Roll	No.	

Total Pages: 2

## **GSM/D-21**

1199

## SOFTWARE ENGINEERING Paper-BCA-234

Time: Three Hours] [Maximum Marks: 80

**Note:** Attempt *five* questions in all, selecting *one* question from each unit. All questions carry equal marks.

## **Compulsory Question**

- 1. (a) Define software.
  - (b) What are various software development process models?
  - (c) What is the purpose of e-r diagram?
  - (d) Error, Fault and failure.
  - (e) What is scm?
  - (f) Define verification and validation.
  - (g) What are different types of maintenance?
  - (h) Alpha and Beta Testing.  $(2\times8=16)$

## UNIT-I

- **2.** (a) What is Software crisis? Discuss various reasons for Software Crisis.
  - (b) What are different characteristics of software process?  $(8\times2=16)$

3.	Explain Waterfall and prototype model along with its advantages and Limitations. (16)
	UNIT-II
4.	What is SRS? Explain the need, characteristics and components of an SRS. (16)
5.	What are various information gathering tools? (16)
	UNIT-III
6.	<ul> <li>(a) Write short notes on the following:</li> <li>(i) Data flow diagram.</li> <li>(ii) Data Dictionary. (4×2=8)</li> <li>(b) What is the difference between Coupling and Cohesion?</li> </ul>
	(16)
7.	Explain Software maintenance along with its types and characteristics. (16)
	UNIT-IV
8.	What is the purpose of testing? Explain Functional Testing in Detail. (16)
9.	Write short notes on the following:  (i) Project Scheduling.  (ii) Risk Management. (8×2=16)