

FY MCA SEM-I

07/01/25

205

(2 years course)

Time: 3 HRS

Max. Marks: 80

- N.B:**
- 1) Question 1 is compulsory.
 - 2) Attempt any three questions from Q.2 to Q: 6.
 - 3) Each question carries equal marks.

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| Q.1 | a) | Explain various activities performed during project scheduling. | 05 |
| | b) | Explain procurement management process. | 05 |
| | c) | Explain SDLC in brief. | 05 |
| | d) | Draw the use case diagram for restaurant billing process. | 05 |
| Q.2 | a) | Explain incremental model in detail | 10 |
| | b) | Write a short note on COCOMO II model. | 10 |
| Q.3 | a) | Define requirements engineering. Explain FAST technique. | 10 |
| Q.3 | b) | Explain any two techniques used for software quality control with suitable example. | 10 |
| Q.4 | a) | Consider the ERP application project with following features:
i. The application has 5 screens with 2 views with 9 tables. (Complexity = 2)
ii. The application has 3 reports of 3 sections with 9 tables. ((Complexity = 5)
iii. The application has 3 3GL components. (Complexity = 10)
There is 30% reuse of object points.
The developers' experience and capability is HIGH in similar environment.
Calculate the object point count, NOP, effort to develop such project.
(PROD=25) | 10 |
| Q.4 | b) | Explain difference between:
a) LOC and Function Point
b) Activity network diagram and WBS | 10 |
| Q.5 | a) | Write a short note on Make/ Buy decision. | 10 |
| | b) | Explain function point analysis technique in detail. | 10 |
| Q.6 | a) | Explain Formal Technical Review. State how it helps to improve quality of software development. | 10 |
| | b) | Explain extreme programming model in detail. | 10 |