QP Code :580601

(3 Hours)   [Total Marks :100

(Old Course)

N.B. : (1) Question no. **1** is **compulsory**.
     (2) Attempt any **four** out of remaining questions.
     (3) **Figures** to the **right** indicate **full** marks.

1. Attempt any **four** questions:-
    (a) Read Appendix A, Identify all Actors and use-cases.   5
    (b) Identify Use-cases having include or extend extensions and hence draw   5
       Use-case diagram for the scenario in the Appendix A.
    (c) Draw activity diagram for the ordering process problem given in appendix A   5
    (d) What is walkthrough? Why is it used?   5
    (e) How COCOMO model is used for software estimation?   5

2.   (a) Explain in detail CMM levels with their significance   10
    (b) What is SCM? Explain software Configuration Item Identification?   10

3.   (a) Explain Black Box Testing   10
    (b) Compare and contrast Extend and Include dependency relationship   10

4.   (a) What are Software Architecture Styles? Explain any one style with example   10
    (b) Explain Non-functional requirements.   10

5.   (a) Explain reverse and re-engineering.   10
    (b) What is Cohesion and coupling? Explain types of couplings.   10

6.   (a) Explain the importance of Project Scheduling and Tracking   10
    (b) What is software Quality Assurance? Explain different Quality Matrics   10

7.   (a) What is software acceptance testing and Unit testing.   10
    (b) What are different types of maintenance? Explain steps involved in creating   10
       maintenance log

Appendix A

XYZ electronics manufactures different electronics gadgets. Software portal
is to be designed to co-ordinate the business activities of the organization.
A dealer can place bulk orders through portal. Depending upon type
of gadget and dealer's credentials discount is offered. The manager
has right to change discount offerings to individual dealer for the particular
produce. Manager also can generate report of orders placed by dealers.
Dealer can view pending bills, paid bills related to each order placed. Dealer
can pay bills online. It is even possible to pay partial payment. Store manager
can view all placed orders. He generates invoice for those orders and ships
the ordered quantity to the dealer. Dealer can view shipment details.
If required quantity is not available, partial shipment is also possible.