanam Road – 517583

QUESTION BANK (DESCRIPTIVE)

Subject with Code : BP&D (13A01501)

Course & Branch: B.Tech - CE

Year & Sem: III-B.Tech & I-Sem

Regulation: R13

UNIT – I

PLANNING OF A RESIDENTIAL BUILDING

1. Explain the term building? Explain various types of buildings? [10M]
2. Explain various types of residential buildings with neat sketches? [10M]
3. What are the various factors to be considered in selecting a site for residential building? [10M]
4. Explain the following terms: [10M]
 - a) Orientation of a building
 - b) Aspect
 - c) Prospect
 - d) Privacy
 - e) Economy
5. Explain the following terms: [10M]
 - a) Furniture requirement
 - b) Grouping
 - c) Circulation
 - d) Sanitation
 - e) Lighting
6. Explain the terminology in building byelaws? Explain the objectives of building byelaws? [10M]
7. Explain the following terms: [10M]
 - a) Minimum plot sizes
 - b) Open space requirements
 - c) Plinth area, floor area and carpet area
 - d) Floor area ratio
 - e) Floor space index

8. Enumerate the basic principles underlying building byelaws and also limitations for the built up area? [10M]

9. Explain the following terms: [10M]

- a) Height of the building
- b) Wall thickness
- c) Lighting and ventilation requirement
- d) Safety from fire
- e) Drainage and sanitation

10. Explain the applicability of the bye-laws in the present day construction? [10M]

Prepared by: C.Sasidhar.



SIDDHARTH GROUP OF INSTITUTIONS :: PUTTUR

Siddharth Nagar, Narayanavanam Road – 517583

QUESTION BANK (OBJECTIVES)

Subject with Code : BP&D (13A01501)

Course & Branch: B.Tech - CE

Year & Sem: III-B.Tech & I-Sem

Regulation: R13

UNIT – I

PLANNING OF A RESIDENTIAL BUILDING

1. Any structure for whatsoever purpose and of whatsoever materials used for human habitation with all services is called []

A) Building	B) School
C) Hotel	D) Industry

2. _____ are shall not be considered as a building []

A) Tents	B) Shamians
C) Tarpaulin Shelters	D) All the above

3. _____ is a building in which sleeping accommodation is provided for normal residential purposes, with or without cooking and dining facilities []

A) Mercantile building	B) Industrial building
C) Residential building	D) Storage building

4. _____ is a building used for school, college or day-care purposes []

A) Institutional building	B) Mercantile building
C) Residential building	D) Education building

5. _____ is a building used for purposes of medical or treatment or care of persons suffering from physical or mental illness []

A) Storage building	B) Industrial building
C) Residential building	D) Institutional building

6. _____ is a building where group of people meet or gather for amusement, recreation, social, religious and similar purposes []

A) Residential building	B) Mercantile building
C) Storage building	D) Business building

7. _____ is a building used for transaction of business, for keeping accounts []
A) Storage building B) Mercantile building
C) Business building D) Hazardous building
8. _____ is a building used for shops, stores, market, for display and sale []
A) Mercantile building B) Business building
C) Storage building D) School building
9. _____ is a building where products or materials of all kinds and properties are
fabricated, assembled, manufactured or processed []
A) Assembly building B) Mercantile building
C) Storage building D) Industrial building
10. _____ is a building used for storage, handling, manufacture of combustible materials or
explosive materials or products []
A) Mercantile building B) Storage building
C) Industrial building D) Hazardous building
11. _____ is a building whose walls or roof is independent of other buildings []
A) Detached houses B) Semi-Detached houses
B) Row houses D) Duplex houses
12. _____ is an attached twin of two similar houses with one common wall []
A) Row houses B) Duplex houses
B) Detached houses D) Chawls
13. _____ is single storeyed houses having common wall between the neighbours and
having maximum security []
A) Row houses B) Duplex houses
C) Detached houses D) Semi-Detached houses
14. Block of flats are developed due to increase in _____ []
A) Service tax B) Income tax
B) Land cost D) Property tax
15. _____ is type of detached or semi-detached house provided with an accommodation of
single dwelling at two or more floors []
A) Duplex houses B) Semi-Detached houses
C) Detached houses D) Row houses

