

SCHEME OF VALUATION

(Scoring Indicators)

Revision: 2015

Course Title: PROJECT MANAGEMENT AND SOFTWARE ENGINEERING

Course Code: 5132

Q.No	Scoring Indicator	Split up score	Sub total	Total
PART A				
I(1)	Software engineering discusses the systematic and cost effective techniques to software development.	2	2	2
I(2)	The customer requirements identified during the requirements gathering and analysis activity are organised into a software requirements specification.	2	2	2
I(3)	The DFD is a simple graphical formalism that can be used to represent a system in terms of the data input to the system, various processing carried out on those data and the output data generated by the system.	2	2	2
I(4)	Unit testing is the testing of individual modules in isolation from other modules.	2	2	2
I(5)	A risk is any anticipated unfavourable event that can occur while a project is underway.	2	2	2
PART B				
II(1)	<ul style="list-style-type: none"> a. Early computer programming. b. High level language programming. c. Control flow based design. d. Data structure oriented design e. Data flow oriented design. f. Object oriented design. 	List – 3 Explain -3	3+3= 6	6
II(2)	<p>Listing the advantages and limitations of</p> <ul style="list-style-type: none"> a. Classical water fall model - no feed back b. Iterative waterfall model - mostly used etc c. Prototyping model – concurrent feedback d. Spiral model – predicting time and cost 	4 x 1.5	6	6
II(3)	<ul style="list-style-type: none"> a. Concise b. Structured c. Black box view d. Traceable e. Response to undesired events f. verifiable 	Listing any 4 – 2 marks and Explanation 4 marks	6	6
II(4)	<p>Explanation about lines of code, function point metric, feature point metric.</p> <p>Explanation Calculation of UFP, FP.</p>	Explanation of each- 2 marks each	2+2+ 2=6	6
II(5)	<p>Explain about design document – different modules required, control relationship among different modules, interfaces among different modules, data structures of the individual modules and algorithms of the individual modules.</p> <p>Program structure or software architecture , structure chart, UML , Cohesion , Coupling etc</p>	6	6	6

II(6)	Explanation about code walkthrough, code inspection.	Explanation of each - -- 3 marks	3 +3 = 6	6
II(7)	Software configuration management deals with effectively tracking and controlling the configuration of a software product during its life cycle.		6	6
III(a)	Explaining the six phases in detail.	Listing 2 marks and explanation 6 marks	2+6	8
III(b)	Figure and Explanation of classical water fall model.	Figure 2 marks Exp - 5 marks	2+5	7
IV(a)	Figure and Explanation of iterative water fall model.	Figure 2 marks Exp - 6 marks	2+6	8
IV(b)	Figure and Explanation of spiral model.	Figure 2 marks Exp - 5 marks	2+5	7
V(a)	Explanation about a. Requirements gathering b. Requirements analysis c. Requirements specification		2+3+3	8
V(b)	Structure of SRS document – explanation of each step in detail 1. Introduction 2. Goals of implementation 3. Functional requirements 4. Non functional requirements 5. Behavioural description	2 marks for listing and explanation 5 marks	2+5	7

VI	<ul style="list-style-type: none"> a. Function symbol b. External entity symbol c. Data flow symbol d. Data store symbol e. Output symbol <p>Explanation of each with figure 2 marks each</p> <p>Example 5 marks</p>	10+ 5	15	15
VII	<ul style="list-style-type: none"> a. Representative coding standards – 8 marks b. Representative coding guidelines – 7 marks 	8+7	15	15
VIII	<ul style="list-style-type: none"> a. Statement coverage b. Branch coverage c. Condition coverage d. Path coverage e. Mutation testing 	3 marks each. 3*5=15	15	15
IX	<p>Explanation about basic COCOMO – estimation of development effort, time of organic, semidetached and embedded – its formulas. --- 9 marks</p> <p>Intermediate COCOMO - 3 marks</p> <p>Complete COCOMO – 3 marks</p>	9+3+3	15	15
X	<p>Explaining the five levels of CMMI.</p> <p>Initial</p> <p>Repeatable</p> <p>Defined</p> <p>Managed</p> <p>Optimizing</p>	Explanatio n- 3 each	15	15