

ADCA / MCA (II Year)

Term-End Examination

June, 2011

CS-10 : SOFTWARE ENGINEERING

Time : 3 hours

Maximum Marks : 75

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

1. There is a requirement raised to design a software for "Computer Peripherals and software - complaint monitoring system" for MIS department of a University which provides services for its systems. The system allows recording of all the complaints and assigning them to concerned Engineers for servicing them. It produces daily listing of complaints division wise and pending complaints also.
 - (a) Develop a SRS for this system. Make suitable assumptions and list them. 5
 - (b) Design DFD's upto 2-levels. 8
 - (c) Identify the s/w modules and their relative functions. 5
 - (d) Draw an ERD with the various components. 7
 - (e) Suggest a testing strategy for any one of the s/w modules selected in (c). Give valid reason for your selection. 5

2. (a) Define a functional point, with the help of an example, explain how can it be used for calculating the effort estimation of a s/w. 8
- (b) What is a data-dictionary ? What does it contain ? Illustrate it with the help of an example. 7
3. (a) Define s/w Quality Assurance (SQA) what is the role and significance of formal technical review in maintaining SQA. What are its objectives. 7
- (b) What are the risks of a s/w project ? How do you manage these risks. Explain 8
4. (a) What is CMM ? Explain various maturity levels in CMM. 7
- (b) Develop a use case diagram(s) for a video library system where a VCD/DVD issue and their return operations are allowed. 8
5. Write short notes on the following : 5x3=15
- (a) Control Coupling
- (b) Verification and Validation
- (c) s/w Version Control
- (d) Project metrics
- (e) Project Scheduling (Any one technique)
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