

Roll No



**PRESIDENCY UNIVERSITY
BENGALURU**

SET A

**SCHOOL OF DESIGN
END TERM EXAMINATION - JAN 2024**

Semester : Semester V - 2021
Course Code : DES2027
Course Name : Building Services
Program : B. Design

Date : 04-JAN-2024
Time : 1:00 PM - 4:00 PM
Max Marks : 100
Weightage : 50%

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and non-programmable calculator are permitted.
- (iv) Do not write any information on the question paper other than Roll Number.

PART A

ANSWER ALL THE QUESTIONS

4 X 5M = 20M

1. Explain in brief , the basic working principle and applications of following lighting
 - i) Ambient lighting
 - ii) Task lighting

(CO1) [Knowledge]
2. Define:
 - a) Luminous flux
 - b) Illuminance

(CO2) [Knowledge]
3. Write Short Notes on:
Electricity transmission and distribution system .

(CO3) [Knowledge]
4. Explain lighting and electrical power supply measures that can help conserve electricity in buildings.

(CO4) [Knowledge]

PART B

ANSWER ALL THE QUESTIONS

5 X 10M = 50M

5. What is meant by Sub-stations? Describe different types of substations with reference to location.

(CO1) [Comprehension]

6. Compare the properties of
i) Incandescent lamp
ii) Florescent lamp
iii) LED lamp
(CO2) [Comprehension]
7. What role does lighting play in guiding visitors through museum exhibitions and creating a narrative or thematic experience?
(CO3) [Comprehension]
8. Explain the electrical wiring system with a suitable diagram.
i) Wood casing and capping
ii) Conduit wiring
(CO4) [Comprehension]
9. How can lighting be used to highlight the texture and details of sculptures and three-dimensional artworks?
(CO5) [Comprehension]

PART C

ANSWER ALL THE QUESTIONS

2 X 15M = 30M

10. Prepare an electrical layout showing **light points, fan points and distribution board** for a 2 bedroom house using Indian Standard notations. Assume necessary data.
(CO5) [Application]
11. Draw a single line diagram of two bed room residence and prepare the electrical circuit diagram using standard symbols.
(CO6) [Application]