UNIVERSITY OF PETROLEUM & ENERGY STUDIES
DEHRADUN
End Semester Examination – May, 2018

Program/course: MBA (PM) + MBA (UISC)   Semester   : II
Subject: Project Management & Contract Administration   Max. Marks   : 100
Code   : LSCM 8001   Duration   : 3 Hrs.
No. of page/s: 03

Note: Use of Calculator & graph paper allowed

SECTION – A   (20 Marks)

Fill in the blanks. Each blank carries 1 marks.

1.1 A project is a series of _____ directed to accomplishment of a desired objective.

1.2 If the optimistic time estimate of an activity is 14 days, pessimistic time estimate is 24 days, expected duration of the activity is 17 days then most likely time estimate is _____.

1.3 According to PMBOK, there are total _____ processes.

1.4 If CPI of a project is more than 1.0 then the project is _____ budget.

1.5 In CPM both activities and their time duration are _____ (deterministic/probabilistic).

1.6 The expected project completion time is 30 weeks; the probability of being completed in 31 weeks will be _____ than 0.5.

1.7 The critical activities in a project network have _____ slack time.

1.8 If SPI of a project is less than 1.0 then the project is _____time schedule.

1.9 PMBOK stands for _____.

1.10   If cost of capital = IRR, then Net Present Value = _____.

1.11   The shape of time phased cumulative cost curve is _____.

1.12   If the unit cost of painting is Rs. 100/sq. meter then the total cost of painting a wall (10 m. X 100 m.) will be _____.

1.13   The activities are shown as _____ bars in Gantt chart.

1.14   Given that: Sum of all activities direct costs= Rs. 40,000; Indirect Cost= Rs. 1000/day; Project Duration= 10 days; Total Project Cost= _____.

1.15   _____ Reserves are not included in the project budget.

1.16   The installation cost of a plant with capacity 1000 tons/annum is Rs. 100 Crores, the installation cost of a similar plant with capacity 2000 tons/annum will be _____.

1.17   The overall project costs broken down into the various major heads like materials, labour, equipment etc. is known as _____.

1.18   The payback period of a project with initial investment of US$ 10 Million and subsequent annual cash inflows of Rs. 2 Million per annum for next 10 years is _____.

1.19   _____ is acquiring of goods and services required for the project from outside the performing organization.

1.20   If the work worth Rs. 10 Lakhs is done in Rs. 12 Lakhs then Cost Variance = _____.

SECTION – B   (20 Marks)

Write short notes on any four of the following. Each carries 5 marks.

2.1 Project Process Groups

2.2 Project Management Knowledge Areas

2.3 Risk Register

2.4 Project Quality

2.5 Contracts

SECTION – C   (30 Marks)

Attempt any 2 questions. Each question carries 15 marks.

3.1 Desrcibe the various phases of project life cycle with the help of project life cycle curve.

3.2 What are the two components of business case analysis? Explain them in brief.

3.3 What does a project manager typically do? What are the types of competencies required for a project manager?

SECTION – D   (30 Marks)

Attempt any 2 questions. Each question carries 15 marks.

3.1 Prepare time phased cumulative cost curve for the following project:

Activity	Predecessors	Duration (Weeks)	Activity Cost (Rs. Lakhs)
A	-	8	8
B	-	2	8
C	B	5	10
D	C	6	9
E	A	4	12
F	D,E	4	6
G	D,E	1	1
H	F	3	6

3.2 Consider the data of a project shown in the following table.

Activity	Immediate predecessor(s)	Time (weeks)		Cost (Rs.)	
		Normal	Crash	Normal	Crash
A	-	8	6	8000	8600
B	-	5	4	6000	6300
C	-	10	8	12000	13600
D	A	6	5	8000	8400
E	C	7	7	10000	-
F	D	9	7	14000	15100
G	B,E	3	2	4000	4200

If the indirect cost per week is Rs. 7000, find the optimal crashed result of the project network.

3.3 Following are details of a project that is planned to be completed in one year at a total cost of Rs.12 lakhs. The project is being reviewed at the end of month 4.

End of Month	Planned Value*	Actual Cost*	Earned Value*
1	100	100	50
2	200	250	150
3	300	400	201
4	400	550	300

(*All figures in Rs. '000)

1. Calculate the schedule variance& cost variance at month 4. Forecast the time & cost of project completion based on the current performance.

2. Forecast the time & cost of project completion if the efficiency improves to 100% from the 5th month onwards.

3. What should be the targeted cost & schedule efficiency so as to complete the project in time and budget?

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