

R13

SET - 1

II B. Tech II Semester Regular/Supplementary Examinations, April/May-2017 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** the question in **Part-A**

3. Answer **One** Question from **Part-B**

PART -A

 $(14 \times 3 = 42M)$

- 1. a) What is the role of building bye-laws in planning a city?
 - b) Explain the minimum size requirements for the following components: Wall thickness, column and beam sizes, height of a room, size of stair, foundation, plinth level, height of a building.
- 2. a) Explain clearly different principles involved in planning a residential building?
 - b) What are the different points normally given consideration while planning a residential building? Explain with examples?
- 3. a) Plan a Post office in a village in 250 sq.m area. Take all environmental and economic factors into consideration while planning?
 - b) Draw plan of the above building? Assume all the necessary data suitably.
- 4. a) Draw the plan, elevation and isometric view of odd course of 2 brick Flemish bond?
 - b) Differentiate between stone and brick masonry?
- 5. Draw sign conversion for i) Brick ii) Glass iii) Stone iv) Timber v) Concrete

PART -B

 $(1 \times 28 = 28M)$

- 6. a) Draw plan and sectional elevation of a paneled door of size 1.2X2.1m. Indicate all features.
 - b) Draw a detailed elevation of a king post truss of 5m clear span. Indicate all features.

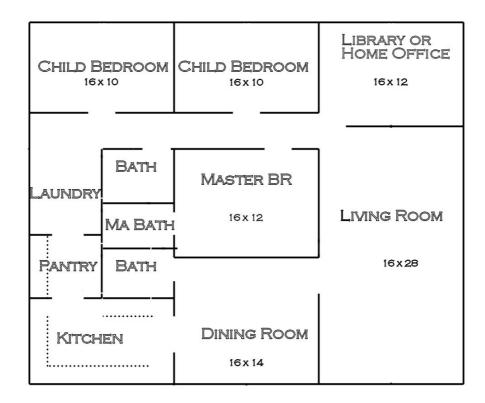




R13

SET - 1

7. a) Draw the dimensioned plan and elevation for the given line plan. Assume all suitable data.



b) Take suitable section and draw sectional elevation for the above given plan. Assume all suitable data.

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SET - 2

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(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** the question in **Part-A**
- 3. Answer **One** Question from **Part-B**

PART -A

 $(14 \times 3 = 42M)$

- 1. a) Classify different type of buildings as per bye-laws? And explain the function of each type of building along with examples?
 - b) Explain about different minimum sizes of components in a building as per byelaws?
- 2. a) Explain how orientation of building is done? And what are the factors influencing that?
 - b) Explain the influence of open places in planning a residential building? Also explain the importance of the same?
- 3. a) Plan a bank in open space 300 sq.m. in a town? Explain different components involved in planning?
 - b) Draw the dimensioned plan of the above building with all features? Assume all the necessary data suitably.
- 4. a) What is the significance of sign conventions in building drawing? Explain with examples?
 - b) Draw plan, elevation, and isometric view of 2 brick English bond for odd courses?
- 5. Draw plan for
 - a) Coupled roof
 - b) Collar roof

PART-B

 $(1 \times 28 = 28M)$

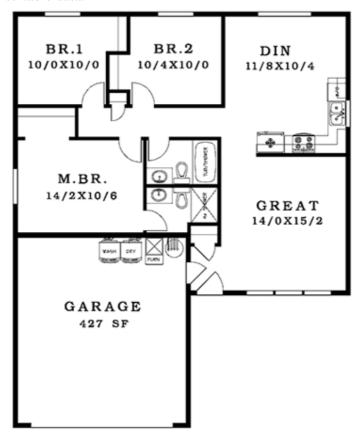
- a) Draw plan and sectional elevation of a glazed window of size 1.8X1.1m. Indicate all features.
 - b) Draw a detailed elevation of a Queen post truss of 5m clear span. Indicate all features.



R13

SET - 2

7. a) Draw the dimensioned plan and elevation for the given line plan. Assume all suitable data.



b) Take suitable section and draw sectional elevation for the above given plan. Assume all suitable data.



