Elective-II : Software Testing & Quality Assurance

P. Pages : 2

AHK/KW/19/2353

Time : Three Hours

Max. Marks : 80

Notes : 1. All questions carry marks as indicated.
2. Solve Question 1 OR Questions No. 2.
3. Solve Question 3 OR Questions No. 4.
4. Solve Question 5 OR Questions No. 6.
5. Solve Question 7 OR Questions No. 8.
6. Solve Question 9 OR Questions No. 10.
7. Solve Question 11 OR Questions No. 12.
8. Due credit will be given to neatness and adequate dimensions.
9. Assume suitable data whenever necessary.
10. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Explain life cycle of defects list list characteristics of good software. 8

   b) Explain V – model with diagram. 6

OR

2. a) What are different limitations of testing? Explain. 6

   b) Explain the following terms with example. 8

      i) Error.

      ii) Faults.

      iii) Defects.

      iv) Failures.

      v) Bug.

3. a) Enlist and explain various tools for unit testing. 7

   b) What is debugging and the three approaches to debugging? 6

OR

4. a) Explain Dynamic unit testing in detail. 6

   b) Write a short note on Mutation testing. 7

5. a) Explain control flow graph with example. 7

   b) Describe the concept of test data selection with example. 6

<div align="center">**OR**</div>

6.		Explain each path selection criteria in detail.	13
7.	a)	Explain the data flow anomalies in the data flow testing.	8
	b)	Explain the dynamic data flow testing with example.	5

<div align="center">**OR**</div>

8.	a)	What is test plan for system integration.	6
	b)	Write a short note on software and hardware integration.	7
9.	a)	What are similarities and differences b/w quality assurance and safety measure.	7
	b)	Explain Robustness test in detail.	6

<div align="center">**OR**</div>

10.	a)	Give significance of functionality test and also explain different categories of test involved in it.	7
	b)	Explain load and stability test in details.	6
11.	a)	What are objective of Acceptance testing.	5
	b)	Why are Acceptance test cases executed in two phase.	5
	c)	What is software quality.	4

<div align="center">**OR**</div>

12.	a)	Explain ISO 9001:2001 s/w quality standards and its requirement.	8
	b)	Draw data flow graph for Binary search routine and explain the same.	6

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