POKHARA UNIVERSITY

Level: Bachelor   Semester:Fall   Year   : 2020
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) What are the different phases in software development life cycle? Explain.   7
   b) What are the principles of agile software development? How agile principle is implemented in Dynamic System Development Methods (DSDM).   8

2. a) What is W5HH principle? Explain different types of feasibility for acceptance of software.   8
   b) Explain briefly the need of risk identification during software development process. Also explain RMMM and RMMM plan.   7

3. a) Explain the significance of requirement analysis in the software modelling with suitable example.   7
   b) What is UML diagrams? Explain briefly about the use case diagram and class diagram with example.   8

4. a) Draw a detailed class diagram for the following: 8
   For a construction company a software is to be developed with following specifications-
   Company takes many project is at particular location. Each project is supervised by project manager assigned by CEO of the company. Record related to start of project, its completion is maintained. Under each PM there is a team of people of different category like designer, plumber, electrician, architect, labor etc. Each project is marketed by team of Marketing Executives.
   b) Prepare level 1DFD for the following food ordering system.   7
   KFC pizza wants to install a system to record orders for pizza and burger. When regular customer call KFC pizza on the phone, their phone number goes automatically into pizza system. The phone number invokes the name, address and last order date automatically on the screen. Once the order is taken, the total including tax and delivery

is calculated. The order is given to the cook. A receipt is printed, Occasionally, special offers (Coupons) is printed so the customer can get a discount. Drivers who make deliveries give customers a copy of the receipt and coupon (if any). Weekly totals are kept for comparison with last year's performance.

5. a) Discuss the importance of unit testing and integration testing in object-oriented life cycle for system development. 7

   b) Why software review is needed? How formal technical review is helpful for maintaining quality of software project? 8

6. a) Define Software configuration management and explain its with processes. 7

   b) What is software process improvement (SPI)? Describe the different activities applied during SPI? 8

7. Write short notes on: (**Any two**) 2×5
   a) Make/Buy Decision
   b) ISO Standards
   c) Interface Design