



JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA

PGDM / PGDM (M) / PGDM (SM)

SIXTH TRIMESTER (BATCH 2022-24)

ENDTERM EXAMINATION, APRIL 2024

Set-1

Course Name	PROJECT MANAGEMENT	Course Code	20530
Max. Time	2 Hours	Max. Marks	40 MM

**INSTRUCTIONS:**

- A. This is a Closed Book examination
- B. Attempt all questions.
- C. Use of calculators permitted.
- D. Answers should be to the point, avoid unnecessary long answers.
- E. Q1, Q2 & Q3 is based on given case.

**Case- Web-Based Reporting & Information System at Zenith Office Designs**

Zenith Office Designs based in US has large number of sales representatives who sell office furniture to major corporations in US. Each sales representative is assigned to a specific state of US. To enable the management to monitor the amount of sales for each representative for each state, Zenith Office Designs has decided to build a Web-Based Reporting & Information System that will track sales amount, discounts offered, inventory, pending orders, field visits by sales representatives, client enquiries generated etc.

Zenith Office Designs has outsourced the development of Web-Based Reporting & Information System to ABC Corporation, an IT and Digital solutions provider consulting company based in Bangalore, India. This is a time constrained project as Zenith Office Designs wants the new system to be operational before their next BOD meeting. Zenith Office Designs is a promising client of ABC Corporation and successful completion of this project may lead to future business opportunities for of ABC Corporation. As project must be completed with tight time schedule, ABC Corporation has appointed its senior consultant – Mr. Srinivas as the Project Manager of **Web-Based Reporting & Information System Project**. HR of ABC Corporation has allocated 6 experienced team members to the project on full-time basis. The Team members are – Tripti, Riya, Usha, Dinesh, Ajay, Farhan and Harish.

Srinivas and his team have created the Work-Breakdown structure. Thereafter, the team have developed the Project Activity List. The team also determined activity resource requirements, activity duration estimates and activity cost estimates as detailed below-

Activity ID	Activity	Immediate Predecessor	Estimated Duration (weeks)	Manpower Resources Allocated	Direct Labor Costs (\$)	Material Costs (\$)	Travel Costs (\$)
A	Study Agreement and Existing Information System	--	2	Srinivas, Tripti	4440		
B	Gather Data	--	3	Dinesh	3300		
C	Prepare Problem Definition Report	A,B	1	Tripti	1000		
D	Interview Users	C	3	Farhan	6300		4500
E	Define User Requirements	D	2	Farhan	1600		
F	Prepare System Analysis Report	E, A	1	Harish	480		
G	Design Input and Output Interface, Finalise Software and Hardware Requirements	F	4	Riya	8400		
H	Develop and Evaluate Database	F	2	Dinesh, Usha	6600		
I	Develop System Development Report	G,H	1	Ajay, Harish	1700		
J	Install & Test Software	I	1	Usha	7500	7500	
K	Install & Test Hardware	I	2		9600	14000	
L	Test Network	I	1	Srinivas, Tripti	5500		
M	Conduct User Trainings	J	1	Farhan, Usha	6000	500	11000
N	Launch Web-Based Reporting & Information System	K,L	1	Srinivas, Tripti, Harish	3500		

**Q1**

- Construct a PDM network diagram for the project.
- Analyse the network using Critical path Method (CPM) and determine the completion time of the project. Also, determine the critical path.

**(Marks: 2+8)**

**Q 2**

- Determine the Total Project Cost.
- Construct a Cost Baseline of the project till 13<sup>th</sup> week.

**(Marks: 2+8)**

**Q 3** The table below depicts the status report of the project at the end of week 11.

Activity ID	Activity	Immediate Predecessor	Estimated Duration (weeks)	% Complete	Actual Expenditure (\$)
A	Study Agreement and Existing Information System	--	2	Completed	4000
B	Gather Data	--	3	Completed	3200
C	Prepare Problem Definition Report	A,B	1	Completed	1100
D	Interview Users	C	3	Completed	11000
E	Define User Requirements	D	2	90% complete	1500
F	Prepare System Analysis Report	E, A	1	80% complete	400
G	Design Input and Output Interface, Finalise Software and Hardware Requirements	F	4	20% complete	2500
H	Develop and Evaluate Database	F	2	40% complete	3200
I	Develop System Development Report	G,H	1	Not Started	
J	Install & Test Software	I	1	Not Started	
K	Install & Test Hardware	I	2	Not Started	
L	Test Network	I	1	Not Started	
M	Conduct User Trainings	J	1	Not Started	
N	Launch Web-Based Reporting & Information System	K,L	1	Not Started	

Note- As a practice, ABC Corporation distributes work scheduled and budget on a pro-rata basis.

- Using Earn Value Management (EVM) technique to monitor and control the project, evaluate PV, EV, CV, SV of the project as on end of 11th week.
- Predict the completion time of the project and project cost at completion.

(Marks: 8+2)

**Q 4** Discuss the following:

- Project Cost Estimation Techniques
- Work Breakdown Structure (WBS)

(Marks: 5+5)