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Total Pages : 03

GSM/D-23

1130

SOFTWARE ENGINEERING

BCA-234

Time : Three Hours]

[Maximum Marks : 80

Instruction : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

Explain the following terms in brief : $2 \times 8 = 16$

- (a) What is the need of metrics ?
- (b) What are the phases of software development ?
- (c) Differentiate between verification and validation.
- (d) Define Data Flow Diagram.
- (e) What are goals of SRS document ?
- (f) What is requirement analysis ?
- (g) Define Context diagram.
- (h) Define Data Dictionary.

Unit I

- (a) Discuss major areas of applications of the software.
- (b) What is Software Crisis ? What are its causes ?

$2 \times 8 = 16$

3. What is Software life cycle ? Discuss the generic water model and prototype model.

Unit II

4. (a) Explain the term validation. What are the different types of errors possible in SRS ?
- (b) What is the need of SRS ?
5. Write short notes on the following :
- (i) Components of an SRS
 - (ii) Requirement validation
 - (iii) Requirement management.

Unit III

6. (a) What do you mean by decision table ? What are the main parts of decision tables ?
- (b) What do you mean by structured English ? Explain with suitable example.
7. What is software Maintenance ? Explain its types and characteristics.

Unit IV

8. (a) What are testing objectives and testing principles in Software design ? 8
- (b) Explain Software Maintenance Process. 8
9. Differentiate between the following : 16
- (i) Alpha and Beta testing
 - (ii) Verification and Validation
 - (iii) Black box and White box testing.