

PGDM 2017-2019

Project Management (DM-544 /IB-517)

Trimester – V End-Term Examination: December 2018

Time allowed: 2.5 Hours

Max Marks: 50

Roll No: _____

Section A:

Max. Marks: 15

Short answers: Answer any 3 out of 5 questions below. Each question carries 5 marks. Each answer about 100 words.

A-1: What is the full form of WBS? How does the WBS differ from the project network?
How are WBS and project networks linked?

A-2: What similarities and differences exist between a traditional project manager and a Scrum master?

A-3: Present six reasons scheduling resources is an important task.

A-4: Why is the traditional project management approach less effective when project scope and technology are not well known?

A-5: What are the six elements of a typical scope statement?

Section B

Max. Marks: 20

Long answers: Answer any 2 out of 3 questions below. Each question carries 10 marks. Each answer about 200 words.

B-1: Draw a project network from the following information.

Activity	Predecessor	Duration
A	None	5
B	A	4
C	A	7
D	A	4
E	B	11

F	C	7
G	C, D	8
H	E, F	3
I	G	10
J	H, I	5

Work out the critical path. Activities B and F can be shortened to a minimum of 2 weeks. Which activity would you shorten to reduce the project duration by 2 weeks? Why? Is it possible to shorten the critical path further and save money. Explain how.

B-2: You are in charge of organizing an Inter B-Schools conference on “Emerging Markets”. Your school does not have an appropriate auditorium to conduct the event. You have to hire a facility outside BIMTECH that can seat an audience of up to 1,000 delegates.

QB2.1 Develop a scope statement for this project that contains examples of all the elements. Assume that the event will occur in 5 weeks and provide your best guess estimate of the dates for milestones.

QB2.2. What would the priorities likely be for this project?

B-3: Why is it important for project managers to resist changes to the project baseline? Under what conditions would a project manager should make changes to a baseline? When should a project manager not allow changes to a baseline?

Activity	Predecessor	Duration
A		4
B	A	3
C	A	4
D	A	4
E	B	3

Case Study:

The Ministry of Statistics and Programme Implementation (MoSPI) as an apex-level central monitoring organization of the Government of India is mandated for monitoring Central Sector Projects costing Rs 150 crore and above.

The Quarterly Project Implementation Status Report (QPISR) for the 1st quarter of 2017-18 (April-June, 2017), comprises 1265 projects being implemented by the various Ministries/ Departments/CPSUs of GoI. The anticipated completion cost of these 1265 projects is reported to be of the order of about Rs. 17,58,000 crores.

The sector-wise status of projects

1: Atomic Energy Sector

4 projects belong to the Atomic Energy Sector.

2 projects have an overall delay in the range of 25 to 60 months and 1 project have delay of more than 60 months. 1 project doesn't have proper date of commissioning.

2: Fertilizers Sector

2 projects belong to the Fertilizers Sector. Out of these two projects 1 project is on schedule and 1 is delayed by 10 months and is facing a cost overrun of 5.9%

Project with Cost Overrun: There are two projects having cost overrun. Total original cost of these projects is 680.64 crore, and anticipated cost is 703.44 crore reflecting a cost overrun of 3.3%

Project with both time and cost overrun : This project is facing cost overrun of 5.9% and time overrun of 10 months

3: Mines Sector

4 projects belong to the Mines Sector.

Out of projects, 2 projects are on schedule, and 2 projects do not have fixed dates of commissioning.

4: Steel Sector

35 projects belong to the Steel Sector.

Out of 35 projects, 11 projects are on schedule, 19 projects are delayed and 5 projects are without proper date of commissioning.

Projects with time overrun : 16 projects have an overall delay in the range of 1 to 24 months, 2 projects have 25 to 60 months and 1 project is delayed by more than 60 months.

Projects with cost overrun : 5 projects that are facing cost overruns to the tune of about 35%.

Main reasons of delay:

Delay in obtaining Environmental clearance and Forest clearance as well as delay in permitting mining in forest areas, Delay in Land acquisition, R & R issues, Law & Order problem, Delay in equipment supply, Delay due to adverse geo-mining conditions and Fire

5: Petrochemicals sector:

1 project belongs to the Petrochemicals Sector.

This project is facing cost overrun to the extent of 82.5% from the original cost. The project doesn't have proper date of commissioning.

Main reasons of delay and cost overrun:

Poor quality of DFR, Delay in appointment of Project team & EPMC, Delay in finalization of Technology Licensors, Key personnel not placed on time both by GAIL & EPMC, Site /Location

not surveyed, Post PIB / CCEA approval Changes in Technology / Engineering / Operational / Utility requirements, Delay in award of Piling works, Ambiguity in ownership and lack of adequate commitment for the project during the early stages of the implementation period after CCEA's approval.

6: Petroleum Sector

95 projects belong to the Petroleum Sector: 37 projects are delayed and 9 projects are without date of commissioning.

There are 18 projects that are facing cost overruns.

There are 11 projects reporting both time and cost overrun to the extent of 18.5% from the original cost and time overrun ranging from 12 to 70 months.

