**Bachelor of Science (B.Sc.) (I.T.) Part—II**
**(Semester—IV) (C.B.S.) Examination**

**SOFTWARE ENGINEERING—I**

**Paper—I**

Time : Three Hours]　　　　　　　[Maximum Marks : 50

**Note :—** (1) **ALL** questions are compulsory and carry equal marks.

　　　　(2) Draw neat and labelled diagrams wherever necessary.

**EITHER**

1. (a) What significant changes are observed in evolving the computer software ? Explain.　　　5

　　(b) Explain any three challenges of software engineering.　　　5

**OR**

　　(c) What myths are considered while evolving the computer software over the period ?　　　5

　　(d) What are the activities that occur throughout the software process which primarily focus on project management ?　　　5

**EITHER**

2. (a) Discuss Waterfall model for software development.

                                        5

    (b) Explain functional and nonfunctional requirements in software development.     5

**OR**

    (c) What is the difference between Unified Process (UP) phase and Unified Process (UP) workflows ?     5

    (d) What are considerations to initiate requirement engineering process ? Explain.     5

**EITHER**

3. (a) List and explain different tasks in requirement engineering.     5

    (b) What is the purpose of domain analysis ? How is it related to concept of requirement patterns ?     5

**OR**

    (c) Explain the following :

        (i) Data objects

        (ii) Data attributes

        (iii) Relationship.     5

    (d) What are the basic guidelines for conducting a collaborative requirement gathering meeting ?

                                          5

**EITHER**

4. (a) What are the different design elements used in deployment model of software development ? Explain.     5

    (b) When should a moduler design be implemented ? How can this be accomplished ?     5

**OR**

    (c) Explain how is complex system made easy during design engineering. Explain.     5

    (d) Discuss the quality attributes considered in software design engineering.     5

5. (a) List and discuss briefly five goals related to process area of software development.     2½

    (b) List different phases of Unified Process (UP) model.     2½

    (c) What do you mean by class base modeling ?     2½

    (d) List different design classes and give its purpose.     2½