

**Academic Year (2021-22)**

**Department of Information Technology (Under Graduate Course) B.Sc.IT**

**Question Bank**

**Semester – VI (MCQ based Examination )**

**Software Quality Assurance( USIT601 )**

**Questions for Advanced Learner**

1. A city field in software accepts 3 to 25 alpha characters only. Using Boundary Value Analysis technique what will be the possible number of combinations?

- A. 2, 3, 25, 26
- B. 1, 3, 25, 27
- C. 2, 3, 25, 27
- D. 1, 3, 25, 27

2. Which of the following is a fourth generation strongly typed language?

- A. Ada
- B. C
- C. COBOL
- D. Fortran

3. What will be the next-date value for mm-dd-yy format for 07-31-2020?

- A. 08-31-2020
- B. 1/8/2020
- C. 07-32-2020
- D. 8/7/2021

4. It is acceptable to create DD-Path graph for source code upto

- A. 50 lines
- B. 100 lines
- C. 200 lines
- D. 500 lines

5. McCabe Complexity can be calculated from the formula:

- A.  $v-n+2$
- B.  $v-n+3$
- C.  $v-n+4$
- D.  $v-n+5$

6. One of the following is not a component of verification workbench:

- A. Verification Process
- B. Process rework
- C. Standards
- D. Validation Process

7. This is the one who leads the complete inspection process including planning the inspection, running it, taking the follow up after the meeting.

- A. Manager
- B. Moderator

- C. Author
- D. Reviewer

8. This is the person who prepares the artifact for inspection

- A. Scribe
- B. Moderator
- C. Author
- D. Reviewer

9. This is a testing program based on specification like requirement specification, design specification, user manual etc.

- A. Feature Coverage
- B. Specification Based Testing
- C. Functionality Coverage
- D. Integration Testing

10. In this strategy we find a defect or a bug that go through the paths

- A. Path Sensitizing
- B. Path Profiling
- C. Path Testing
- D. Path reading

### Slow Learner

1. Quality can be defined as Conformance to \_\_\_\_\_.

- A. Specification
- B. Market
- C. Developer
- D. Company

2. The cost which arises from the efforts to prevent defects is called as \_\_\_\_\_.

- A. Appraisal cost
- B. Prevention cost
- C. Failure cost
- D. Miscellaneous cost

3. \_\_\_\_\_ is the conformity of the software with the actual requirements and specifications

- A. Reliability
- B. Performance
- C. Security
- D. Functionality

4. \_\_\_\_\_ is the ease of use and learning ability of the system.

- A. Performance
- B. Reliability
- C. Functionality
- D. Usability

5. The cycle of Improvement Sequence is:

- A. Define, Monitor, Measure, Control, Improve
- B. Define, Measure, Monitor, Improve, Control
- C. Define, Monitor, Measure, Improve, Control

D. Define, Measure, Monitor, Control, Improve

6. "One defect hides another defect" is termed as?

- A. Camouflage Effect
- B. Cascading Effect
- C. Coverage Effect
- D. Redundant Code

7. Which of the following is not an appraisal cost in SQA?

- A. inter-process inspection
- B. maintenance
- C. quality planning
- D. testing

8. \_\_\_\_\_ matrix is used to trace the requirement to the test that are needed to verify whether the requirement are fulfilled

- A. Total quality management
- B. Requirement Traceability
- C. Requirement engineering
- D. Project Quality Management

9. \_\_\_\_\_ is simply the input values to be passed to the system under test.

- A. Test Plan
- B. Test Design
- C. Test Data
- D. Test Cases

10. A \_\_\_\_\_ document is a high level document defines software testing approach to achieve testing objective.

- A. Test Plan
- B. Test Strategy
- C. Test case
- D. Test note

#### Assignment

1. System architecture is determined during which phase?

- A. Requirement gathering
- B. Implementation
- C. Development
- D. Design

2. \_\_\_\_\_ are the Testers of System Testing?

- A. Developers
- B. Business Analysts
- C. Independent Testers
- D. Customers

3. \_\_\_\_\_ Testing makes sure that the system's stability is maintained after modifications.

- A. Usability Testing
- B. Scalability Testing
- C. Regressive Testing

D. Recoverability Testing

4. Recovery Testing comprises of \_\_\_\_\_.

- A. System Recovery
- B. System Design
- C. System Coding
- D. System Maintenance

5. How many process maturity levels are there?

- A. Five
- B. Two
- C. Three
- D. Four

**Security in Computing( USIT602 )**

**Questions for Advanced Learners**

1. In which of the component a security program defines the purpose, scope, and responsibilities of the security organization and gives formal authority for the program?

