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2.6		Attempt any two:	
	i.	Write short note on the following:	5
		(a) Leadership Style	
		(b) Decision making process	
	ii.	Explain in detail how health and safety play an important role in IT	5
		development.	
	iii.	Explain the Oldham-Hackman Job Characteristics Model	5

Total No. of Questions: 6

Total No. of Printed Pages:4

Enrollment No.....



Faculty of Engineering

End Sem (Even) Examination May-2018 CA5EL08 Software Project Management

Programme: MCA Branch/Specialisation: Computer Application

Duration: 3 Hrs. Maximum Marks: 60

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		lestions are compulsory. Internal choi uld be written in full instead of only a		ers of Q.
Q.1 i.		The process each manager follows during the life of a project is known as		
		(a) Project Management	(b) Manager life cycle	
		(c) Project Management Life Cycle	(d) All of these	
	ii.	i. Who owns the Project Management Plan (PMP)?		1
		(a) The project team	(b) The chief executive.	
		(c) The project manager	(d) The project support office	
	iii.	The primary objective of cost-benefit	t analysis is	1
		(a) To find out direct and indirect co system	st of developing the information	
		(b) To determine the tangible benefit	ts of the information system	
		(c) To determine if it is economicall developing the information syste		
		(d) To determine the intangible bene	fits of the information system	
	iv.	Which of the following is not an apprestimation?	-	1
		(a) Empirical (b) Heuristic	(c) Analytical (d) Critical	
	v.	Risk exposure is given by which of	these formulas:	1
		(a) R.E. = $p_i * I_i$	(b) R.E. = $p_i + I_i$	
		(c) R.E. = $p_i - I_i$	(d) None of these	
	vi. The critical path in a network of activities:		vities:	1
		(a) Must have at least three activitie	s.	
		(b) Cannot be delayed or else the en	tire project will be delayed.	
		(c) Will be the path with the most n	umber of activities.	
		(d) Will always have all activities w	ith positive slack.	
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P.T.O.

	vii.	During which project management process group are budget forecasts created?	1
		(a) Monitoring and controlling (b) Planning	
		(c) Initiating (d) Executing	
	viii.	Suppose you are managing a software development project. The project is expected to be completed in 8 months at a cost of \$10000 per month. After 2 months, you realize that the project is 30% completed at a cost of \$40,000. What is the Earned Value (EV) and the Cost Variance (CV)?	1
		(a) EV = \$24,000; CV= (\$16,000) (b) EV = (\$20,000); CV= \$16,000 (c) EV = \$16,000; CV= (\$4,000) (d) EV = (\$16,000); CV= \$4,000	
	ix.	Forces affecting organizational behaviour are (a) Paople (b) Environment (c) Tachnology (d) All of these	1
	х.	 (a) People (b) Environment (c) Technology (d) All of these Which type of leadership is best suited for optimizing team performance in projects? (a) Democratic leadership (b) Participative leadership. (c) Autocratic leadership 	1
		(d) Benevolent authoritative leadership	
Q.2	i.	Mention the various categories of software project.	4
0.5	ii.	Explain in detail the ISO 12207 software development life cycle.	6
OR	iii.	Define different phases of project management life cycle.	
Q.3	i.	Give the significance of cost benefit analysis.	2
	ii.	Write short note on cash flow forecasting.	3
	iii.	Explain cost benefit evaluation techniques with example.	5
OR	iv.	Explain portfolio management of software projects. Discuss with examples.	5
Q.4	i.	What are the various objectives of activity planning?	2
•	ii.	Explain in detail three approaches to identifying the activities or tasks that make up a project.	3
	iii.	List the various factors used to identify risks? Explain Boehm's top 10 development risks.	5

OR	iv.	Create a precedence activity network using the following details.
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Activity	Depends on	Duration (days)
A	-	5
В	A	7
С	В	6
D	A	5
Е	D	10
F	В	15
G	В	8
Н	G	8
I	С	4
J	G	4
K	E,F	5
L	I,H	3

- Q.5 i. What are the stages in contract placement and what do you mean by contract management?
 - ii. Suppose a project is budgeted to cost Rs. 150000/-. The project is to be completed in 18 months. After two months the product is 10% complete at an expense of Rs. 25000/-. It was planned that after two months, 15% of the project work should have been completed. Compute the cost performance index and the schedule performance index. Interpret these values to assess the progress of the project.
- OR iii. Assume that operations on a Work Package cost Rs. 1500 to complete. They were originally scheduled to finish today. At this point, we actually spent Rs. 1350. And we estimate that we have completed two third (2/3) of the work. What are the cost and schedule variance.

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Marking Scheme CA5EL08 Software Project Management

Q.1	i.	The process each manager follows during the life of a project is known as (c) Project Management Life Cycle	1
	ii.	Who owns the Project Management Plan (PMP)?	1
		(c) The project manager	
	iii.	The primary objective of cost-benefit analysis is	1
		(c) To determine if it is economically worthwhile to invest in developing the information system	
	iv.	Which of the following is not an approach to software cost estimation?	1
		(d) Critical	
	v.	Risk exposure is given by which of these formulas:	1
		(a) R.E. = $p_i * I_i$	
	vi.	The critical path in a network of activities:	1
		(b) Cannot be delayed or else the entire project will be delayed.	
	vii.	During which project management process group are budget forecasts created?	1
		(a) Monitoring and controlling	
	viii.	Suppose you are managing a software development project. The project is expected to be completed in 8 months at a cost of \$10000 per month. After 2 months, you realize that the project is 30% completed at a cost of \$40,000. What is the Earned Value (EV) and the Cost Variance (CV)?	1
	•	(a) $EV = $24,000$; $CV = ($16,000)$	1
	ix.	Forces affecting organizational behaviour are (d) All of these	1
	х.	Which type of leadership is best suited for optimizing team performance in projects? (b) Participative leadership.	1
Q.2	i.	Categories of software project.	4
•	ii.	Diagram 4 marks	6
		Description 2 marks	-

OR	iii.	Diagram	3 marks	6
		Description	3 marks	
Q.3	i.	Significance of cost benefits analysis.		2
	ii.	Diagram	1 mark	3
		Description	2 marks	
	iii.	1 mark for each technique	(1 mark * 5)	5
OR	iv.	Portfolio management of software projects with exam	ples.	5
Q.4	i.	½ mark for each objective	(½ mark * 4)	2
	ii.	1 mark for each	(1 mark * 3)	3
OR	iii.	Factor	2 marks	5
		Development risk	3 marks	
	iv.	Create a precedence activity network		5
Q.5	i.	Stages in contract placement	2 marks	4
		Contract management	2 marks	
	ii.	Interpret these values to assess the progress of the pro	ject.	6
OR	iii.	CV = BCWP - ACWP = 1500 (2/3) - 1350 = -350		6
		SV = BCWP - BCWS = 1500 (2/3) - 1500 = -500		
		CPI = BCWP/ACWP = 1500(2/3)/1350 = 0.74		
		SPI = BCWP/BCWS = 1500(2/3)/1500 = 0.67		
		Spending higher than budget, and given what we ha	ve spent, we are	
		not as far along as we should be (have not completed we should have)	as much work as	
Q.6		Attempt any two:		
	i.	Write short notes on the following:		5
		(a) Leadership Style	2.5 marks	
		(b) Decision making process	2.5 marks	
	ii.	Health and safety play an important role in IT develop	oment.	5
	iii.	Oldham-Hackman Job Characteristics Model		5
