

## MIT WORLD PEACE UNIVERSITY, PUNE. ASSIGNMENT – 2 [Based on Module 4,5,6] 2021-2022

- 1. Differentiate between Shallow foundation and Deep foundation.
- 2. Describe in short 'Smart materials used in Engineering'.
- 3. Determine the carpet area per floor of a two storey building from the following data.
  - a) Plot area =  $600 \text{ m}^2$
  - b) FSI allowed = 1.0
  - c) Ratio of carpet area/built-up area = 0.7

Assume equal built-up area per floor.

- 4. Briefly discuss the role of an Engineer to achieve sustainable development.
- 5. It is proposed to plan a bunglow. As civil engineering students discuss the planning principles to be followed for the planning of the bunglow.
- 6. Explain briefly following terms used in building byelaws:
  - a. open space requirement
  - b. setback distance
  - c. FSI

## **Extra Questions for Practice**

- 1. Explain functions of Foundation with neat diagram.
- 2. Differentiate between load bearing structure and framed structure
- 3. Enlist principles of building planning. Explain with a neat sketch Aspect, Prospect, Orientation and Circulation.
- 4. A plot is having dimensions  $25 \,\mathrm{m} \times 30 \,\mathrm{m}$ . A building constructed on it occupies  $200 \,\mathrm{m}^2$  on ground floor and  $175 \,\mathrm{m}^2$  on first floor. If F.S.I. permissible is 0.8, how much area can be constructed on second floor?
- 5. Explain in brief solid waste management.
- 6. Discuss in short E waste management.
- 7. A plot owner proposed G+1 storey construction with 180m2 built-up area on each floor. The plot size is 19m x20m, find the ground coverage and F.S.I. proposed, if all side margins are 2m. If FSI allowed in the area is 1.0, state with reasons whether the plan will be sanctioned or not.
- 8. Explain in brief the role of green building in sustainable development.
- 9. What are Building Bye Laws? Write objectives of Building Bye Laws?
- 10. Describe in short 'Eco friendly material used in construction'.