B.E. Eighth Semester (Computer Engineering) (C.B.S.)

Elective - III : Software Testing & Quality Assurance

P. Pages: 2 NKT/KS/17/7631 Time: Three Hours Max. Marks: 80 All questions carry marks as indicated. Notes: 1. Solve Question 1 OR Questions No. 2. 2. Solve Ouestion 3 OR Ouestions No. 4. 3. Solve Question 5 OR Questions No. 6. 4. Solve Question 7 OR Questions No. 8. 5. Solve Question 9 OR Questions No. 10. 6. 7. Solve Question 11 OR Questions No. 12. Due credit will be given to neatness and adequate dimensions. 8. 9. Assume suitable data whenever necessary. 10. Illustrate your answers whenever necessary with the help of neat sketches. What is software testing? Give a brief note on unit, integration and regression in testing. 7 1. a) Explain the sequence of testing activities performed by a test engineer in testing program. 7 b) OR 7 2. a) Explain the different sources of information for test case selection. b) Discuss about the development and testing phases in the classical 'V' – model. 7 7 3. Explain how to prevent defect using tool for unit testing. a) b) What is the difference between testing and debugging? Explain different approaches 7 followed for debugging in unit testing. OR Explain in detail dynamic unit testing. 7 4. a) Explain different steps involved in code review process in case of unit testing. b) 7 5. Describe control flow testing & control flow graph. 7 a) b) Write note on generating test input. 6 OR Explain about predicate coverage criteria concept in control flow test with an example. 6. a) 6 Explain path selection criteria in detail. 7 b) Explain different types of data flow testing criteria with a suitable example. 7 7. a) Explain in detail system integration techniques. 6 b) OR

8.	a)	Describe Test plan for system integration.	7
	b)	Explain different types of Interfaces and interface errors.	6
9.	a)	Describe functionality tests and its categories of test involved in it.	7
	b)	Write a short note on test case and necessity of test case document action.	6
		OR	
10.	a)	Write importance of regression testing when developing a new software release. What test cases from the test suite would be more useful in performance a regression test.	7
	b)	Write note on.	6
		a) Load & stability test.	
		b) Reliability test.	
11.	a)	Explain types of acceptance testing and its criteria.	7
	b)	Describe five views of software quality.	6
		OR	
12.	a)	Explain different categories of ISO -9126 quality characteristics of software product.	6
	b)	Explain ISO: 9000: 2000 software quality standard fundamentals.	7
