



DCID302

Reg. No.

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III Semester B.Sc. Degree Examination, March/April - 2024

INTERIOR DESIGN AND DECORATION

Building Services Lighting

(NEP Scheme 2020-21 ONWARDS)

PAPER : ID -T-3.2

Time : 2½ Hours

Maximum Marks :60

Instructions to Candidates:

- 1) All the Sections are Compulsory.
- 2) Illustrate wherever necessary

SECTION -A

I. Answer any TEN of the following.

(10×2=20)

1. What is artificial lighting?
2. Define task lighting?
3. Expand LED and CFL.
4. What do you mean by load factor?
5. Draw any two electrical symbols.
6. What do you mean by down lighting?
7. Define Reflection.
8. Mention any two principles of lighting?
9. What is Eco-lighting?
10. Define the term voltage.
11. Mention the formula of "Lumen method calculation".
12. Give any four examples of Exterior lighting fixtures.



[P.T.O.]

**SECTION-B****II. Answer any FIVE of the following****(5×4=20)**

13. Explain the following:

- i) Voltage
- ii) Power
- iii) Current

14. What are the different types of lighting arrangements? Explain with relevant diagrams.

15. What are the factors affecting selection of lighting systems.

16. Brief write about earthing systems.

17. Explain different types of wires. Mention the colour codes used in National Building codes.

18. Mention the applications of electrical services in a building.

SECTION - C**III. Answer any FOUR of the following.****(4×5=20)**

19. Draft an electrical layout for 30' × 25' residence with legend.

20. What are Protection systems? Explain.

21. Explain the following:

- i) MCB
- ii) ELCB
- iii) MCCB

22. Explain CRI and CCT of lighting.

23. An office space of 10m × 5m requires an illumination level of 350 lux on the working plan. It is proposed to use fluroscent bulb which gives output of 2500 lumens each. Calculate the number of bulbs required using lumen method calculations.

Note: UF = 0.69

MF = 0.63