Reasons of delay:

Delay due to lack of expertise in high technology fields like deep water exploration, Changes in scope of work, Limited pool of expert vendors Environment clearances, Delay in import of high technology equipments, forest clearance

7: Health and Family welfare sector:

13 projects belong to the Health and Family Welfare Sector.

4 projects are delayed and 5 projects do not have fixed the date of commissioning.

Projects with time overrun: 4 projects are facing time overruns and 1 project of 6.3%.

Main reasons of delay:

Fund Constraint, Delay in civil works, Local protest for demanding local employment, Delay in release of fund

8: Railways Sector

348 projects belong to the Railways Sector.

34 projects are delayed. 274 projects do not have date of commissioning.

Main reasons of delay:

Lack of funds, Problems in land acquisition, Forest land clearance, Geographical surprises, Increase/change in scope of work, Delay in shifting of utilities by state govt., Adverse law and order situation at places.

9: Road Transport & Highways Sector

487 projects belong to the Road Transport & Highways Sector.

104 projects are delayed. 282 projects do not have date of commissioning.

Main reasons of delay:

Land Acquisition and Rehabilitation & Resettlement Law & Order Problem, Delayed due to Environment/Forest/Wild Life and Security Clearances Geological Uncertainties, Increase in/Change of Scope of Work, Non-Availability of Good Contractors/ Contractual Disputes/ Non-Performance of Contractor/Poor Participation of Contractor,

10: Shipping and Ports Sector

8 projects belong to the Shipping and Ports Sector. 2 projects are delayed and 2 projects are without date of commissioning. 2 projects facing time overrun of 96-141 months. Overall cost overrun of 145.8% in these delayed project.

Main reasons of delay :

Delay in obtaining Environmental clearance and Forest clearance as well as delay in permitting mining in forest areas,, Delay in Land acquisition, R & R issues, Law & Order problem, Delay in equipment supply, Delay due to adverse geo-mining conditions and Fire

11: Urban Development sector

34 projects belong to the Urban Development Sector. 21 projects are delayed and 6 projects do not have date of commissioning.

Main reasons for delay :

Delay in initial handing over of site., Delay in design and Engineering

New Management Initiatives and System Improvements

New functionalities have been added to OCMS in order to enable better communication between the Administrative Ministries and the project implementing agencies. On the specific request of the Department of Public Enterprises a module to monitor the milestones/projects under the MoU system has been added.

The Ministry has advised all States to constitute a Central Sector Projects Coordination Committee (CSPCC) under the chairmanship of their Chief Secretaries to resolve project related problems faced by Central Sectors PSUs in project implementation in their States.

General Improvements in Project Management.

Suggestions, from time to time, and various remedial measures to be adopted for better implementation of projects, has also been discussed and emphasized at various forums. The Division is engaged in examining the causes of time and cost overruns in projects and identifying bottlenecks during implementation. It also examines specific projects to fix responsibility for time/cost overruns.

Other Management Initiatives and System Improvements

The status of implementation of projects is continuously reviewed by representatives of the Ministry of Statistics & Programme Implementation, NITI Aayog, Cabinet Secretariat and the Prime Minister's Office. Particular attention has been paid to major factors responsible for time and cost overruns, like delay in land acquisition, fund constraints, delay in award of contracts and civil works, supply of equipments, shifting of utilities, change of scope etc. Efforts have also been made to identify system deficiencies relating to project formulation, functioning of Empowered Committees, Contract Management System and Arbitration etc. Accordingly, some policy issues have been identified to minimize delays. Some of the recent management initiatives taken up by the MOSPI are:

Setting up of Standing Committees: The institution of Standing Committees in each Ministry to review the time and cost overruns in projects and to fix responsibility thereto has been made more effective by introducing a system of furnishing an Action Taken Report (ATR). Submission of ATR has now been made mandatory for Revised Cost Estimates (RCE) approval by EFC/PIB/CCEA.

Re-designing and redevelopment of OCMS: The Ministry is in the process of re-designing and redeveloping the OCMS. The existing OCMS is now being upgraded in .NET and SQL under the supervision of NIC to cater the requirement of various stakeholders. The new software will be more user friendly and will have updated features like dashboards, graphics etc.

Monitoring of Infrastructure projects of State/UT Government: It has been decided to offer the OCMS of the MoSPI to the State Governments for use in monitoring the progress of State Sector Infrastructure Projects at their level. The MoSPI will also extend training and handholding to the concerned officers of the State Governments in the use of the project-monitoring software/mechanism. The State Governments will free to decide whether they would like to use the OCMS or some other package for the purpose of project-monitoring of the State Sector Infrastructure Projects.

Q1: As majority of the major projects are commissioned or being commissioned in one of the Indian states, what did the MoSPI (Ministry) advise all the State Governments

Q2: From the reasons for delays in executing projects listed under each of the sectors, list the five major reasons/causes.

Q3: If you are made the convener of a central govt. committee to suggest some more effective measures for assuring timely completion of projects, what would be your five major recommendations.