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 **PRESIDENCY UNIVERSITY**

  **Bengaluru**

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| **End - Term Examinations – JANUARY 2025** |
| **Date:** 03-01-2025 **Time:** 09:30 am – 12:30 pm |

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| **School:** School of Design | **Program:** B.Des BSM |
| **Course Code:** DES2027 | **Course Name:** Building Services |
| **Semester**: V | **Max Marks**:100 | **Weightage**: 50% |

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| **CO - Levels** | **CO1** | **CO2** | **CO3** | **CO4** | **CO5** |
| **Marks** | **23** | **21** | **56** |  |  |

**Instructions:**

1. *Read all questions carefully and answer accordingly.*
2. *Do not write anything on the question paper other than roll number.*

**Part A**

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| **Answer ALL the Questions. 10 x 2 Marks=20 Marks** |
| **1** | What type of wiring and switch is needed for heavy electrical devices like ACs, Ovens etc.?  | **2 Marks** | **Remembering** | **CO1** |
| **2** | What are the uses of 2-way switches?  | **2 Marks** | **Remembering** | **CO1** |
| **3** | What do you understand by the term Fuse, meter & DB | **2 Marks** | **Remembering** | **CO1** |
| **4** | What are AC and DC currents? | **2 Marks** | **Remembering** | **CO1** |
| **5** | What is solar power and PV cells? | **2 Marks** | **Understanding** | **CO2** |
| **6** | What is hydro-electric power? | **2 Marks** | **Understanding** | **CO2** |
| **7** | What are the various sustainable electricity generation processes?  | **2 Marks** | **Understanding** | **CO2** |
| **8** | What are the uses of anti-glare lights?  | **2 Marks** | **Applying**  | **CO3** |
| **9** | Name any 3 uses of ambient lighting. | **2 Marks** | **Applying**  | **CO3** |
| **10** | What is direct lighting, and name 2 uses? | **2 Marks** | **Applying**  | **CO3** |

**Part B**

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| **Answer the Questions Total 80 Marks** |
| **11.** |  | 1. Draw a lighting layout for a bedroom of the size 12' x 12' with legend .(7marks)
2. Explain the layout with necessary information.(3marks)
 | **10 Marks** | **Applying** | **CO3** |
| **or** |
| **12.** |  | 1. Sketch the various types of LED devices with respect to their function.(7marks)
2. What is the beam angle of a light ?(3marks)
 | **10 Marks** | **Applying** | **CO3** |
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| **13.** |  | 1. What are the various parameters to be considered while designing the lighting and wiring for a bedroom?(8marks)
2. With supportive illustrative sketches .(2marks)
 | **10 Marks** | **Applying** | **CO3** |
| **or** |
| **14.** |  | Explain the uses of decor lights, bed lights, study lights, reading lights. | **10 Marks** | **Applying** | **CO3** |

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| **15.** |  | What are the various lighting parameters that are to be considered while designing a fashion studio? | **10 Marks** | **Applying**  | **CO3** |
| **Or** |
| **16.** |  | 1. What do you understand by under counter lighting.(3marks)
2. Differentiate between COB lights and CFL lights?(7marks)
 | **10 Marks** | **Applying**  | **CO3** |

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| **17.** |  | 1. What are the major stages of generation of Hydro electricity generation?(8marks)
2. What are the major stages of thermal electricity generation?(7marks)
 | **15 Marks** | **Remembering** | **CO1** |
| **Or** |
| **18.** |  | 1. Write a brief note on any of the distribution of electricity from source to end user.(10marks)
2. Illustrate the same process.(05 marks)
 | **15 Marks** | **Remembering** | **CO1** |

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| **19.** |  | 1. Sketch a plan for your college design studio indicating SB layout.(7marks)
2. Sketch a plan for your college design studio lighting layout.(8marks)
 | **15 Marks** | **Understanding** | **CO2** |
| **Or** |
| **20.** |  | 1. Sketch a plan of a 1bhk indicating SB layout. (7marks)
2. Sketch a plan of a 1bhk indicating the wiring layout.(8marks)
 | **15 Marks** | **Understanding** | **CO2** |

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| **21.** |  | 1. What are the various types of lighting used in landscaping?(10marks)
2. Write a brief note on outdoor lighting with examples or sketches?(10marks)
 | **20 Marks** | **Applying**  | **CO3** |
| **Or** |
| **22.** |  | 1. Explain the importance of outdoor lighting. (10marks)
2. Write brief notes on parameters used for calculating the number of light fixtures, switches etc.(10marks)
 | **20 Marks** | **Applying**  | **CO3** |

**\*\*\*\*\* BEST WISHES \*\*\*\*\***