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PRESIDENCY UNIVERSITY BENGALURU

SCHOOL OF ENGINEERING

SUMMER TERM

END TERM EXAMINATION – AUGUST 2024

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| **Semester :V SEM** | **Date :07-08-2024** |
| **Course Code :MEC 3201** | **Time :9:30AM -12:30PM** |
| **Course Name :** INDUSTRY 4.0 | **Max Marks :100** |
| **Program : BCA & BCV** | **Weightage :** |

**Instructions:**

1. *Read all questions carefully and answer accordingly.*
2. *Question paper consists of 3 parts.*
3. *Scientific and non-programmable calculator are permitted.*
4. *Do not write any information on the question paper other than Roll Number.*

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| **PART A** | | | |
| **ANSWER ANY 4 QUESTIONS 4Q X 5M=20M** | | | |
| 1 | Write a note on Industrial Revolution | (CO 1) | [Knowledge] |
|  | | | |
| 2 | Explain Horizontal integration via value chains | (CO1) | [Knowledge] |
|  | | | |
| 3 | Explain Vertical Integration and Networking of manufacturing or service  systems | (CO1) | [Knowledge] |
|  | | | |
| 4 | Difference between Additive manufacturing and subtractive manufacturing | CO 2) | [Knowledge] |
|  | | | |
| 5 | Applications of Industry 4.0 in Health sector | (CO 2) | [Knowledge] |
|  | | | |
| 6 | Explain Smart Healthcare Network | (CO 3) | [Knowledge] |

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| **PART B** | | | |
| **ANSWER ANY 5 QUESTIONS 5Q X 10M=50M** | | | |
| 7 | With suitable example explain Cyber security system in Industry 4.0 | (CO 3) | [Comprehension] |
|  | | | |
| 8 | Write a note on Industrial Revolution | (CO 3) | [Comprehension] |
|  | | | |
| 9 | With suitable example explain IoT in Industry 4.0 | CO 3) | [Comprehension] |
|  | | | |
| 10 | Explain proposed framework for I 4.0 | (CO 3) | [Comprehension] |
|  | | | |
| 11 | Write a note on smart factory | (CO 3) | [Comprehension] |
|  | | | |
| 12 | Write a note on Big Data and Analytics | (CO 3) | [Comprehension] |
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| 13 | Explain Applications of Industry 4.0 in Aerospace sector | (CO 3) | [Comprehension] |

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| **PART C** | | | |
| **ANSWER ANY 2 QUESTIONS 2Q X 15M=30M** | | | |
| 14 | Explain Key Design Principles of a Industrial 4.0 Smart Factory | (CO 4) | [Application] |
|  | | | |
| 15 | Explain conceptual frame work Agricultural sector | (CO 4) | [Application] |
|  | | | |
| 16 | Explain reference Architectural Model Frame Work I4.0 | (CO 4) | [Application] |