

**B.Tech. – VIEP – COMPUTER SCIENCE AND
ENGINEERING (BTCSVI)**

Term-End Examination

00046

June, 2016

BICS-005 : SOFTWARE ENGINEERING

Time : 3 hours

Maximum Marks : 70

*Note : Attempt any **five** questions. All questions carry equal marks.*

1. (a) Give a genetic view of software engineering. 4
- (b) What is the waterfall model ? How is it different from other engineering process models ? 10
2. (a) Define software process. What are the fundamental activities of a software process ? 7
- (b) Differentiate between prototyping and incremental models. 7

3. (a) What is the objective of Formal Technical Review ? What is COCOMO model ? 7
- (b) Design a data flow diagram for a students registration program to manage course request, and handle students class schedule, students registration status and class list for instructor. 7
4. Write down SRS for the following : 2×7=14
- (a) A system to manage a library
- (b) A system to conduct online examinations
5. (a) Explain the process of measuring software reliability. 7
- (b) Define process metrics, project metrics and size oriented metrics. 7
6. (a) What are the various software design methodologies ? Discuss the role of abstraction in software design. 7
- (b) What do you mean by function point analysis ? Mention any four features of it. 7

7. (a) Explain in detail the various testing strategies. 7
- (b) How are the CASE tools classified ?
Explain in detail. 7
8. Write short notes on any *two* of the following : $2 \times 7 = 14$
- (a) Boundary Value Analysis
- (b) Reverse Engineering
- (c) Coupling and Cohesion
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