Q.P. Code : 581603

(3 Hours) Total Marks:80

N.B. : (1) Question No. 1 is compulsory
(2) Attempt any three questions out of remaining five.

Q 1. (a) Develop the SRS for an Online Shopping Portal. [20]
A customer visits the online shopping portal. He may buy item or just visit the
page and logout. The customer can select a segment, then a category and brand
to get different products in the desired brand.
The customer can select product for purchasing. The process can be repeated for
more items. Once the customer finishes the selecting product/s, the cart can be
viewed. If the customer wants to edit the final cart it can be done. For completing
the process of purchase and payment the customer has to login the portal. If the
customer is visiting for first time, he should do the registration process first, else
he can directly login to continue. Final cart is submitted for payment and the
delivery address is confirmed by the customer. Confirmation is given to the
customer through shipment Id and products list.
SRS for this should include:
  a. Product perspective
  b. Scope and objective
  c. Functional Requirements
  d. Non-Functional Requirements

Q 2. (a) What is user interface design process? Explain with one example. [10]
(b) Explain Software Configuration item identification. [10]

Q 3. (a) What are the objectives of testing? Explain black box testing and integration [10]
testing.
(b) What is Coupling and Cohesion? Explain different forms of it. [10]

Q 4. (a) What do you mean by requirements? Explain Functional and Non-Functional [10]
requirements in detail.
(b) What are the different types of maintenance and also explain steps for creating [10]
maintenance log?

Q 5. (a) Discuss Incremental model and prototype model for software development with [10]
merits and demerits.
(b) Explain size oriented software engineering metrics. [10]
Find function points for an E-commerce application with the following data,
No. of User inputs   50
No. of User outputs   30
No. of User inquiries   35
No. of User files   06
No. of external interfaces 04
Assume suitable complexity adjustment factors and weighting factors.

Q 6. Write short notes on (any two)
(a) Version control and change control. [10]
(b) COCOMO Model. [10]
(c) Agile Methodology. [10]
(d) Risk Management. [10]