16. The soil below the ground level which having good bearing capacity is called []
A) Sub-soil B) Loose soil
C) Graded soil D) Rocky soil
17. _____ soils will offers maximum bearing capacity for foundation []
A) Rocky soil B) Clay soils
C) Hard moorum earth soil D) Fibrous soil
18. _____ undergoes uneven settlements when loaded []
A) Hard moorum B) Rocky soils
C) Clay soils D) Reclaimed soils
19. _____ is essential for the survival of any form of life and also during construction of any building []
A) Shelter B) Clothing
C) Water D) None of these
20. Soils percolating at _____ are ideally suited for percolation trenches []
A) 35 s/mm B) 25 s/mm
C) 45 s/mm D) 50 s/mm
21. Soils percolating at _____ are relatively less porous and pooling of waste water in common with them []
A) 125 s/mm B) 155 s/mm
C) 180 s/mm D) 200 s/mm
22. Soil recording a rate of percolation of less than _____ are loose soils []
A) 3 s/mm B) 1 s/mm
C) 2 s/mm D) 5 s/mm
23. Based on our living conditions _____ are undesirable in commercial and industrial areas []
A) Residential buildings B) Storage buildings
C) Assembly buildings D) Mercantile buildings
24. Rectangular shape of sites of length _____ its width and preferably the width being parallel to the road is ideal []
A) 2 to 6 times B) 3 to 4 times
C) 1 to 2 times D) 5 to 6 times
25. Orient means _____ []
A) East B) West

C) North

D) South

26. The minimum provisions designed from National Building code by Town planning authorities regarding the structural sufficiency, fire hazards and health aspects are _____ []

A) Building Bye-laws

B) City Bye-laws

B) Town Bye-laws

D) None of these

27. _____ allows disciplined and systematic growth of buildings []

A) Building Bye-laws

B) City Bye-laws

B) Town Bye-laws

D) None of these

28. For a detached building of plot size above 250 Sq.m the frontage should be []

A) 8 to 12 m

B) 10 to 12 m

C) above 12m

D) below 12m

29. For a semi-detached building of plot size 125-250 Sq.m the frontage should be []

A) 8 to 12 m

B) 10 to 12 m

C) above 12m

D) below 12m

30. For a row type building of plot size 50-125 Sq.m the frontage should be []

A) 8 to 12 m

B) 4.5 to 8 m

C) above 12m

D) below 12m

31. The front open spaces for a building with width of the street upto 7.5m is []

A) 1.5m

B) 2.5m

C) 3.5m

D) 4.5m

32. The front open spaces for a building with width of the street 7.5 to 18m is []

A) 1.5m

B) 2.5m

C) 3.0m

D) 4.5m

33. The front open spaces for a building with width of the street 18 to 30m is []

A) 1.5m

B) 2.5m

C) 3.5m

D) 4.5m

34. The front open spaces for a building with width of the street above 30m is []

A) 1.5m

B) 2.5m

C) 3.5m

D) 6.0m

35. _____ is the ratio of total covered area of all floors to the plot area []

A) Floor Area Ratio

B) Floor Space Index

C) Floor Slab Ratio

D) None of these

36. For lighting and ventilation of verandah should be a maximum width of []

A) 2.5m

B) 2.36m

C) 2.40m

D) 3.20m

37. For parking it should be a plain ground having a slope not steeper than []

A) 5%

B) 6%

C) 7%

D) 8%

38. A load bearing wall should have a minimum thickness of _____ []

A) 200mm

B) 150mm

C) 250mm

D) 300mm

39. Any brick column should be atleast _____ thick []

A) 250mm

B) 300mm

C) 350mm

D) 200mm

40. _____ cement concrete is most commonly used for the construction of load bearing members []

A) 1:2:6

B) 1:2:4

C) 1:2:8

D) 1:2:9

Prepared by: C.Sasidhar.



