Year: - Second Year B Arch. Subject: - BS II Pattern: - 2019

1. Write a report on your residence stating the details of electricity from generation to consumption using a flow chart. Identify every single component that is used in the process.
2. Explain the role of every single component: Brand, Capacity, and location for Installation.
3. Sthe voltage of HT line and LT line that comes to your residence.
4. Explain all the safety devices used to ensure the electrical safety.
5. Explain the difference between single phase and double phase lighting.
6. Explain in detail what do you understand by Passive design for lighting
7. What is the difference between Passive Solar Design and Active Solar Design?
8. What is the importance of Sun path diagram study for incorporating Natural lighting in interiors of the building?
9. Explain in detail what is daylight factor? What is the formula for calculating daylight factor for any room? Make neat proportionate sketches.
10. What is Glare and it's types? Explain with minimum 2 examples each.
11. What is the importance of fenestration in Facade design?
12. What are kinetic shading devices? Explain with minimum 2 examples drawing neat proportionate sketches.
13. What are lighting shelves? Where are they applicable? Explain with neat proportionate sketches.
14. What are the types of Glazing?
15. What are solar panels? Explain their application in detail.
16. What are solar tubes? What is their function? Explain in detail.
17. What is the importance of skylights in interiors of buildings?
18. What are the elements of Passive Solar Design?
19. What are photovoltaic panels?
20. What do you understand by Colour Rendering Index and Colour Temperature? What are its application in designing interiors in Buildings? Explain with Examples.
21. What is the Difference between Luminance and illuminance? Explain with neat proportionate sketches.
22. Explain the terms:
    a)Lamp Life.
    b)Luminous Flux

23. Define and explain Lumen Method of Lighting Design in Detail with examples. What are the Limitations of this method?
24. Explain the Types of Fuses. In short describe the APPLICATIONS all the types of fuse. Avoid the construction mechanisms.
25. Explain the use and applications of different types of circuit breakers.
26. Differentiate between Fuse and Circuit breakers
27. Explain what is Earthing and different types of earthing with appropriate sketches.
28. Explain the use and working of a lightning arrester.
29. Explain the Fire Safety Systems installed in a Building Typology .(Minimum 5 Types)
30. Use flow chart to link the Detection, Notification and response to ensure Fire Safety .Add onsite photographs and explain the same.
31. Mention detailed specifications of the components used in Fire Alarm systems.
32. Write the difference between composting and vermicomposting? Explain both in detail with neat sketches.
33. What are refuge chutes? How do we make provision of refuge chutes in high rise buildings? (show sizes & Diameter for each floor)
34. What is incinerators? Explain in detail with neat Sketches.
35. What are the types of solid waste?
36. Study types of solid waste you and propose minimum 3 ways of treating it.
37. Draught the layout of your BEDROOM with furniture and good line quality and Calculate the number of lights required for the room using Lumen Method.