



**B.TECH DEGREE EXAMINATIONS: APRIL 2018**

(Regulation 2014)

Eighth Semester

**INFORMATION TECHNOLOGY**

U14ITTE52: Software Quality Assurance and Testing

**COURSE OUTCOMES**

- CO1: Appreciate the importance of software quality assurance  
 CO2: Apply software testing techniques for information systems development.  
 CO3: Know the inputs and deliverables of testing process  
 CO4: Demonstrate activities in software project management  
 CO5: Interpret the importance of software quality assurance

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions:-**

**PART A (10 x 1 = 10 Marks)**

1. Matching type item with multiple choice code

CO1 [K<sub>2</sub>]

List I		List II	
A. Black box testing		i. Glass box	
B. White box testing		ii. Gray box	
C. Acceptance testing		iii. Modular testing	
D. Unit testing		iv. End user testing	

- |    | A   | B  | C   | D   |
|----|-----|----|-----|-----|
| a) | ii  | i  | iv  | iii |
| b) | iii | iv | ii  | i   |
| c) | ii  | iv | iii | i   |
| d) | iv  | i  | ii  | iii |

2. X= Defects deliberately introduced by development

CO2 [K<sub>2</sub>]

Y=Total defects found by testing team

Z=Defects found by testing but not belonging to defects deliberately introduced by development

- |              |              |
|--------------|--------------|
| a) $(Y-Z)/X$ | b) $(Z-Y)/X$ |
| c) $Y+Z$     | d) $X+Z$     |

3. Which of the following statements are false? CO4 [K<sub>2</sub>]
1. V model is also termed as verification and testing model
  2. The Histogram is a graphic representation of frequency counts of a sample or a population
  3. The Operational definition of reliability is Mean Time to Failure
  4. Beta testing happened at the tester space.
- a) 1,3 b) 2,4  
c) 1,2,3 d) 1,2,3,4
4. A Famous technique used to find the root cause of a defect is ----- and ----- CO3 [K<sub>2</sub>]
- a) 5w and fishbone b) 5 why and fishbone  
c) 5w and six sigma d) 5 why and six sigma
5. Assertion (A): Cost of prevention is also known as green money CO1 [K<sub>2</sub>]  
Reason (R): Green money is a cost of developing product without defect
- a) Both A and R are Individually true and R is the correct explanation of A b) Both A and R are Individually true but R is not the correct explanation of A  
c) A is true but R is false d) A is false but R is true
6. ----- Defect may be generated when application communication with environmental factors is hampered CO4 [K<sub>2</sub>]
- a) Algorithmic b) Module-Interface  
c) User-Interface d) System-Interface
7. Arrange the software testing process CO3 [K<sub>2</sub>]
1. Analysis and Design
  2. Evaluating exit criteria and Reporting
  3. Implementation and Execution
  4. Planning and Control
- a) 2-3-4-1 b) 4-1-2-3  
c) 3-4-2-1 d) 4-1-3-2
8. ....is not used as a quality control tool CO5 [K<sub>2</sub>]
- a) Flow chart b) Gantt chart  
c) Pareto chart d) Cause and effect diagram
9. Assertion (A): A walkthrough differs from software technical reviews in its openness. CO2 [K<sub>2</sub>]  
Reason (R):It is a formal software review like inspection
- a) Both A and R are Individually true and R is the correct explanation of A b) Both A and R are Individually true but R is not the correct explanation of A  
c) A is true but R is false d) A is false but R is true