SIDDHARTH GROUP OF INSTITUTIONS :: PUTTUR

Siddharth Nagar, Narayanavanam Road – 517583

QUESTION BANK (DESCRIPTIVE)

Subject with Code : BP&D (13A01501)

Course & Branch: B.Tech - CE

Year & Sem: III-B.Tech & I-Sem

Regulation: R13

UNIT – II

PLANNING OF RESIDENTIAL BUILDINGS & PLANNING OF PUBLIC BUILDINGS

1. What is the difference between house and home? Which rooms are required for different income groups? [10M]
2. What are the factors to be considered by planner prior to planning of a residential building? Explain in detail? [10M]
3. Give the standard dimensions for the following rooms of a residential building: [10M]
 - a) Bedroom
 - b) Kitchen
 - c) Dining room
 - d) Garage
 - e) Sick room
4. What are the usual requirements of a normal residential building? [10M]
5. What are the requirements for the following rooms in planning of residential building? [10M]
 - a) Dining room
 - b) Drawing room
 - c) Kitchen
6. Draw the typical layout of the furniture pieces for the following: [10M]
 - a) Bed room
 - b) Drawing room
 - c) Kitchen
 - d) Toilet

7. A three storeyed school building is to be located in a village at a site measuring 50m x 35m. The longer dimension is east west direction with the main road along the southern side. Draw the line diagram of the above building. Briefly explain the principles of your planning. [10M]
8. A central library is to be designed for an engineering college. Draw the line diagram of the library building. Briefly explain the principles of your planning. [10M]
9. What are the factors to be considered in the design of a bank building? Explain the planning factors in the design of a library building? [10M]
10. Differentiate between the following: [10M]
- a) Hotel and Motel
 - b) Reading room and stack room
 - c) Auditorium and foyer
 - d) Dispensary and clinic


SIDDHARTH GROUP OF INSTITUTIONS :: PUTTUR

Siddharth Nagar, Narayanavanam Road – 517583

QUESTION BANK (OBJECTIVE)
Subject with Code : BP&D (13A01501)
Course & Branch: B.Tech - CE
Year & Sem: III-B.Tech & I-Sem
Regulation: R13
UNIT – II
PLANNING OF RESIDENTIAL BUILDINGS & PLANNING OF PUBLIC BUILDINGS

1. _____ is one which is used wholly or partly for a considerable time or permanently for human habitation []

A) Residential building	B) Industrial building
C) Public building	D) Commercial building
2. _____ is one which gives shelter to its inmates against the weathering elements as the sun, rain, wind and snow []

A) Home	B) House
C) Apartment	D) Hotel
3. _____ denotes more than the house, providing the shelter for protection of environmental factors []

A) Bungalow	B) House
C) Home	D) Hotel
4. Prior to the planning of a residential building, the planner to consider []

A) Size, shape and location	B) Requirement of occupants
C) Fund resources	D) All the above
5. To fulfill the needs of human activities, the residence is divided into ____ areas []

A) 2	B) 3
C) 4	D) 6
6. The major areas of a residence is []

A) The living area	B) The sleeping area
C) The service area	D) All the above

7. The very first room of a house as we enter is []
A) Drawing or Living room B) Kitchen
C) Bathroom D) Bed room
8. The main functions of a living room are []
A) To draw guests B) Act as a lounge
C) Act as a sitting or relaxing room D) All the above
9. The room utilized for the purpose of playing chess and for social functions []
A) Bed room B) Drawing room
C) Dining room D) Kitchen room
10. The size of the doors should not be less than []
A) 1.2x1.2m B) 1.0x1.0m
C) 1.2x2.0m D) 1.2x2.5m
11. The window size should not be less than []
A) 1.0x1.0m B) 1.20x1.0m
C) 0.95x0.95m D) 0.65x0.65m
12. The minimum illumination required for a residential living room is []
A) 500 Lux B) 200 Lux
C) 300 Lux D) 100 Lux
13. The minimum window area should never be less than _____ of floor area []
A) 20% B) 15%
C) 35% D) 30%
14. A minimum floor area preferred for residential living room []
A) 15 to 20 Sq.m B) 20 to 25 Sq.m
C) 30 to 40 Sq.m D) 45 to 50 Sq.m
15. The minimum brightness required for a dining room is []
A) 25 Lux B) 30 Lux
C) 35 Lux D) 50 Lux
16. The recommended size of dining room is []
A) 4.0x3.0m B) 3.0mx3.0m
C) 4.0x3.5m D) 3.5x3.5m
17. The minimum brightness required in the kitchen room is []

