Software Engineering 2711. 2013.

30 : 2nd half.13-Avi(av)

Con. 9042-13.

(FURTHER REVISED COURSE)

VT-14537

(3 Hours)

[Total Marks: 60

N.B.: (1) Question No. 1 is compulsory for 20 marks.

- (2) Solve any four from Question Nos. 2 to 6.
- Q. 1 Altro motor is a leader in the business of car manufacturing. It announces its "Car Manufacture to order" system. It provides the customers with an online customization option for ordering car with special features. Customer can design a car model online by referring e catalog. Customer car model may include Order no, Price, Fuel type, body type, Colour, Accessories, approximate date of delivery and other shipment details. All details of customers are stored in database for future reference. Once the online payment is accepted the designed car model is dispatched and intimated to the customer. Customer is able to modify his order within a week from the order placed.

In this context answer the following:

[5x4] = 20M

(Make suitable assumptions wherever necessary; however state those assumptions very clearly)

- i. List out Use Cases? Write a dialogue for any one use case of them?
- j. Design a suitable 1 page MIS report for the CEO of this firm?
- k. Draw activity diagram?
- 1. Draw data flow diagram?

Q.2 Solve any **two** of the following:

[5x2] = 10 M

- a. Explain in detail the Incremental model with advantages and disadvantages?
- b. Explain various steps involved in requirement engineering?
- c Explain the term "Software Configuration Management" (SCM)?

Q.3 Solve any **two** of the following:

[5x2] = 10 M

- a. Explain in detail Risk identification and Risk projection?
- b. Enumerate various diagrams suggested under UML stating briefly their purpose?
- c. Summarize various phases of Software Life Cycle in Waterfall Model?

Q.4 Solve any two of the following:

[5x2]=10M

- a Elaborate the term Software Project estimation?
- b. Describe in brief non functional software requirements?
- c. Explain the term "Software Requirements Specification" with one business example?

Q.5 Solve any two of the following:

[5x2] = 10 M

- a. Explain in brief User Interface analysis?
- b. Enlist and explain the steps required to perform a cost estimation using COCOMO model?

c. Explain different levels of software testing?

Q.6 Write short notes on any **two** of the following:

[5x2] = 10 M

- a. Use case point method cost estimation
- b. Extreme Programming (XP)
- C. Extreme i regiumin

c. Smoke testing