



KIIT Deemed to be University
Online Mid Semester Examination(Spring Semester-2021)

Subject Name & Code: SPM- IT4027
Courses: Btech 6th sem

Applicable to

Full Marks=20

Time:1 Hour

SECTION-A(Answer All Questions. All questions carry 2 Marks)

Time:20 Minutes

(5×2=10 Marks)

Question No	Question Type(MCQ/SA T)	Question	Answer Key(if MCQ)	CO Mapping
Q.No:1(a)	1.What can be considered as a project? a.Routine tasks are involved b.Work is carried out in several phases c.No specific objective d.Work done for an individual	Question -1 on concept 1	b	1
	2.Project management is: a.Planning about the project b.Organising the project c.Directing the project d.Controlling the project e.All of the above	Question -2 on concept 1	e	1
	3.Taking action to remedy hold ups is: a.Organizing b.Controlling c.Monitoring d.Planning	Question -3 on concept 1	b	1
	4. What are the three corners of a project triangle which can be adjusted to which can be adjusted for meeting the objectives? a. Cost, time, effort	Question -4 on concept 1	c	1

	b. Resource, time, cost c. Scope, time, cost d. Cost, time resource			
Q.No:1(b)	The first step in Project planning is to a. determine the project constraints b. determine the budget c. select a team organization model d. establish the objectives and scope	Question -1 on concept 2	d	1
	Arrange the following steps to form a basic/general Engineering Process Model. i. Test ii. Design iii. Install iv. Specification v. Development vi. Maintain a. 2, 4, 5, 1, 6, 3 b. 4, 2, 5, 1, 3, 6 c. 2, 4, 5, 1, 3, 6 d. 4, 2, 5, 1, 6, 3	Question -2 on concept 2	b	1
	3. PRINCE II is a. A framework for project planning b. A set of project management standard c. Structured project management method d. All the above	Question -3 on concept 2	d	1
	You can identify high level project	Question -4 on concept 2	c	1

	<p>risk in which stage of Step Wise Project Planning:</p> <p>a. Identify Project Scope and Objectives</p> <p>b. Identify Activity Risks</p> <p>c. Analyze project characteristics</p> <p>d. Identify Project products and activities</p>			
Q.No:1(c)	<p>Which of the following statements is not true for ROI</p> <p>a. Return of Investment is a ratio between net income and investment.</p> <p>b. Return of Investment compares the total annual profit against the total investment</p> <p>c. Return of Investment compares the average annual profit against the total investment</p> <p>d. A high ROI means the investment's gains compare favourably to its cost.</p>	Question -1 on concept 3	b	2
	<p>Which of the following activities is not part of feasibility study/ business case</p> <p>a. Cost benefit analysis</p> <p>b. Risk assessment</p> <p>c. Requirement gathering and specification</p> <p>d. Organizational and operational infrastructure</p>	Question -2 on concept 3	c	2

	Q1) Project management is not about a)Scope Management b)Document Management c)Time Management and Risk Management d)Cost Management	Question -3 on concept 3	b	
	Project Controlling can be done with a)Programming Skills b)Drawing Skills c)Earned Value Management Techniques d)All of these	Question -4 on concept 3	c	2
Q.No:1(d)	Which model is an extension for waterfall model? A.Iterative waterfall model B.Prototype model C.V model D.Incremental model	Question -1 on concept 4	c	1
	Which one from below is a Atern/DSDM principle? A.Time boxing B.Deliver quickly C.Negotiate Business need not required	Question -2 on concept 4	a	1
	If schedule is tight for a project which approach you should use? A.Prototype B.Evolutionary C.Once shot D.Iterative	Question -3 on concept 4	b	1
	Which one is not the Limitations of extreme programming a.Reuse of existing codes b.Reliance on availability of	Question -4 on concept 4	c	1

	high quality developers c. Not meeting the deadline d. Dependence on personal knowledge			
Q.No:1(e)	Which one of the following is not the principle of Atern/DSDM a. Proper documentation b. On time delivery c. Build incrementally d. Deliver iteratively	Question -1 on concept 5	a	2
	In which approach, the project can be put aside temporarily for some time a. Agile b. Prototyping c. Evolutionary D. Incremental	Question -2 on concept 5	d	2
	Which one of the following approach accounts for limited scope for iteration a. Evolutionary b. Waterfall c. Incremental d. Prototyping	Question -3 on concept 5	b	2
	RAD and JAD are features of which model a. Incremental b. Prototyping c. Agile d. Evolutionary	Question -4 on concept 5	c	2

SECTION-B(Answer Any One Question. Each Question carries 10 Marks)

Time: 30 Minutes

(1×10=10 Marks)

<u>Question No</u>	<u>Question</u>	<u>CO Mapping</u>
<u>Q.No:2</u>	1. a) Calculate return of investment, payback period and net profit for the below project. Year Project	1

	<p>0 -220,000 1 50,000 2 50,000 3 30,000 4 75,000 5 100,000</p> <p>b) Explain how the interpretation of ROI may not be sufficient for cost benefit analysis.</p> <p>c) In this project, calculate the NPV (Net Present Value) considering the discount factor as 10%. and 12%</p>	
<u>Q.No:3</u>	<p>1. a) Calculate return of investment, payback period and net profit for the below project. Year Project 0 -2,50,000 1 30,000 2 50,000 3 20,000 4 60,000 5 120,000</p> <p>b) Explain how the interpretation of ROI may not be sufficient for cost benefit analysis.</p> <p>c) In this project, calculate the NPV (Net Present Value) considering the discount factor as 8%. and 13%</p>	1
<u>Q.No:4</u>	<p>1. a) Calculate return of investment, payback period and net profit for the below project. Year Project 0 -300,000 1 60,000 2 65,000 3 55,000 4 90,000 5 90,000</p> <p>b) Explain how the interpretation of ROI may not be sufficient for cost benefit analysis.</p> <p>c) In this project, calculate the NPV (Net</p>	1

	Present Value) considering the discount factor as 14%. and 18%	
<u>Q.No:5</u>	<p>A final year degree student is to build an application that will act as a 'suggestions box' in a factory. The application will allow employees to make suggestions about process improvements, and will track the subsequent progress of the suggestion as it is evaluated. The student wants to use a web-based front-end with a conventional database. The student has not previously developed any applications using this mix of technologies. Suggest a suitable life cycle model to the student for the software development. Explain why you chose a particular model for this application along with listing out its characteristics, advantages and disadvantages. Explain the model with suitable diagrams. Would you prefer an OTS for the same. Explain your answer.</p>	2
<u>Q.No:6</u>	<p>2. Being a project manager, which SDLC model will you follow to develop the following applications:</p> <p>a) A software to connect control room computers to satellite. Assume that the team does not have any prior experience in developing communication software.</p> <p>b) A payment gateway application for online payments.</p> <p>In both the cases,</p>	2

	Explain why you chose a particular model for that application along with listing out its characteristics, advantages and disadvantages. Explain the models with suitable diagrams.	
<u>Q. No:7</u>	In what circumstances the evolutionary model will be preferred over prototyping model. Give a suitable example. Explain both the models with suitable diagrams. List out the characteristics feature, advantages and disadvantages of both the models.	2

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