- A) 250 Lux
C) 150 Lux

- B) 300 Lux
D) 200 Lux

18. In a kitchen-cum-dining, the floor area should be a minimum of _____ is adopted []

- A) 6.5 Sq.m
C) 7.5 Sq.m
- B) 7.0 Sq.m
D) 8.5 Sq.m

19. For a large kitchen room the dimensions preferred are []

- A) 3x6m
C) 5x6m
- B) 4x6m
D) 6x6m

20. A man spends _____ of his life in a bedroom []

- A) 30 to 50 %
C) 40 to 45%
- B) 60 to 70%
D) 55 to 60%

21. The minimum space required for both children and adult in bed room are []

- A) 5.0 and 8.0 m³
C) 6.5 and 7.5 m³
- B) 5.5 and 8.5 m³
D) None of these

22. _____ is a place children are stimulated to go in search of knowledge and develop their creative abilities []

- A) Home
C) School
- B) Drawing hall
D) Hotel

23. Choose the correct matching order []

Type of School

- i) Single teacher upto 60 pupils
ii) Two teachers upto 100 pupils
iii) Five teachers upto 200 pupils
iv) Community school complex

Area in hectares

- a) 0.5 to 0.60
b) 0.2 to 0.30
c) 0.1 to 0.12
d) 6 (including play fields)

- A) i-c, ii-b, iii-a, iv-d
C) i-d, ii-b, iii-c, iv-a

- B) i-b, ii-c, iii-a, iv-d
D) i-c, ii-d, iii-a, iv-b

24. For a higher secondary school (rural) the area in hectares []

- A) 2/900 pupils
C) 2/840 pupils
- B) 3/1000 pupils
D) 4/1500 pupils

25. Around _____ per bus shall be considered in the design of the bus station towards the parking area []

- A) 10 Sq.m
C) 20 Sq.m
- B) 15 Sq.m
D) 25 Sq.m

26. Bus stations are to be classified as A, B,C,D and E based on []
A) Population of the city B) Average number of passengers
C) Importance of the city D) Number of halting buses
27. The main circulation corridors should be of sufficient width and not less than ____ []
A) 1.8 m B) 2.0m
C) 2.5m D) 2.96m
28. The main circulation corridors should be of sufficient width and not more than ____ []
A) 3.0m B) 3.5m
C) 3.55m D) 4.0m
29. Office room should have a minimum illumination of _____ []
A) 100 Lux B) 200 Lux
C) 250 Lux D) 150 Lux
30. The corridors will have a minimum illumination of _____ []
A) 100 Lux B) 200 Lux
C) 250 Lux D) 50 Lux
31. Drawing office a minimum illumination of _____ []
A) 100 Lux B) 200 Lux
C) 300 Lux D) 150 Lux
32. The width entrance of Government offices should be _____ []
A) 2 to 4m B) 3 to 6m
C) 3 to 7m D) 4 to 6m
33. The space required for the projector room should be _____ []
A) 15 to 20 Sq.m B) 16 to 20 Sq.m
C) 17 to 25 Sq.m D) 20 to 25 Sq.m
34. _____ = number of counters x 5 x width of public hall []
A) Public space (m^2) B) Private Space (m^2)
C) Government space (m^2) D) None of these
35. Space required for treasury and strong room in main post office (Assistant post master) is _____ []
A) 7.5 m^2 B) 8.0 m^2
C) 14.0 m^2 D) 12.0 m^2



SIDDHARTH GROUP OF INSTITUTIONS :: PUTTUR

Siddharth Nagar, Narayanavanam Road – 517583

QUESTION BANK (DESCRIPTIVE)

Subject with Code : BP&D (13A01501)

Course & Branch: B.Tech - CE

Year & Sem: III-B.Tech & I-Sem

Regulation: R13

UNIT – III

BUILDINGS: SAFETY AND COMFORT & PROJECT NETWORKING

1. Explain the following terms: [10M]
 - a) Aspect of safety
 - b) Structural, safety and fire
 - c) constructional safety

2. Explain the components of building automation system? [10M]
 - a) HVAC
 - b) Electrical lighting
 - c) Security
 - d) Fire-fighting
 - e) communication

3. Explain the following terms: [10M]
 - a) Design for thermal comfort
 - b) ventilation comfort
 - c) Air conditioning comfort
 - d) Lighting comfort
 - e) Noise and Acoustic comfort

