POKHARA UNIVERSITY

Level: Bachelor   Semester: Fall   Year   : 2021
Programme: BE   Full Marks: 100
Course: Object Oriented Software Engineering   Pass Marks: 45
                                         Time   : 3hrs.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt all the questions.

1. a) Define Software Engineering. Describe about scrum software   7
        development and extreme programming in detail.

    b) Explain spiral model with its pros and cons.   8

2. a) What is risk management? What are different types of risks and how   7
        can we identify risk? Explain.

    b) What is feasibility study? Explain different types of feasibility study.   8

3. a) Obtain DFD for the following System.   8

        A customer can book a ticket from the internet or can directly buy the
        ticket in the Movie Hall itself. There can be multiple halls within one
        movie theatre. The ticket operator provides a ticket with hall's stamp
        after checking the booking information to the customer. The guard in
        each hall validates the ticket and provides access to the customer inside
        the hall. There is also provision of complementary food item which the
        café will provide in the break time of the movie.

    b) What is class diagram? How it is represented? Explain it with suitable   7
        example.

4. a) What do you mean by Design Patterns? What is the importance of   7
        incorporating reuse in a project? List out its major advantages.

    b) Discuss the various steps of interface design. How is it evaluated?   8

5. a) Define verification and validation. Discuss briefly about white box test   8
        and black box test.

    b) Why change management is necessary to achieve quality? Explain   7
        change management process.

6. a) What is capability maturity model? Describe the five levels defined in the CMM — 7

   b) Explain unit and integration testing in details. — 8

7. Write short notes on: (**Any two**) — 2×5

   a) Architectural Design

   b) Feature driven development

   c) FP based estimation