Code No: R1622011

R16

SET - 1

II B. Tech II Semester Regular/Supplementary Examinations, April/May- 2019 BUILDING PLANNING AND DRAWING

(Civil Engineering)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (Part-A and Part-B)

2. Answer any THREE Questions from PART-A

3. Answer any **ONE** Question from **PART-B**

 $(14 \times 3 = 42M)$

PART -A

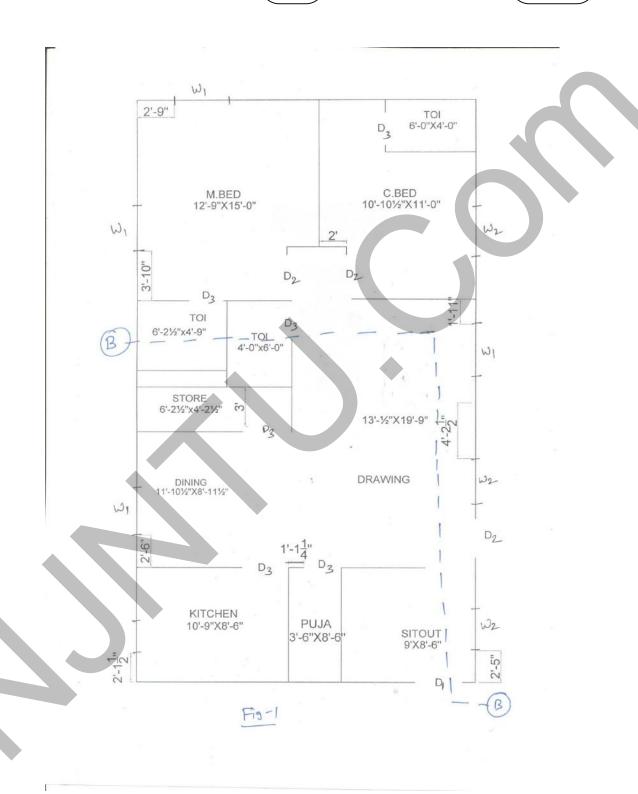
- 1. What are building Bye-laws and explain briefly the objectives and principles underlying building Bye-laws.
- 2. Discuss in detail the classification of buildings as per National building code.
- 3. Explain briefly the requirements of different rooms and their grouping in a residential building.
- 4. Discuss about the Principles of planning for a public buildings.
- 5. Design a School building for strength of 1500 students and draw the plan of the designed building.

PART -B

- 6. Draw two consecutive courses joints of the following walls in English bond: i. One brick thick wall ii. One and half brick thick wall
 - iii. Two brick thick wall iv. Two and half brick thick wall
- 7. Draw plan and elevation (along the section) of the building shown in figure-1 with the following specifications (assume appropriate dimensions if not mentioned in the single line drawing)
 - a. Exterior walls are 9" thick and partitions walls are 4 ½" thick
 - b. Doors : D1 4' width, D2 3 1/2' width, D3 3' width
 - c. Windows: W1-4' x 3', W2-3' x 3', W3-2' x 2'
 - d. Take lintel level as 7' and total height of building as 11' with 5 " thick RCC slab

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SET - 2

II B. Tech II Semester Regular/Supplementary Examinations, April/May- 2019 BUILDING PLANNING AND DRAWING

(Civil Engineering)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (Part-A and Part-B)

- 2. Answer any THREE Questions from PART-A
- 3. Answer any **ONE** Question from **PART-B**

 $(14 \times 3 = 42M)$

PART -A

- 1. List out Principles of planning for a building and discuss any four in detail.
- 2. Explain briefly the characteristics of various types of residential buildings.
- 3. Design a School building for strength of 1200 students and draw the plan of the designed building.
- 4. Discuss the salient features of the functional design of the following:
 - i) Office buildings ii) Bank buildings
- 5. Explain Briefly about
 - i) Floor area ratio (FAR)
 - ii) Floor space index (FSI)
 - iii) Open spaces and Setbacks

PART -B

- 6. a)
 With suitable scale draw the following symbols
 i. Brick work ii. Concrete iii. Sand filling iv. Steel
 - b) Draw front elevation, vertical section of a double leafed paneled door.
- 7. Draw plan and elevations (along the sections shown) of the building shown in figure-1, with the following specifications (assume appropriate dimensions if not mentioned in the drawing)
 - A. Take lintel level as 7' and total height of building as 11' with 5 " thick RCC slab.