4. Elaborate various steps involved in the planning of construction projects? [10M]

5. Explain the terms: [10M]
 - a) Scheduling and
 - b) Monitoring of bar charts

6. Explain CPM and PERT network analysis and discuss the differences between them? [10M]

7. Explain the circumstances under which CPM and PERT methods are preferred one over the other? [10M]

8. Explain various phases of project management? Explain role of management in project execution?

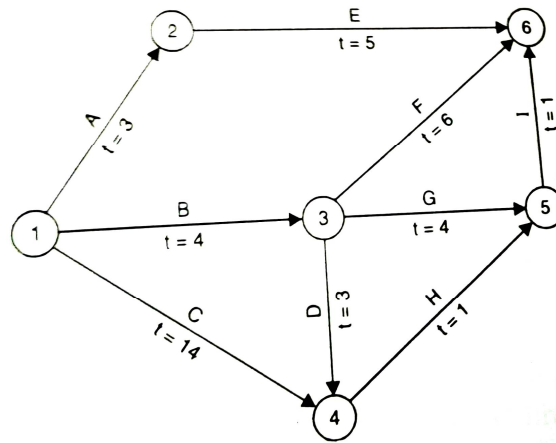
[10M]

9. What do you understand by total float? How it is determined? What is its importance in network planning?

[10M]

10. The network shown in the following figure has the estimated duration for each activity marked. Determine the total float for each activity and establish the critical path. Also determine free float and independent float for each activity.

[10M]





SIDDHARTH GROUP OF INSTITUTIONS :: PUTTUR

Siddharth Nagar, Narayanavanam Road – 517583

QUESTION BANK (DESCRIPTIVE)

Subject with Code : BP&D (13A01501)

Course & Branch: B.Tech - CE

Year & Sem: III-B.Tech & I-Sem

Regulation: R13

UNIT – IV

SIGN CONVENTIONS AND BONDS

1. Draw the conventional signs for the following: [10M]
 a) Brick b) Stone c) Plaster d) Sand filling e) Concrete
2. Draw the conventional signs for the following: [10M]
 a) Glass b) Steel c) Cast Iron d) Copper alloys e) Aluminium alloys
3. Draw the conventional signs for the following: [10M]
 a) Lead b) Zinc c) Tin d) White lead e) Earth
4. Draw the conventional signs for the following: [10M]
 a) Rock b) Timber c) Marble
5. Draw the conventional signs for the following: [10M]
 a) English bond and Flemish bond
 b) Header and Stretcher bond
 c) Stone masonry
 d) Cavity walls (1) and (2)
6. Draw the conventional signs for the following: [10M]
 a) Door frame
 b) Types of panelled doors
 c) Ledged, braced and battened doors
 d) Panelled doors
 e) Glazed and panelled door
7. Draw the conventional signs for the following: [10M]
 a) Windows both panelled and glazed
 b) King post truss
 c) Queen post truss

d) Steel roof truss

8. Draw the conventional signs for the following: [10M]

- a) Stair cases
- b) Straight stairs with two flights
- c) Details of stairs

9. Draw the conventional signs for the following: [10M]

- a) Foundations
- b) Swing ventilator
- c) Couple roof
- d) Collar roof

10. Draw the conventional signs for the following: [10M]

- a) Odd and even courses for one, one and half
- b) Two and two and half brick


SIDDHARTH GROUP OF INSTITUTIONS :: PUTTUR

Siddharth Nagar, Narayanavanam Road – 517583

QUESTION BANK (DESCRIPTIVE)
Subject with Code: BP&D (13A01501)

