Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   **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 have to attempt any FOUR questions.**

SECTION-A

Q1. Write briefly :

a) Define Characteristics of Software Engineering.

b) Explain the role of CPM in Project Planning.

c) What is data dictionary?

d) What is difference between coupling and cohesion?

e) What do you mean by decomposition techniques?

f) What is the difference between Verification and Validation?

g) Difference between alpha and beta testing.

h) What do you mean by Reverse Engineering?

i) What do you mean by CASE tools?

j) List significance of Metrics in Software.

SECTION-B

Q2. What are the Software Process Models? Explain Spiral model in detail.

Q3. What is Software Design? Explain objectives and principles of software design.

Q4. What do you mean by Structured Analysis? Explain various tools in detail.

Q5. Difference between the following :

    a) White box and Black Box Testing

    b) Procedural and Architectural Design

Q6. Discuss Principles of Testing. What are various types of testing techniques?

Q7. Explain the role of CASE tools in Software Reengineering in detail.