

ADMISSION NUMBER											

School of Business
Bachelor of Business Administration
Semester End Examination - May 2024

Duration : 180 Minutes
Max Marks : 100

Sem VI - D1UA602T - Project Management

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

- 1) Apply your knowledge of project parameters within the context of initiating a new software development project. K3 (6)

- 2) Imagine you've been assigned to oversee the construction of a new bridge in a busy urban area. Due to various constraints such as limited resources and strict regulatory timelines, it's crucial to efficiently manage the project schedule. Apply the Critical Path Method (CPM) to identify key activities, optimize resource allocation, and ensure timely completion of the bridge construction while minimizing disruptions to traffic flow. K3 (9)

- 3) List any four tools or techniques of Project Management . K4 (4)

- 4) Examine the methods and techniques you employ to identify risks in a project? Analyze the importance of proactive risk identification and provide examples of specific tools or approaches you might use. K4 (8)

- 5) Compare between Positive risk and Negative Risk in project management. Examine how positive risks, also known as opportunities, can be leveraged to benefit a project, while negative risks, or threats, pose potential challenges. K4 (8)

- 6) Imagine you are a forecasting analyst working for a retail company that sells electronic gadgets. The company wants to improve its inventory management by implementing a forecasting technique. The management has requested you to calculate a 3-year moving average to predict future sales accurately. Interpret the 3-year moving average, providing a smoothed trend for better sales forecasting. K5 (10)

3-year Simple Moving Average forecast

year	1	2	3	4	5	6	7	8	9	10
Sales	30	25	35	25	20	30	35	40	30	45

7) A) Estimate the time required to complete the following project.(7 marks) K5 (10)

B) Determine the critical activities. (3 Marks)

Activity	Predecessor Activity	Optimistic time estimate (to days)	Most likely time estimate (tm days)	Pessimistic time estimate (tp days)
A	-	2	4	6
B	A	3	6	9
C	A	8	10	12
D	B	9	12	15
E	C	8	9	10
F	D, E	16	21	26
G	D, E	19	22	25
H	F	2	5	8
I	G	1	3	5

- 8) The following information is known about a project. K5 (15)
- 1- Determine the AOA network for this project. (7 Marks)
 - 2- Determine the Critical Path for the project? (5 Marks)
 - 3- Determine the Project Duration? (3 Marks)

Number	Activity	Predecessor	Duration
1	Design house and obtain financing	--	3 months
2	Lay foundation	1	2 months
3	Order and receive materials	1	1 month
4	Build house	2,3	3 months
5	Select paint	2, 3	1 month
6	Select carpet	5	1 month
7	Finish work	4, 6	1 month

- 9) In the context of project management, how can linear regression be employed for demand forecasting? Discuss the specific steps involved in utilizing linear regression to predict project demand. Highlight the key considerations and challenges in applying linear regression to project demand forecasting. K6 (12)

Hindustan Corporation awarded a prestigious contract to SRM industries on 1 January 2007. The project was a eleven-month endeavour to develop a new product for Hindustan Corporation. While awarding the contract, SRM Industries was informed that if the initial R&D effort was satisfactory, a single- source production contract would follow for at least seven years, and this contract would be negotiated on a year-to-year basis.

Rakesh Sharma, a young and enthusiastic engineer, was appointed project manager. He was given eight very efficient people for his project office. In addition, there were six people from operations, as functional project team members.

The progress was fine till 31 July 2007, when Hindustan Corporation informed SRM Industries that they were envisaging a cash flow problem, and hence, a follow-on contract could not be awarded till the beginning of the next financial year (April 2008).

Rakesh Sharma now had a big problem. He did not want to damage the project office and let the key people of the project be assigned to some other project, as there was no surety that they would be available at the beginning of the follow-on contract.

Rakesh estimated that Rs 1 lakh per month was required to maintain his key personnel for the slow-down period of 4 months (December 2017 to March 2008). With the Puja and Diwali holidays of 18 days and some short-term assignments in hand, he estimated that Rs 2-8 lakh were needed neces fund.

Rakesh conveyed to the programme team members that they would have to generate a management reserve of Rs 3 lakh. The contract being a firm fixed-price contract, all schedules for the projers office and project team were extended to 31 March 2008. Rakesh also kept his boss Shankar Choudhury Informed about his plans.

Shankar initially agreed to Rakesh's approach. But Just before the Pujas, he advised Rakesh to book the management reserve as excess profit, and close the contract as per the original schedule of 30 November 2007. He informed him that this would help increase their Puja bonus. He also assured Rakesh that the key personnel would be reassigned to the follow-on project when it materialized. Rakesh was furious

Discussion questions:

1. Discuss the reasons why Rakesh was furious? Analyze the different aspects of project control in this caselet?
2. Propose some remedial measures for the above crisis. Compare this with any other organizational project that you may have come across .