Roll No. ....

Total No. of Questions: 07]

Total No. of Pages: 02

## BCA (Sem. - 3<sup>rd</sup>) SOFTWARE ENGINEERING SUBJECT CODE: BC - 303 Paper ID: [B0211]

[Note: Please fill subject code and paper ID on OMR]

Time: 03 Hours

Maximum Marks: 60

**Instruction to Candidates:** 

- 1) Section A is Compulsory.
- 2) Attempt any Four questions from Section B.

## Section - A

Q1)

 $(10 \times 2 = 20)$ 

- a) What are various characteristics of software?
- b) What are disadvantages of waterfall model?
- c) What is ER Diagram? List various notations used in ER Diagram.
- d) What is use of data dictionary?
- e) What are objective of software design?
- f) What are objective of testing? Explain.
- g) What are differences between unit and system testing?
- h) What are various principles of structured analysis?
- i) What is abstraction and encapsulation? Explain.
- j) Explain how verification is different from validation.

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*P.T.O.* 

## Section - B

 $(4 \times 10 = 40)$ 

- **Q2)** What is software process model? Explain the advantages and disadvantages of spiral model and prototyping model.
- Q3) Write a note on the following:
  - (a) Role of metrics.
  - (b) Principles of software Engineering.
- Q4) What is project management? Explain various activities of project management.
- **Q5)** What is cost estimation? Explain various cost estimation techniques. Discuss how COCOMO helps in cost estimation.
- **Q6)** What is context level DFD? Create and explain DFD for university examination system.
- **Q7)** Write note on the following:
  - (a) Black box and White box testing.
  - (b) Procedural design.



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