CBCS SCHEME

18ME745

Seventh Semester B.E. Degree Examination, Feb./Mar. 2022
Project Management

Time: 3 hrs.   Max. Marks: 100

Note : 1. *Answer any FIVE full questions, choosing ONE full question from each module.*
2. *Use of Statistical tables permitted.*

Module-1

1 a. Define Project. Explain the different Financial Analysis models used for selection of Projects. **(10 Marks)**
   b. Explain the Project Life Cycle, with a sketch indicating the effort level required at each stage. **(10 Marks)**

OR

2 a. Discuss the different knowledge areas choosen by PMBOK. **(10 Marks)**
   b. Explain various Projects Selection methods. **(10 Marks)**

Module-2

3 a. Define WBS. Explain the different formats for constructing WBS, with a suitable example. **(10 Marks)**
   b. With a suitable example, explain the steps involved in defining a Project Scope. **(10 Marks)**

OR

4 a. Define Project Scheduling. What is the purpose of a Project Schedule? Discuss the historical development. **(10 Marks)**
   b. What is Gantt Chart? Discuss , how it is used in Project Management. **(10 Marks)**

Module-3

5 a. Discuss the Project team composition issued to be considered when selecting team members. **(10 Marks)**
   b. Explain the ability needed to correctly resource a project by a Project Manager. **(06 Marks)**
   c. What is Project Budget? Why you need a Project Budget? **(04 Marks)**

OR

6 a. With a flow chart, explain DMAIC process for achieving quality improvement. **(10 Marks)**
   b. Explain the basic quality tool for efficient Project Management. **(10 Marks)**

Module-4

7 a. What do you mean by Balanced Scorecard approach to Project determination? **(10 Marks)**
   b. Explain the common reasons for terminating the Project early. **(05 Marks)**
   c. Briefly explain the Post Project activities of the Project Management. **(05 Marks)**

OR

8 a. Define Supply Chain Management? Explain the four areas involving in Supply Chain Project Management (SCPM). **(10 Marks)**
   b. What do you mean by Knowledge Management? Define Partnering and explain Strategic Partnering. **(10 Marks)**

Module-5

9 a. Explain the errors which would likely to occur during drawing of network diagrams.

(06 Marks)

b. The table below represent the information related to Project, for which the direct cost is Rs 100 per day.

Activity	1-2	1-4	1-3	2-4	3-4	2-5	4-5
Normal time (days)	4	6	2	5	2	6	4
Normal cost (Rs)	120	300	60	300	200	230	200
Crash time (days)	3	4	1	3	2	5	2
Crash cost (Rs)	180	500	120	500	200	350	480

i) Draw Network diagram.
ii) Find Normal duration and Normal cost of the Project.
iii) Calculate the Optimum duration and Minimum Project Cost.
iv) If all activities are crashed to the maximum possible extent, what will be the project duration and cost?

(14 Marks)

OR

10 a. Write a short note on AoA and AoN diagrams.

(06 Marks)

b. The following table shows the jobs of a network along with their estimation in days.

Job	1-2	1-3	1-4	2-5	3-5	4-6	5-6
t_o	1	1	2	1	2	2	3
t_m	1	4	2	1	5	5	6
t_p	7	7	8	1	14	8	15

i) Draw Network diagram.
ii) Compute the expected duration and variance of each activity.
iii) Identity the critical path.
iv) Calculate the variance and standard deviation.
v) What is the Probability of Completion of the Project :
　　a) 4 days earlier than expected　　b) Not more than 4 days later than expected.

(14 Marks)

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