# **BCA-08**

# December - Examination 2017

# BCA Pt. II Examination Software Engineering Paper - BCA-08

Time: 3 Hours [ Max. Marks: - 100

**Note:** The question paper is divided into three sections A, B and C. Write answers as per given instructions.

## Section - A

 $10 \times 2 = 20$ 

(Very Short Answer Questions)

**Note:** Answer **all** questions. As per the nature of the question delimit your answer in one word, one sentence or maximum up to 30 word. Each question carries 2 marks.

- 1) (i) Define the aim software engineering.
  - (ii) What do you understand by software models?
  - (iii) Define the importance of planning in software development.
  - (iv) What do you understand by measurement of software?
  - (v) State the importance of requirement engineering in software development.
  - (vi) What is structure analysis?

- (vii) What do you understand by modular designing?
- (viii) What is the software reliability?
- (ix) State the name of two types of verification.
- (x) What do you understand by black box testing?

### Section - B

 $4 \times 10 = 40$ 

(Short Answer Questions)

**Note:** Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 10 marks.

- 2) Distinguish functional and non-functional requirement of software.
- 3) Explain the difference between testing and debugging.
- 4) What is a physical Data Flow diagram and how it is different from logical DFD?
- 5) What is software Requirement Specification (SRS) document? State its goals.
- 6) Explain the Software reengineering process model.
- 7) What are the elements of Software Project Management Plan (SPMP)?
- 8) What is the role of user interface in software design and why it is important?
- 9) Explain the advantages and disadvantages of using CASE tools.

(Long Answer Questions)

**Note:** Answer **any two** questions. You have to delimit your each answer maximum up to 500 words. Each question carries 20 marks.

- 10) What is 'Data Modeling'? Explain the Data Objects, Attributes and Relationships with suitable examples.
- 11) Differentiate between
  - (i) Process and product
  - (ii) Data flow diagram and chart.
  - (iii) Cardinality and modularity.
  - (iv) Verification and validation.
- 12) Explain waterfall model and spiral model and compare it.
- 13) What is 'COCOMO'? Describe the various modes of COCOMO estimation model given examples of application falling in each area.

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