

B.C.A.- III (CBCS Pattern) Semester-V  
**005 - Elective-II Paper-II - Software Engineering**

P. Pages : 2

Time : Three Hours



**GUG/S/25/13080**

Max. Marks : 40

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- Notes :
1. All questions are compulsory and carry equal marks.
  2. Draw neat and labelled diagram and use supporting data wherever necessary.
  3. Avoid vague answers and write specific answer related to questions.

**Either :**

1. a) Explain Layered technology in software engineering. 4
- b) Explain any three types of myths and reality in software engineering in detail. 4

**OR**

- c) Write a note on process patterns in software engineering. 4
- d) Explain the capability maturity model integration (CMMI) in brief. 4

**Either :**

2. a) Explain the waterfall model. Explain its phases with advantages and disadvantages. 4
- b) Explain the evolutionary process model in brief. 4

**OR**

- c) What is feasibility study? Explain classification of feasibility study. 4
- d) Explain functional and non-functional requirements. How to identify the functional requirement. 4

**Either :**

3. a) What do you mean by system models. Explain Behavioral models in detail. 4
- b) Define software architecture? Explain Data design at architectural level. 4

**OR**

- c) Explain the following 4
  - i) Design process
  - ii) Design quality.
- d) Explain object oriented design concept in detail. 4

**Either :**

4. a) What do you mean by debugging? Explain different debugging strategies. 4
- b) Differentiate between Verification and validation in detail. 4

**OR**

- c) Define Black-Box testing with diagram. Explain with advantages and disadvantages. 4
- d) Explain the metrics for Design model in brief. 4
5. Solve all the questions.
- a) Explain the team process models in detail. 2
- b) Write a short note on unified process model. 2
- c) Explain the object model in detail. 2
- d) Explain the metrics for software quality in brief. 2

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