

**[Time: 3 Hours]**

**[ Marks:60]**

Please check whether you have got the right question paper.

- N.B:
1. Question.No.1 is compulsory.
  2. Attempt any four out of remaining six questions
  3. Begin new answer in a new page
  4. Use of normal calculators are allowed

Q1 10\*2=20 marks

- a. In a government project government has decided to release funds totaling to Rs. 156 lakhs as under: first year Rs. 69 lakhs, second year Rs. 68 lakhs and third year Rs. 19 lakhs. The project consists of following activities: Expenses are evenly spread every month as under.

Activity	duration in months	Total cost Rs. Lakhs	Cost per month Rs. Lakhs
1-2	13	26	2
1-3	12	60	5
2-4	2	20	10
3-4	8	20	2.5
2-5	15	15	1
4-5	2	15	7.5

Based on above data draw network diagram, find critical path. Prepare money requirement table month/year wise. Is it possible to accept government funds schedule without time over run.

- b. Write ten methods to finance an infra-structure project?

2. Attempt any two (5\*2=10)

2 (a) Explain the use and need of sensitivity analysis in a project?

2(b) From following project details calculate sensitivity of the project to project cost, annual cash flow, cost of capital: Project cost Rs. 16 lakhs, annual cash flow: Rs.5 lakhs for 5 years. Cost of capital 15 pct. IRR 17 pct.

2 (c) Project cost 12 lakhs, annual cash flow Rs. 4 lakhs for 4 years cost of capital 14 pct., IRR is 18 pct. find most sensitive factor that affects the project.

3. Attempt any two (5\*2=10)

3 (a) Explain cost variance, cost performance index, schedule performance index

3 (b) Given Budgeted cost of work scheduled Rs. 15 lakhs and budgeted cost of work performed Rs. 14 lakhs. Actual cost of work performed Rs. 16 Lakhs. Budgeted cost of total work Rs. 25 lakhs. Calculate the three indices as per question 3a.

3 (c) what are S curves. Explain the uses?

4. Attempt any two (5\*2=10)

4 (a) what are interest service coverage ratio, and debt service coverage ratio? Explain its uses to a project financial analyst?

4 (b) Calculate above two ratios for the following data: Rs. Lakhs

particulars	Year 1	Year 2	Year 3	Year 4	Year 5
Profit after tax	960	1150	1270	1300	1370
depreciation	310	300	280	270	240
tax	250	406	508	550	598
Interest on loan payable	324	250	174	100	32
Repayment of term loan	344	344	344	344	344

4 (c) Explain difference in evaluation of projects using NPV and IRR?

5 (a) Project outlay Rs. 60 lakhs, salvage value Rs. 6 lakhs. Cost of capital 12 pct. Working capital required Rs. Six lakhs, returnable after six years, life of the project is six years. Yearly revenue generated RS. 28 lakhs will increase by Rs. 4 lakhs every year. Yearly cost of the project is Rs. 15 lakhs excluding SLM depreciation and taxes at 35 pct. develop a cash flow model and find NPV of the project?

**OR (10 marks each)**

5 (b) Explain ten methods of financial evaluation of projects?

6. Write any two short notes :( 2 \*5=10)

a. WBS

b. Resource leveling

c. time over run and cost over run