## Dr. Babasaheb Ambedkar Technological University Lonere Raigad

## **Department of Civil Engineering**

## Question Bank

Subject – BTCVC401\_Building Planning & Drawing

- 1. Describe following principles of planning? a) Grouping b) Privacy
- 2. Describe following principles of planning? a) Aspect b) Prospect
- 3. Describe following principles of planning? a) Roominess b) Circulation
- 4. Describe following principles of planning? a) Accentuation b) Contrast
- 5. Explain sun path diagram with sketch?
- 6. Describe importance of sun path diagram?
- 7. What are the components of sun path diagram? Explain these components?
- 8. What is the importance of wind diagram in building planning?
- 9. Which are the governing factors for orientation of building?
- 10. How orientation of building gives better design?
- 11. Describe design criteria for building to be designed in hot and humid climatic zone?
- 12. Describe design criteria for building to be designed in hot and dry climatic zone?
- 13. Describe design criteria for building to be designed in cold climatic zone?
- 14. Explain the concept of green building?
- 15. Which are the criteria to be fulfilled for green building?
- 16. Explain GIHA rating system for green building?

## OR

- 17. Draw a plan of a two storey bunglow with living room, bedrooms (2 no), kitchen and toilets. Scale 1: 100\_\_\_\_\_\_(20 marks)
- 18. Describe development plan with its scale, Colour code etc.?
- 19. Describe bye laws for means of access?
- 20. Describe bye laws for recreational open space?
- 21. Describe bye laws for front open space and side open space?
- 22. Which projections are allowed in open space around the building?
- 23. Explain floor space index?
- 24. What is the minimum area of following 1) kitchen 2) bathroom 3) WC?
- 25. What is the minimum width of following 1) kitchen 2) bathroom 3) WC?
- 26. What is the minimum height of following 1) living room 2) Basement?
- 27. What is the minimum parking space for car & scooter?
- 28. Which documents are required to get development permission?
- 29. Describe the requirement of municipal drawing for development permission?
- 30. Explain the term Anthropometry?
- 31. What is the difference between a) row house b) twin bungalow c) apartment?
- 32. Describe content of municipal drawing required for development permission?
- 33. Which are the various services provided in plumbing &drainage system?
- 34. Describe direct & indirect water distribution system?
- 35. Which are the bye laws for water requirement for different types of buildings?
- 36. Describe drainage below ground and drainage above ground?
- 37. Describe nahni trap with sketch?
- 38. Describe gully trap with sketch?
- 39. Describe intercepting trap with sketch?
- 40. Describe one pipe & two pipe plumbing system?
- 41. Describe septic tank & soak pit sketch?

- 42. Describe how to calculate rain water harvesting tank?
- 43. Describe lumen method of lighting design with example?
- 44. Describe various factors affecting selection of wiring system?
- 45. Describe different types of wiring system?
- 46. Describe various firefighting systems?
- 47. Which are the bye laws to be used for firefighting system of building?
- 48. Draw a typica layout of toilet showing all drainage pipes?
- 49. Describe definition & function of natural ventilation?
- 50. Describe design consideration for natural ventilation?
- 51. What are the functions of air conditioning?
- 52. Describe working of air conditioning system?
- 53. Describe various types of AC systems?
- 54. Describe the tonnage calculation for AC unit with example?
- 55. Explain various methods of reducing load on AC?
- 56. Explain working of window air conditioning system?
- 57. Explain working of split AC unit?
- 58. Describe conduction, convection & radiation?
- 59. What are the advantages of thermal insulation?
- 60. Which materials are used for thermal insulation? explain each of them?
- 61. Describe the calculation for heat loss?
- 62. Which are the methods for mechanical ventilation?
- 63. What are the recommended values of air change/hour for different types of building?
- 64. Draw a sketch of window AC unit showing all components?
- 65. Draw a plan of one BHK flat showing furniture layout (scale 1: 50)?
- 66. Which are the criteria to be fulfilled for green building?
- 67. Explain GRIHA rating system for green building?
- 68. What is the definition & importance of Acoustics?
- 69. Explain wavelength & frequency of sound?
- 70. Explain reflection & absorption of sound?
- 71. Describe the term reverberation?
- 72. Explain Sabine's formula with an example?
- 73. Which are the factors affecting acoustics of the building?
- 74. Explain noise and its types?
- 75. How to control external noise?
- 76. How to control internal noise?
- 77. Which are the various international rating systems for green building?
- 78. What are the criteria for site selection and material selection in green building evaluation?
- 79. Describe any four criteria for green building rating system?
- 80. What is the importance of green building?

**Note:** *This question bank is for reference only.* 

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