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# ADCA / MCA (II Year)

### **Term-End Examination**

#### December, 2011

# **CS-10 : SOFTWARE ENGINEERING**

Time : 3 hours

0681

Maximum Marks: 75

**Note :** Question number **1** is **compulsory**. Answer **any three** questions from the rest.

- A News paper website wants to automate its "Reader's - offer of online selling of electronic gadgets" like mobile phone, ipod, Digital camera, Handycam's etc everyday. The main objectives of the system are :
  - Online selling of the products with great discount prices.
  - Online archiving (product wise)/(day wise) for atleast a week.
  - Online tracking of the delivery, once purchased by the customer.
  - Automatic updates to the registered customers through a autogenerated Newsletter as an e - mail. For the above mentioned system.
  - (a) Develop SRS.
  - (b) Design DFD's upto 3<sup>rd</sup> level.

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P.T.O.

5

8

	(c)	Construct the structure chart / hierarchy chart for this system.	5
	(d)	Design ERD with all the components.	7
	(e)	Suggest the testing strategy for any one of the s/w modules.	5
2.	(a)	Define s/w metrics. Explain various metrics for s/w productivity and quality.	8
	(b)	With the help of a suitable example, explain the concept of LOC based estimation.	7
3.	(a)	What are the various stages in a Spiral Model ? How is this model different from Prototyping Model ? What kind of projects are suitable to be developed uing this model.	7
	(b)	List the major project cost estimation techniques and discuss how the cocomo model is used in estimation ?	8
1.	(a)	How is Re - Engineering different from Reverse - Engineering ? Describe the restructuring technique of Re - Engineering with the help of a suitable example.	8
	(b)	What is the significance of s/w	7

(b) What is the significance of s/w 2 Documentation standards. List and explain any five standards.

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### 5. Write short notes on the following :

5x3=15

- (a) Risk Management
- (b) FURPS metrics
- (c) Cause Effect Graphing test case design
- (d) Mc Cabe's complexity metric
- (e) Cleanroom process