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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 Management(UG) | **Program:** BBB/BBE/BBF/BBA |
| **Course Code :** CIV2004 | **Course Name :** Integrated Project Management |
| **Semester**: V | **Max Marks**: 100 | **Weightage**: 50% |

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| --- | --- | --- | --- | --- | --- |
| **CO - Levels** | **CO1** | **CO2** | **CO3** | **CO4** | **CO5** |
| **Marks** | **23** | **31** | **46** | **N/A** | **N/A** |

**Instructions:**

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

**Part A**

|  |
| --- |
| **Answer ALL the Questions. 10 x 2 Marks=20Marks** |
| **1** | Briefly explain post-project phase? | **2 Marks** | **L2** | **CO1** |
| **2** | List any four forms of business organization. | **2 Marks** | **L1** | **CO1** |
| **3** | List any four traits of a project manager. | **2 Marks** | **L1** | **CO1** |
| **4** | What are the various types of contracts for execution of a project? | **2 Marks** | **L1** | **CO1** |
| **5** | Briefly explain Operational and Tactical planning. | **2 Marks** | **L2** | **CO2** |
| **6** | List the tools available for project management. | **2 Marks** | **L1** | **CO2** |
| **7** | What is Critical Path Method? | **2 Marks** | **L1** | **CO2** |
| **8** | Briefly explain the concept of Total Quality Management. | **2 Marks** | **L2** | **CO3** |
| **9** | List the two resource optimization techniques. | **2 Marks** | **L1** | **CO3** |
| **10** | Briefly explain the concept of Project Crashing. | **2 Marks** | **L2** | **CO3** |

**Part B**

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| --- |
| **Answer the Questions. Total Marks 80** |
| **11.** | **a.****b.** | Explain Resource Levelling and Resource Smoothening. Give suitable examples for each.Explain the elements of quality – (i) Quality Characteristics (ii) Quality of Design, and (iii) Quality of Conformance | **25 Marks** | **L3** | **CO3** |
| **Or** |
| **12.** | **a.** | Explain below elements of project management: (i) Work Breakdown Structure (WBS)(ii) Program Evaluation and Review Technique (PERT)(iii) Arrow on Node Method (AON)(iv) Arrow on Activity Method (AOA)(v) Earned Value Analysis | **25 Marks** | **L3** | **CO3** |
|  |  |  |  |  |  |
| **13.** | **a.** | Details of a project consisting of 8 activities is given in Table below. As a planning manager you are asked to determine the time duration required to complete this project and critical activities of the project. Prepare a network diagram and furnish the required deliverables. Also, prepare a Gantt chart for the project and Determine the Critical path.

|  |  |  |
| --- | --- | --- |
| **Activity** | **Predecessor** | **Time (weeks)** |
| A | - | 2 |
| B | - | 3 |
| C | A | 2 |
| D | A,B | 4 |
| E | C | 4 |
| F | C | 3 |
| G | D,E | 5 |
| H | F,G | 2 |

 | **25 Marks** | **L4** | **CO2** |
| **Or** |
| **14.** | **a.** | PERT analysis is a planning technique with the probabilistic approach which accounts for uncertainties associated with every activity. The table below has details of a project having various time estimates for activities involved in the project. 1. Determine expected duration of activities and mean value of project duration.
2. Calculate the probability of completing the project within 30 weeks.
3. Determine the deadline with risk of non-completion being 32%.

|  |  |  |
| --- | --- | --- |
| **Activity** | **Predecessor** | **Time estimates (in weeks)** |
| **Optimistic** | **Most Likely** | **Pessimistic** |
| A | None | 2 | 4 | 12 |
| B | None | 10 | 12 | 26 |
| C | A | 8 | 9 | 10 |
| D | A | 10 | 15 | 20 |
| E | A | 7 | 7.5 | 11 |
| F | B,C | 9 | 9 | 9 |
| G | D | 3 | 4 | 5 |
| H | E,F,G | 5 | 5 | 5 |

 | **25 Marks** | **L4** | **CO2** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **15.** | **a.** | You have been assigned to take up a project, as a project management professional who is expected to manage a project efficiently it is important for you to know the various phases of the project. Enlist and explain various phases in life cycle of a project (*including all the activities performed and reports prepared in individual phases*). | **15****Marks** | **L3** | **CO1** |
| **Or** |
| **16.** | **a.** | Planning techniques have evolved over time and have become sophisticated. Initially planning was done using basic calendars, to do lists etc, which were easier to plan but difficult to track progress. Henry Gantt introduced Gantt chart which is accepted as a widely used tool for planning, scheduling and tracking project progress. Explain Gantt chart with the help of a neat diagram, delineate its advantages and disadvantages. | **15 Marks** | **L3** | **CO1** |

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| **17.** | **a.** | Earned Value Analysis is a tool used for analyzing the status/progress of the project during execution. A project has been started 12 months ago, it has incurred a cost of Rs.15 Lakhs to complete 40% of the work whereas the Allocated cost in the budget for 40% work was Rs. 13 Lakhs. According to the time schedule, in 12 months 43% of project was planned to be completed at a budgeted cost of Rs. 14 Lakhs. Comment on the status of the project using various metrics of Earned value analysis (*SV, SPI, CV and CPI*). | **15****Marks** | **L4** | **CO3** |
| **Or** |
| **18.** | **a.****b.** | Project crashing is done in order to meet project deadlines or to fast-track the project that has been delayed. Describe the terms crash cost and crash duration for an activity. Explain the variation of costs of project during crashing with the help of a curve.Explain the terms SV, SPI, CV and CPI. | **15****Marks** | **L3** | **CO3** |

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