

B.E. Information Technology Fifth Semester  
**IT504 - Software Engineering**

P. Pages : 2

Time : Three Hours



**GUG/W/18/1639**

Max. Marks : 80

- Notes :
1. Same answer book must be used for all question.
  2. All questions carry marks as indicated.
  3. Due credit will be given to neatness and adequate dimensions.
  4. Assume suitable data wherever necessary.
  5. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) What are the characteristics of software? Differentiate web application with other software's. 8
- b) What are the five generic process framework activities? 8

**OR**

2. a) What are the principles that focuses on software engineering practices as a whole? 8
- b) Write short notes on :- 8
- i) Product. ii) Process

3. Explain any six Decomposition techniques in detail. 16

**OR**

4. Write a note on :- 16
- i) Estimation for web app projects.
- ii) Make-Buy-decision.

5. a) How does a date object manifest itself within the context of an application? 8
- b) Write a note on navigation modeling. 8

**OR**

6. Write short notes on :- 16
- a) State Diagram. b) Sequence Diagram.
- c) Class diagram. d) Activity diagram.

Explain each with proper diagram.

7. a) Explain with proper example unit testing and Integration testing. Also explain three approaches of Integration testing. 10

b) Explain coding styles in detail.

6

**OR**

**8.** Write short notes on :-

**16**

i) Debugging.

ii) System testing.

iii) Verification.

iv) Validation.

**9.** Write short notes on :-

**16**

i) Software Risk.

ii) Risk Identification.

iii) Source code metrics.

iv) Risk projection.

**OR**

**10.** Explain in detail RMMM (Risk mitigation monitoring & management plan).

**16**

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