

# INDIAN STATISTICAL INSTITUTE

Bangalore Centre

Program:-MS (Quality Management systems)

## Course:-Project Management

**Instructions to the Candidates:** The question paper Consists of three Parts. Part –A is objective type questions meant to test your conceptual understanding of the subject taught to you. Part B Consists of questions to test your ability to get into the subject in detail. Part C Consists of analytical questions and this tests your ability to apply the knowledge to real world problem situations and scenario's. Part A has a weightage of 10 marks and is compulsory. Part B consists of 6 questions with equal weightage and you need to answer any four it will be evaluated for a total of 20 Marks. Part C consists of three questions out of which you will have to attempt two case study problems. Each question in Part C has weightage of 10 Marks.

Q. No. 1	Part A(Question numbers 1 (i to x) Answer all the questions in this part.	Marks
i.	Mention the triple constraints in the context of project management.	(01)
ii.	Define the term project as per the Project Management Institute.	(01)
iii.	What are the five process groups identified in the Project Management Framework?	(01)
iv.	Mention any four traits/ characteristics that a project manager must possess.	(01)
v.	Name any two organizations that are considered successful in the area of project management.	(01)
vi.	List out any two critical success factor (CSF) for the project management to be successful.	(01)
vii.	List any two critical inputs for developing the scope plan for a typical project.	(01)
viii.	Mention any two important aspects of a Project Charter document.	(01)
ix.	What is a Project Management plan?	(01)
x.	Illustrate a typical project network diagram with five activities depicted on it.	(01)

Q. No.	Part B (Question Numbers 2 to 6) (Answer any four of the six full questions )	Marks
2.	Define a project. You are given the responsibility of organizing the foot ball tournament in your institution. Can this situation be considered as a project? Why or Why not? Substantiate your answer.	(05)
3.	List and briefly explain any five of the Key challenges in the project environment. Differentiate between project management and operations management.	(05)
4.	What are the key skills that the project manager must possess in order to be effective in his/her role? Which among these skills should help him/her in correctly formulating the scope of the project?	(05)
5.	What are the triple constraints in the context of project management? Represent this in the triangle structure. Take the example of developing a new product for an emerging market segment as a project and explain how the triple constraints operate.	(05)
6.	Write down the Project Charter in the standard format for the project that has the objective of successfully designing and building a Steel bridge in a metropolitan city. (Highlight the Business Case and Project Statement of work.)	(05)

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Q. No.	PART C (Question Numbers 7 to 9) (Answer any one of the three full questions)	Marks																					
7.	<p>The following are the activities involved in redecorating a room:- <b>Prepare materials</b> -Buy paint, Buy a ladder ,Buy brushes/rollers ,Buy wallpaper remover. <b>Prepare room</b> Remove old wallpaper, Remove detachable decorations, Cover floor with old newspapers, Cover electrical outlets/switches with tape, Cover furniture with sheets .<b>Paint the room and Clean up the room</b> -Dispose or store left over paint ,Clean brushes/rollers, Dispose of old newspapers ,Remove covers. Develop the Work Breakdown Structure for this project situation. Explain how this WBS will help the project managers in developing a scope plan. What are the other uses of WBS?</p>	10																					
8.	<p>A Social Project manager is faced with a project with the following activities:</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 15%;">Activity-id</th> <th style="width: 55%;">Activity - Description</th> <th style="width: 30%;">Duration</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1-2</td> <td>Social Work Team to live in Village</td> <td style="text-align: center;">5 Weeks</td> </tr> <tr> <td style="text-align: center;">1-3</td> <td>Social Research Team to do survey</td> <td style="text-align: center;">12 Weeks</td> </tr> <tr> <td style="text-align: center;">3-4</td> <td>Analyze results of survey</td> <td style="text-align: center;">5 Weeks</td> </tr> <tr> <td style="text-align: center;">2-4</td> <td>Establish Mother &amp; Child Health Program</td> <td style="text-align: center;">14 Weeks</td> </tr> <tr> <td style="text-align: center;">3-5</td> <td>Establish Rural Credit Program</td> <td style="text-align: center;">15 Weeks</td> </tr> <tr> <td style="text-align: center;">4-5</td> <td>Carry out Immunization of Under Fives</td> <td style="text-align: center;">4 Weeks</td> </tr> </tbody> </table> <p>Draw the arrow diagram, using the helpful numbering of the activities, which suggests the following logic: Unless the Social Work team lives in the village, the Mother and Child Health Program cannot be started due to ignorance and superstition of the villager's .The Analysis of the survey can obviously be done only after the survey is complete. Until rural survey is done, the Rural Credit Program cannot be started .Unless Mother and Child Program is established, the Immunization of Under Fives cannot be started.</p> <ul style="list-style-type: none"> <li>▪ Calculate the Earliest and Latest Event Times</li> <li>▪ Tabulate through Analyzing the Activities using CPM.</li> </ul>	Activity-id	Activity - Description	Duration	1-2	Social Work Team to live in Village	5 Weeks	1-3	Social Research Team to do survey	12 Weeks	3-4	Analyze results of survey	5 Weeks	2-4	Establish Mother & Child Health Program	14 Weeks	3-5	Establish Rural Credit Program	15 Weeks	4-5	Carry out Immunization of Under Fives	4 Weeks	10
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9.	<p>The project life-cycle enables the project manager to look at the total picture (from the cradle to the grave).Prepare a short presentation highlighting how the project life-cycle can be applied to a book Publishing project. Consider the following:</p> <ol style="list-style-type: none"> <li>1. The phases of the life-cycle, particularly if they are different to the classic four phase model.</li> <li>2. The product life-cycle from concept to disposal. Outline how design considerations at the outset influence how upgrades and refits (new editions) happen downstream in the life-cycle.</li> <li>3. As a design develops, design freezes have to be imposed to constrain the options and focus on an optimum solution.</li> <li>4. The value / changes model indicates that the cost of changes increase as the project progresses.</li> <li>5. Each phase of the project life-cycle can be subdivided into its own mini life-cycle, and further, each phase of this life-cycle can also be subdivided, and so on. Give an example how this can be applied to your Project as a method of subdivision leading to planning and control.</li> </ol>	10																					