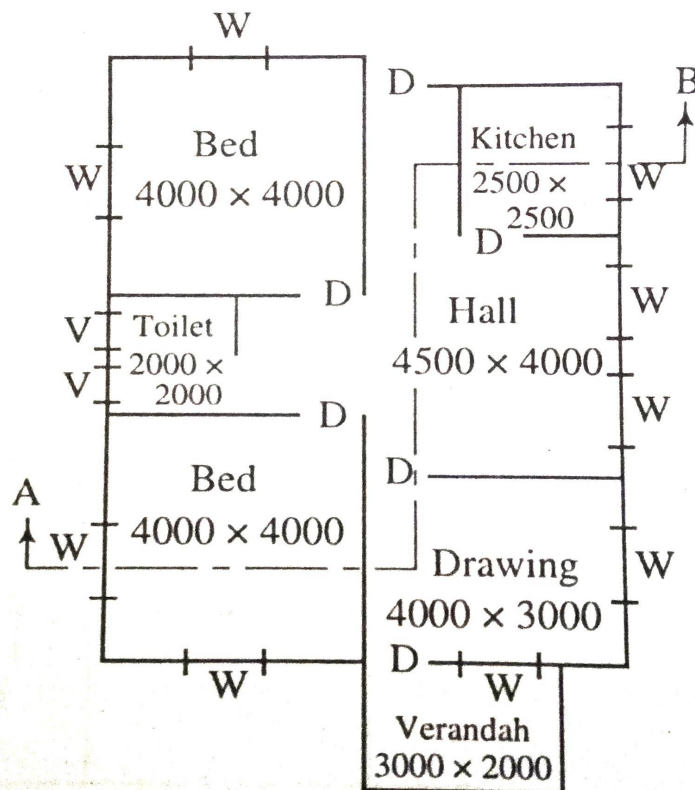
Course & Branch: B.Tech - CE

Year & Sem: III-B.Tech & I-Sem

Regulation: R13

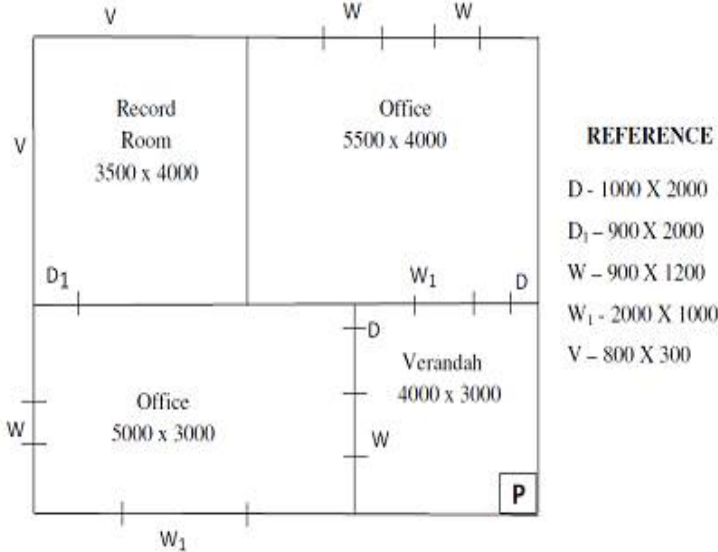
UNIT – V

1. Draw plan, section and elevation for the following line drawing:
 (Provide standard dimensions for doors, windows and ventilation) [10M]



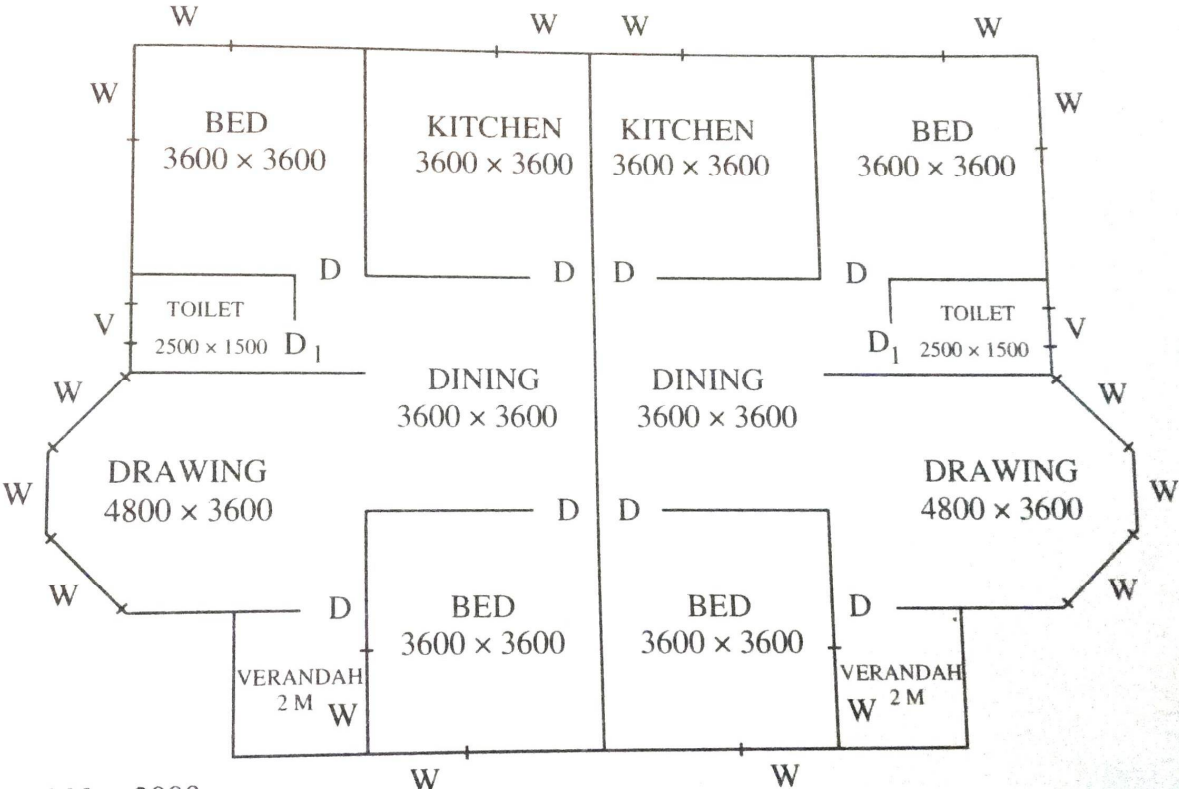
2. Draw plan, section and elevation for the following line drawing:
 (Provide standard dimensions for doors, windows and ventilation)

