

**BACHELOR OF SCIENCE (COMPUTER SCIENCE) (CBCS - 2018 COURSE)**  
**T.Y.B.Sc.(Computer Science) Sem-V : WINTER :- 2021**  
**SUBJECT: SOFTWARE ENGINEERING**

**Day : Saturday**  
**Date 29-01-2022**

**W-20118-2021**

**Time : 02:00 PM-05:00 PM**  
**Max. Marks: 60**

---

**N.B.**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the **RIGHT** indicate **FULL** marks.
  - 3) Draw neat diagrams **WHEREVER** necessary.
- 

**Q.1** Attempt **ANY TWO** of the following : **(12)**

- a) Explain different types of systems.
- b) What is prototyping? Explain the steps in prototyping.
- c) Define Interview as a fact finding method. Explain types of Interview.

**Q.2** Attempt **ANY TWO** of the following : **(12)**

- a) What is system testing? Explain any two types of system testing.
- b) Draw E-R model for 'Employee Management System'.
- c) What is Software Engineering? Explain the features of Software Engineering.

**Q.3** Attempt **ANY TWO** of the following : **(12)**

- a) Explain system design phase.
- b) Discuss the need of Data Dictionary. Also give one example for Data Dictionary.
- c) State the advantages and disadvantages of spiral model.

**Q.4** Attempt **ANY THREE** of the following : **(12)**

- a) Define Decision Support System. What are the different phases in the process of decision making?
- b) Write a note on system maintenance phase.
- c) What is the purpose of waterfall model? What are the phases of waterfall model?
- d) Write a note on role of system analyst.

**Q.5** Attempt **ANY FOUR** of the following : **(12)**

- a) What are the features of computer based system?
- b) Write a short note on Questionnaire method to collect facts.
- c) State the characteristics of software.
- d) What is Data Flow Diagram? What are the symbols used to draw Data Flow Diagram?
- e) Write a short note on feasibility study.
- f) Define the following terms:
  - i) System verification
  - ii) System validation.

\*\*\*\*\*

---