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- Q.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 development. **5**
- iii. Explain the Oldham-Hackman Job Characteristics Model **5**

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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

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

- Q.1 i. The process each manager follows during the life of a project is known as **1**  
(a) Project Management (b) Manager life cycle  
(c) Project Management Life Cycle (d) All of these
- ii. 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 analysis is **1**  
(a) To find out direct and indirect cost of developing the information system  
(b) To determine the tangible benefits of the information system  
(c) To determine if it is economically worthwhile to invest in developing the information system  
(d) To determine the intangible benefits of the information system
- iv. Which of the following is not an approach to software cost estimation? **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: **1**  
(a) Must have at least three activities.  
(b) Cannot be delayed or else the entire project will be delayed.  
(c) Will be the path with the most number of activities.  
(d) Will always have all activities with positive slack.

P.T.O.

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- 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 **1**  
 (a) People (b) Environment (c) Technology (d) All of these
- x. Which type of leadership is best suited for optimizing team performance in projects? **1**  
 (a) Democratic leadership  
 (b) Participative leadership.  
 (c) Autocratic leadership  
 (d) Benevolent authoritative leadership
- Q.2 i. Mention the various categories of software project. **4**  
 ii. Explain in detail the ISO 12207 software development life cycle. **6**
- OR iii. Define different phases of project management life cycle. **6**
- 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**

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- OR iv. Create a precedence activity network using the following details. **5**

Activity	Depends on	Duration (days)
A	-	5
B	A	7
C	B	6
D	A	5
E	D	10
F	B	15
G	B	8
H	G	8
I	C	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? **4**
- 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. **6**
- 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. **6**

