June 13, 2024 10:30 am - 01:30 pm 1T00161 - MCA (Sem-I) (R-2020-21) (2 Year Course) / 70624 - Software Project Management   QP CODE: 10055814

Time : 3 Hours   **[Total Marks : 80]**

N.B. :   1) Question No.1 is **compulsory.**
2) Attempt any **Three** from the remaining questions.
3) Answer to sub-questions should be grouped together.

Q.1. **(a)**   Define project. Explain project life cycle   **(5)**

(b)   Explain in brief : Spiral Model   **(5)**

(c)   Explain FTR.   **(5)**

(d)   Draw the use case diagram for college admission system   **(5)**

Q.2. **(a)**   Define requirements engineering. Explain any two requirements elicitation   **(10)**
techniques.

(b)   What are the key elements included in the Project Closure process   **(10)**

Q.3. **(a)**   Assume a database system for an office automation project is to be developed.   **(10)**
Project complexity is organic. The system mainly consists of following 4
modules:
Data entry 0.6 KLOC
Data update 0.6 KLOC
Query 0.8 KLOC
Report generator 1.0 KLOC
System size 3.0 KLOC. Cost drivers are complexity: high (1.15), storage: high
(1.06), experience: low (1.07), programming capability: low (1.17). Calculate
the effort estimates for the different phases. (Assume the constants $a1= 2.4$,
$b1=1.05$, $c1=2.5$ and $d1=0.38$).

(b)   Write a short note on tools and techniques used in Quality Control   **(10)**

Q.4. **(a)**   Write a short note on Work Breakdown Structure   **(10)**

(b)   What is SRS? Why it is important to develop SRS.   **(10)**

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Q.5. **(a)** The following table indicates the various tasks involved in developing any **(10)**
product, the corresponding activities and the estimated duration (in weeks) for
each task
The following details are available regarding a project:

Activity	Description	Predecessor Activity	Duration (Weeks)
A	Problem Definition	-	3
B	Requirement Specification	A	5
C	Design	A	7
D	Coding	B	10
E	Quality Checking	C	5
F	Implementation	D,E	4

Determine the critical path, the critical activities and the project
Completion time.

(b) Explain RAD and Agile Development Model in detail **(10)**

Q.6. **(a)** Write a short note on Stakeholder Management **(10)**

(b) Explain various steps involved in Risk Monitoring and Control **(10)**