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SET - 3

II B. Tech II Semester Regular/Supplementary Examinations, April/May-2017 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** the question in **Part-A**

3. Answer **One** Question from **Part-B**

PART -A

 $(14 \times 3 = 42M)$

- 1. a) As per climatic conditions, how India is made is made into different zones? Also explain difference in planning?
 - b) State the significance of building bye-laws?
- 2. a) Explain the role of roominess and grouping in planning a residential building? Give some examples?
 - b) What are the different buildings will fall under residential buildings category? How they are differentiated?
- 3. a) Explain the planning of a hotel in 500 sq. m area in a district head quarters. Explain various rooms/components involved in planning?
 - b) Draw a dimensioned plan of the above building along with all features? Assume all the necessary data suitably.
- 4. a) Explain how the sign convention will be done for different type of metals?
 - b) Draw plan, elevation and isometric view of 1½ brick English bond for even courses?
- 5. Draw a plan for
 - a) Glazed window
 - b) Panelled window

PART-B

 $(1 \times 28 = 28M)$

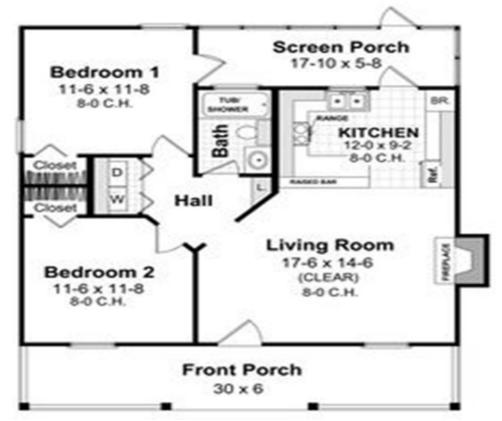
- 6. a) Draw plan and sectional elevation of a paneled and glazed door of size 1.2X2.1m. Indicate all features.
 - b) Draw a detailed elevation of a king post truss of 6 m clear span. Indicate all features.



R13

SET - 3

7. a) Draw the dimensioned plan and elevation for the given line plan. Assume all suitable data.



b) Take suitable section and draw sectional elevation for the above given plan. Assume all suitable data.



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SET - 4

II B. Tech II Semester Regular/Supplementary Examinations, April/May-2017 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** the question in **Part-A**
- 3. Answer **One** Question from **Part-B**

PART -A

 $(14 \times 3 = 42M)$

- . a) Explain about Floor space index and Floor area ratio?
 - b) Explain lighting and ventilation requirements in buildings as per bye-laws?
- 2. a) Explain different factors considered while selecting a site for residential houses?
 - b) State the significance of bye-laws in planning residential houses?
- 3. a) Plan a College in a city in area 550 sq.m. Explain the planning of this college with reference to different components inside it.
 - b) Draw dimensioned plan of the above building? Assume all necessary data suitably.
- 4. a) Draw the sign convention for 'Earth 'and 'plaster'?
 - b) Draw plan, elevation and isometric view of a 2½ brick Flemish bond for even courses?
- 5. Draw plan and Elevation of a sloped roof building.

PART -B

 $(1 \times 28 = 28M)$

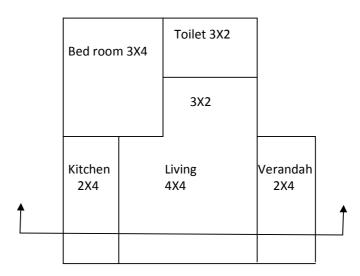
- 6. a) Draw plan and sectional elevation of a paneled window of size 1.2X1.1m. Indicate all features.
 - b) Draw a detailed elevation of a Queen post truss of 6 m clear span. Indicate all features.



R13

SET - 4

7. a) Draw the plan and elevation of the below given line plan. Assume all suitable data.



All Dimensions are in metres.

b) Draw sectional elevation for the above plan. Assume all the necessary data suitably.