

BE - CIVIL / Sem - VIII / R19 / SH-2025 / 25-08-2025

Time: 3-hour

Max. Marks: 80

N.B. 1) Question No. 1 is compulsory.

Q.P. Code : 85903

- 2) Attempt any three questions from the remaining questions.
- 3) Figures to right indicate full marks.
- 4) Assume suitable data, if necessary.

Q1. Write short notes on the following (Any Four)

20

- (a) Role of project manager
- (b) Project portfolio process
- (c) Work Breakdown structure
- (d) Project procurement management
- (e) Ethics in projects

Q.2 (a) Explain conflicts in Project Management. Why negotiations are important in Project Management? 10

(b) A project requires an initial investment of Rs. 30000 in a project. The project generates annual cash inflows of Rs. 10000, Rs. 12000 and Rs. 15000 for 3 years respectively. If rate of discount is 12 % per annum. Calculate Net Present Value. Comment on whether project should be accepted or rejected. 10

Q.3 (a) A project has a list of tasks to be performed whose time estimates are given in table as follows. 10

Activity	Activity Name	Time estimates in days		
		$t_o$	$t_m$	$t_p$
1-2	A	4	6	8
1-3	B	2	3	10
1-4	C	6	8	16
2-4	D	1	2	3
3-4	E	6	7	8
3-5	F	6	7	14
4-6	G	3	5	7
4-7	H	4	11	12
5-7	I	2	4	6
6-7	J	2	9	10

Draw the project network diagram. Determine the critical path for the activities.

(b) What is project sponsor and project charter? Summarize four stages of team development and growth. 10

85903

- Q.4 (a) Differentiate between the Functional, Pure Project and Matrix organizations. 10  
(b) Who are the stakeholders in projects? Why communication is most important part of project manager's job? 10
- Q.5 (a) What is top down and bottoms up budgeting? Explain GANTT chart with suitable example. 10  
(b) Explain Goldratt's critical chain in project planning. 05  
(c) A project to develop a country park has an actual cost of Rs. 350000, a planned cost of Rs. 475000 and a value completed of Rs. 300000. Find the cost and schedule variance and three indices. 05
- Q.6 (a) Draw an Earned value chart. Describe the three variances of it and explain their significance. 10  
(b) List and briefly describe the ways project may be terminated. What are some non-technical reasons for project termination? 10

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