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SUBJECT CODE NO:- H-131
FACULTY OF SCIENCE AND TECHNOLOGY
S.E. (Civil) (Sem-II)
Building Construction & Drawing
[Revised]

[Time: Three Hours]

[Max.Marks: 80]

Please check whether you have got the right question paper.

- N.B
1. Q. No. 1 and Q. No. 6 are compulsory.
 2. Solve any two questions from remaining questions from Section A and Section B.
 3. Assume suitable data, if necessary.
 4. Use separate drawing sheet for solving Q.No.7 of Section B.

Section A

- | | | |
|-----|---|----------|
| Q.1 | Attempt any five:- | 10 |
| | <ol style="list-style-type: none"> a) Enlist the different types of buildings as per the National building code of India. b) State the requirements to be fulfilled by partition walls. c) Enlist the various elementary principles of planning of a building. d) Define Built up area and carpet area. e) Define Safe bearing capacity of soil. f) Specify the soil condition where pile foundation is recommended. g) Explain – Privacy. | |
| Q.2 | <ol style="list-style-type: none"> a) Explain Sun path diagram with its application in building planning. b) What do you understand by energy efficient building? Explain. | 08
07 |
| Q.3 | <ol style="list-style-type: none"> a) What are the objects of providing foundations to the structure? Explain combined footing with neat sketch. b) What are the minimum areas for different rooms in residential building as per Bye laws? | 08
07 |
| Q.4 | <ol style="list-style-type: none"> a) If one of the column lies just at the edge of property line (Plot boundary) then which foundation is more suitable? Explain with neat sketch. b) State the various types of structure and explain with sketch the framed structure. | 08
07 |
| Q.5 | Write a short note on :- (Any Three) | 15 |
| | <ol style="list-style-type: none"> a) Building line and control line b) Roominess c) Setting out Foundation d) Building Bye-laws | |

Section B

- Q.6 Attempt any Five. 10
- What is head room?
 - What is purpose of providing cavity walls?
 - Define foundation and mention its objects.
 - What is a construction joint in building?
 - What are the causes of dampness?
 - When double scaffolding is used?
 - Enlist the factors affecting the acoustical design of an auditorium.
- Q.7 Draw a plan of residential bungalow for a family in new Aurangabad township. 15
 Plot size- 11m×15m.
 Scale- 1:50
 Required Components- Drawing hall, Kitchen, Master bedroom- 1 No., Bedroom-1 No., Dog-legged staircase, WC and bath.
 Draw-
- Working drawing plan
 - Elevation
 - Section through WC/bath and staircase
 - Schedule of opening
 - Construction notes
- Q.8 a) Design a Dog-legged staircase for a building in which the vertical distance between the floors is 3.6m. The stair hall measures 2.5m×3m. Draw a neat sketch explaining different components. 08
- b) Explain in details Acoustic defect. 07
- Q.9 a) Explain water proofing materials and methods involved in water proofing. 08
- b) Write a note on Escalators. 07
- Q.10 a) With the help of neat sketches write down the various types of stairs and their suitability. 08
- b) Write a detailed note on Shoring. 07