

U.S.N.

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

January / February 2025 Semester End Main Examinations**Programme: B.E.****Semester: V****Branch: EEE/ECE/MD/ETE/EIE****Duration: 3 hrs.****Course Code: 23ES5HSPMF****Max Marks: 100****Course: Project Management and Finance**

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.

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|---|---|----|---|-----------|-----------|--------------|
| Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice. | | | UNIT - I | CO | PO | Marks |
| | 1 | a) | Briefly explain important stages in project life cycle with neat diagram | CO 1 | PO 1 | 8 |
| | | b) | List the criteria to be considered in project proposition and formulation? | CO2 | PO2 | 6 |
| | | c) | State your opinion on the challenges and problems the project manager would face in achieving team work with good human relation with multicultural team. | CO2 | PO2 | 6 |
| | | | OR | | | |
| | 2 | a) | Explain importance of planning as a main function of Project management and list key points to be considered | CO2 | PO2 | 8 |
| | | b) | Discuss the importance of business ethics in roles and responsibility of a project management professional | CO2 | PO2 | 6 |
| | | c) | Write the implications of conflicts that arise in team and how project manager can address and resolve it | CO 1 | PO 1 | 6 |
| | | | UNIT - II | | | |
| | 3 | a) | Given a project on expanding nursing home to hospital provide techno economical points on conducting the feasibility study | CO2 | PO2 | 8 |
| | | b) | For the progress of project various types of estimates are made. Present any two such estimates which has better accuracies | CO 1 | PO 1 | 6 |
| | | c) | State the importance of cost benefit ratio in project evaluation | CO 1 | PO 1 | 6 |
| | | | OR | | | |
| | 4 | a) | Provide the brief note on feasibility report and list different cost estimates in project formulation | CO2 | PO2 | 8 |
| | | b) | What is the zero date in a project? list pre-project activities should be completed before zero date. | CO 1 | PO 1 | 6 |

| | c) | Define payback period and its implication on project evaluation. | CO2 | PO2 | 6 | | | | | | | | | | | | | | | | | | | | | | | | |
|----------|--------------|--|----------|--------------|-----|---|-----|---|-----|---|-----|---|-----|---|-----|----|-----|---|-----|---|-----|---|-----|---|-----|---|-----|-----|---|
| | | UNIT - III | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | a) | Differentiate open tendering, Selective tendering and Negotiated tendering | CO2 | PO2 | 10 | | | | | | | | | | | | | | | | | | | | | | | | |
| | b) | With neat organizational structure diagram comment on any two advantages and disadvantages of Matrix Organization | CO 1 | PO 1 | 10 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | OR | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | a) | Briefly explain authority, accountability and responsibility as applied to project management | CO 1 | PO 1 | 10 | | | | | | | | | | | | | | | | | | | | | | | | |
| | b) | With neat organizational structure diagram comment on advantages and disadvantages (two points each) of totally projected Organization | CO 1 | PO 1 | 10 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | UNIT - IV | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | a) | Identify the scope of Project work system and Project Control Systems | CO2 | PO2 | 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| | b) | Develop the network diagram and compute the critical path for a project activity given in the table below. <table border="1"><thead><tr><th>Activity</th><th>Time in days</th></tr></thead><tbody><tr><td>1-2</td><td>5</td></tr><tr><td>1-3</td><td>6</td></tr><tr><td>1-4</td><td>3</td></tr><tr><td>2-5</td><td>5</td></tr><tr><td>3-6</td><td>7</td></tr><tr><td>3-7</td><td>10</td></tr><tr><td>4-7</td><td>4</td></tr><tr><td>5-8</td><td>2</td></tr><tr><td>6-8</td><td>5</td></tr><tr><td>7-9</td><td>6</td></tr><tr><td>8-9</td><td>4</td></tr></tbody></table> | Activity | Time in days | 1-2 | 5 | 1-3 | 6 | 1-4 | 3 | 2-5 | 5 | 3-6 | 7 | 3-7 | 10 | 4-7 | 4 | 5-8 | 2 | 6-8 | 5 | 7-9 | 6 | 8-9 | 4 | CO2 | PO2 | 8 |
| Activity | Time in days | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-2 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-3 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-4 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-5 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3-6 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3-7 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4-7 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5-8 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6-8 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7-9 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8-9 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | c) | Define CPM and PERT tools used in project control system | CO 1 | PO 1 | 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | OR | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | a) | Indicate use of work breakdown structure and draw the WBS chart for any electronics industry. | CO2 | PO2 | 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| | b) | One of the Electronic research project has following time estimates in days. Draw the basic network diagram considering table below. Compute the single time estimate t_e from these three estimates and find the critical path considering time t_e . | CO2 | PO2 | 8 | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | Activity | Predecessor | Optimistic time t_o | Most likely time t_m | Pessimistic time t_p | | | |
|--|----|----|---|-------------|-----------------------|------------------------|------------------------|------|------|---|
| | | | A | - | 2 | 5 | 8 | | | |
| | | | B | A | 2 | 3 | 4 | | | |
| | | | C | A | 6 | 8 | 10 | | | |
| | | | D | A | 2 | 4 | 6 | | | |
| | | | E | B | 2 | 6 | 10 | | | |
| | | | F | C | 6 | 7 | 8 | | | |
| | | | G | D,E,F | 6 | 8 | 10 | | | |
| | | c) | List the subsystem plans under systems and procedure plan | | | | | CO 1 | PO 1 | 6 |
| | | | UNIT - V | | | | | | | |
| | 9 | a) | A company wants to go for financing its project through certain debit and equity. Suggest the preferred debt and equity sources that company has to plan and mention its advantages. | | | | | CO3 | PO11 | 8 |
| | | b) | Outline the features of venture capital and its advantages. | | | | | CO 1 | PO 1 | 6 |
| | | c) | Explain the need for working capital in any project or business | | | | | CO 1 | PO 1 | 6 |
| | | | OR | | | | | | | |
| | 10 | a) | Explain features of debentures and bonds as debt based financing | | | | | CO 1 | PO 1 | 6 |
| | | b) | Identify the different methods of working capital advances that the commercial banks offer and mention the terms and conditions for processing the same. | | | | | CO 1 | PO 1 | 8 |
| | | c) | PSI P Ltd runs ice cream company. Company has made good turnover and profits. However it is experiencing financial strain due to more market demand in summer. Currently company needs equipment costing 1crore for its packaging department which is required during three months of summer and they decide not to go for investment on this equipment as asset. Suggest the suitable financing method that is more appropriate in this case and give your reason. | | | | | CO3 | PO11 | 6 |