[10M]

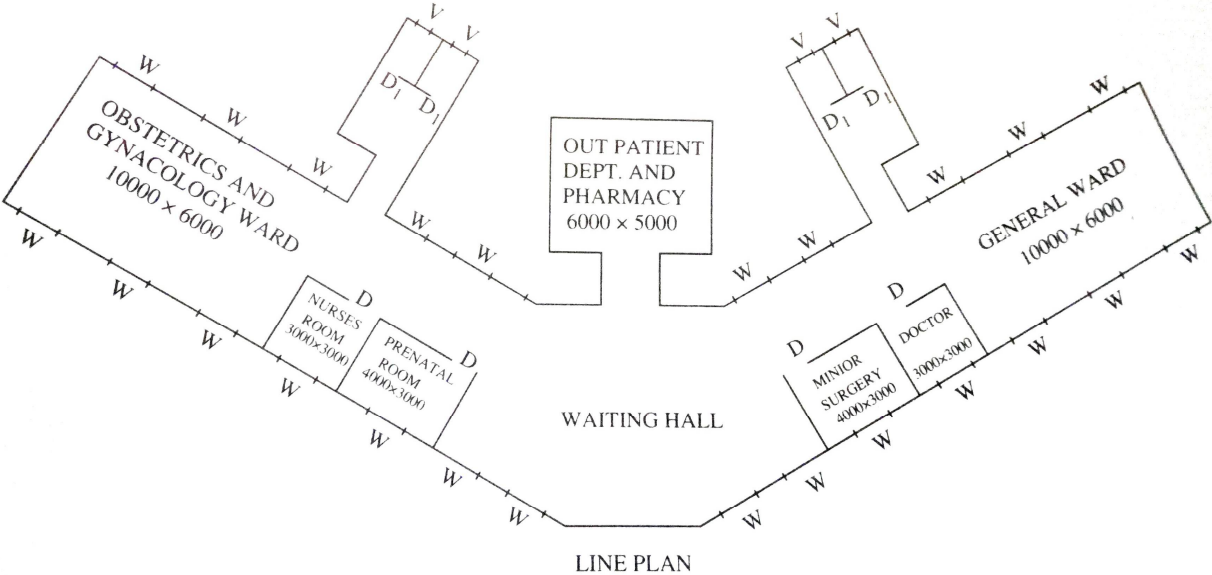


3. Draw plan, section and elevation for the following line drawing:
 (Provide standard dimensions for doors, windows and ventilation)

[10M]



4. Draw plan, section and elevation for the following line drawing: [10M]
(Provide standard dimensions for doors, windows and ventilation)



5. Draw plan, section and elevation for the following line drawing: [10M]
(Provide standard dimensions for doors, windows and ventilation)