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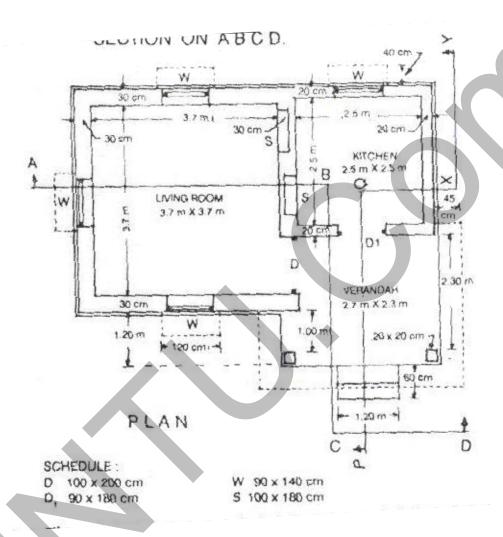


Fig. 1

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SET - 3

II B. Tech II Semester Regular/Supplementary Examinations, April/May- 2019 BUILDING PLANNING AND DRAWING

(Civil Engineering)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (Part-A and Part-B)

2. Answer any **THREE** Questions from **PART-A**

3. Answer any **ONE** Question from **PART-B**

 $(14 \times 3 = 42M)$

PART -A

- 1. a) Explain briefly about Floor area ratio (FAR) and Floor space index(FSI)
 - b) Discuss Why open spaces and setbacks are essential for any building.
- 2. Discuss in detail the classification of buildings as per National building code.
- 3. Design a 100 bedded Hospital building and draw the plan of the designed building.
- 4. Discuss about lighting and ventilation requirement in public buildings.
- 5. Discuss the salient features of the functional design of the following:
 - i) School buildings ii) Hotel buildings

PART -B

- 6. a) Draw two consecutive courses joints of a one brick thick wall in English bond.
 - b) With suitable scale draw the details of a Queen post truss.
- 7. Draw plan and elevations (along the sections shown) of the building shown in figure1. With the following specifications (assume appropriate dimensions if not mentioned in the drawing)
 - A. Take lintel level as 7' and total height of building as 11' with 5 '' thick RCC slab.

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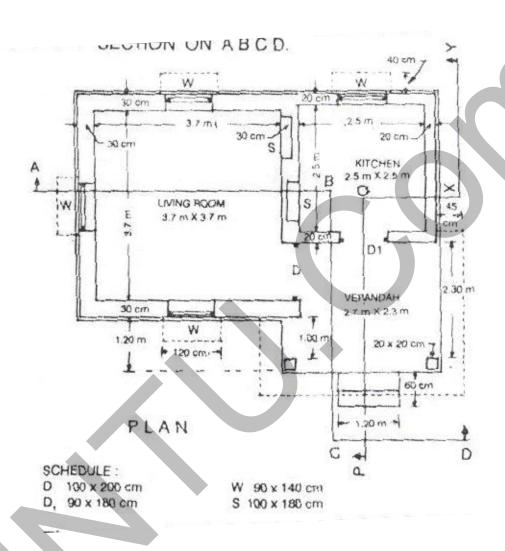


Fig. 1

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SET - 4

II B. Tech II Semester Regular/Supplementary Examinations, April/May- 2019 BUILDING PLANNING AND DRAWING

(Civil Engineering)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (Part-A and Part-B)

2. Answer any **THREE** Questions from **PART-A**

3. Answer any **ONE** Question from **PART-B**

 $(14 \times 3 = 42M)$

PART -A

- 1. List out Principles of planning for a building and discuss any four in detail.
- 2. Discuss about lighting and ventilation requirement for different rooms in a residential building.
- 3. Explain about the reasons for minimum area requirement for different rooms in a residential building.
- 4. Explain briefly the requirements of different rooms and their grouping in a residential building.
- 5. Discuss the salient features of the functional design of the following:
 - i) Office buildings ii) Bank buildings

PART -B

- 6. a) with suitable scale draw the following symbols i. Brick work ii. Concrete iii. Timber iv. Glass
 - b) Draw two consecutive courses joints of the following walls in English bond i. one brick thick wall ii. One and half brick thick wall iii. Two brick thick wall
- 7. Draw plan and elevation (along the section) of the building shown in figure-1 with the following specifications (assume appropriate dimensions if not mentioned in the single line drawing)
 - a. Exterior walls are 9" thick and partitions walls are 4 ½ " thick
 - b. Doors: D1 4' width, D2 3½' width, D3 3' width
 - c. Windows: W1-4' x 3', W2-3' x 3', W3-2' x 2'
 - d. Take lintel level as 7' and total height of building as 11' with 5 " thick RCC slab

Code No: R1622011

R16

