

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 07

BCA (2011 & Onward) (Sem.-4)

SOFTWARE ENGINEERING

Subject Code : BSBC-401

Paper ID : [B0240]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **SIX** questions carrying **TEN** marks each and students has to attempt any **FOUR** questions.

SECTION-A

1. Write briefly :

- a) Explain the term Software Engineering.
- b) Explain the objectives of Software Design.
- c) What are various advantages and disadvantages of fourth generation techniques?
- d) What is Software Project Planning?
- e) What is prototyping?
- f) Explain the use of COCOMO model.
- g) What is Testability?
- h) Differentiate between reverse engineering and forward engineering.
- i) List the advantages of Data Dictionary.
- j) State the principles of Software Testing.

SECTION-B

2. Explain various software process models with their merits and demerits.
3. What are the various characteristics of software? Explain the role of metrics in Software Engineering in detail.
4. Explain various cost estimation techniques. What methods are used to choose the best out of all techniques?
5. What is Modularity? Explain the role of Coupling and Cohesion in software design.
6. What are the objectives of software testing? Differentiate between White Box Testing and Black Box Testing.
7. Differentiate between the following :
 1. Verification and Validation.
 2. Unit Testing and System Testing.