**18ME601**

**Hall Ticket Number:**

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| **III/IV B.Tech (Regular/Supplementary) DEGREE EXAMINATION** | | | |
| **June, 2022** | **Mechanical Engineering** | | |
| **Sixth Semester** | **ENGINEERING ECONOMICS AND FINANCIAL ANALYSIS** | | |
| **Time:** Three Hours | | **Maximum: 5**0 Marks | |
| *Answer Question No. 1 Compulsorily.* | | | (10X1 = 10 Marks) |
| *Answer* ***ANY ONE*** *question from each Unit.* | | | (4X10=40 Marks) |

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| 1. | a) | What is meant by marginal revenue? | CO1 | |  |
|  | b) | What is present worth method? | CO1 | |  |
|  | c) | Write a note single payment present worth amount. | CO1 | |  |
|  | d) | Define the term “Depreciation”. | CO2 | |  |
|  | e) | Define the term costing? | CO2 | |  |
|  | f) | What is Break-even point? | CO2 | |  |
|  | g) | Concept of working capital | CO3 | |  |
|  | h) | Capital budgeting | CO3 | |  |
|  | i) | Project life cycle | CO4 | |  |
|  | j) | Work break down structure | CO4 | |  |
| **Unit - I** | | | | | |
| 2. | a) | What is future worth analysis? | CO1 | **5M** | |
|  | b) | Write down the disadvantages large scales production. | CO1 | **5M** | |
|  |  | **(OR)** |  |  | |
| 3. | a) | What is annual equivalent method? | CO1 | **5M** | |
|  | b) | Explain rate of return Analysis | CO1 | **5M** | |
| **Unit - II** | | | | | |
| 4. | a) | Write down the assumptions of Breakeven analysis? | CO2 | **5M** | |
|  | b) | Himalaya Drug Company has just purchased a capsulation machine for Rs.10, 00,000.The plant engineer estimates that the machine has a useful life of 5 years and a salvage value of Rs. 10,000 at the end of its useful life. Compute the depreciation of the machine using Sum –of-the-year’s digits method of depreciation. | CO2 | **5M** | |
|  |  | **(OR)** |  |  | |
| 5. |  | Define the term costing? What Job costing and Process costing? | CO2 | **10M** | |
| **Unit - III** | | | | | |
| 6. |  | Write and explain the objectives and functions of financial management.. | CO3 | **10M** | |
|  |  | **(OR)** |  |  | |
| 7. |  | Write and explain the objectives and need for working capital management. | CO3 | **10M** | |
| **Unit - IV** | | | | | |
| 8. | a) | What are the differences in PERT and CPM? | CO4 | **3M** | |
|  | b) | A project schedule has the following characteristics   |  |  |  |  | | --- | --- | --- | --- | | Activity | Time week | Activity | Time week | | 1-2 | 4 | 5-6 | 4 | | 1-3 | 1 | 5-7 | 8 | | 2-4 | 1 | 6-8 | 1 | | 3-4 | 1 | 7-8 | 2 | | 3-5 | 6 | 8-10 | 5 | | 4-9 | 5 | 9-10 | 7 |   (i) Construct a network  (ii) Compute earliest occurrence time (E) and least occurrence time (L) for each event  (iii) Find the critical path. | CO4 | **7M** | |
|  |  | **(OR)** |  |  | |
| 9. | a) | Explain Float and Slack. | CO4 | **3M** | |
|  | b) | Explain the project life cycle in detail. | CO4 | **7M** | |

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