- A. Charter
- B. Memo
- C. Document
- D. File

2. Which is one of the most important assets a company possesses?

- A. Employees
- B. Resources
- C. Information
- D. Money

3. Which of the following is the least secure method of authentication?

- A. Fingerprint
- B. Retina Pattern
- C. Smart Card
- D. Password

4. Symmetric key cryptography uses the \_\_\_\_\_ key for encryption and decryption.

- A. Same
- B. Different
- C. Fixed
- D. Variable

5. The port no of HTTP is \_\_\_\_\_ .

- A. 23
- B. 25
- C. 80
- D. 443

6. \_\_\_\_\_ is a routing protocol

- A. Internet protocol
- B. Hypertext transfer protocol
- C. Border Gateway protocol
- D. User datagram protocol

7. Which of the following method is used to evade IDSs?

- A. Denial of service
- B. Fragmentation

- C. Pattern matching
  - D. Access attack
8. What are characteristics of stack based IDS?
- A. They are integrated closely with the TCP/IP stack and watch packets
  - B. The host operating system logs in the audit information
  - C. It is programmed to interpret a certain series of packets
  - D. It models the normal usage of network as a noise characterization
9. If an attacker attempts to “break out” of a guest OS to access the hypervisor or neighboring guest OS’s referred as:
- A.Sniffing
  - B.Spoofing
  - C.Escape
  - D.Stealing
10. How many choices for network configurations provide by hypervisors?
- A.1
  - B.2
  - C.4
  - D.3

### Questions for Slow Learners

- 1.What is the best definition of an advanced persistent threat?
- A.A code that won't stop repeating
  - B.A code that hides until it is used
  - C.A code that destroys a computer
  - D.A code that gets lost in data
- 2.Which one of the following is not type of the Virus?
- A.non-resident virus
  - B.memory resident virus
  - C.stealth virus
  - D.MITM
- 3.What is full form of NAS?
- A.New-attached storage
  - B.New-available storage
  - C.Network-attached storage
  - D.Neutral attached storage
4. When an employee record changes, corresponding changes can be easily made by calling
- A.SQL commands
  - B. stored procedures
  - C. view query
  - D. nested query
5. The code 3 of the ICMP error message refers to
- A. Network unreachable
  - B. port unreachable.
  - C. Protocol unreachable
  - D. Port unreachable
6. A packet filter firewall filters at \_\_\_\_\_
- A. Physical Layer
  - B. Data link layer
  - C. Network layer or Transport Layer
  - D. Application layer
7. Which is true of a signature-based IDS?

- A. It cannot work with an IPS.
  - B. It only identifies on known signatures.
  - C. It detects never-before-seen anomalies.
  - D. It works best in large enterprises
8. VoIP Stands for \_\_\_\_\_ .
- A. Voice over Internet Protocol
  - B. Voice over Internal Protocol
  - C. Virtual over Internal Protocol
  - D. Virtual over Internet Protocol
9. Which command sends encrypted data in the content stream or URL?
- A.POST
  - B.GET
  - C.Forward
  - D.Receive
10. Which of the following is not a drawback to install intrusion detection and monitoring systems?
- A.Installation is expensive
  - B.It cannot be penetrated
  - C.It requires human response
  - D.It is subjected to false alarms

### Assignments

1. COBIT DS11.4 Provision relevant to:
- A.Require contractors
  - B.Create and maintain an inventory of information assets
  - C.Ensure that all hardware, software, and facilities related to the security function and controls are tamper-proof.
  - D.Sanitize equipment and media containing sensitive information prior to reuse or disposal.
2. hat are some of the most common vulnerabilities that exist in a network or system?
- A. Changing manufacturer, or recommended, settings of a newly installed application.
  - B. Additional unused features on commercial software packages.
  - C. Utilizing open source application code
  - D. Balancing security concerns with functionality and ease of use of a system
3. The \_\_\_\_\_ must be installed and designed in such a way as to encompass your premises' territory and minimize outside signal leakage as much as possible.
- A.LAN
  - B.VPN
  - C.ETHERNET
  - D.WLAN
4. In networking firewall and \_\_\_\_ systems are used for controlling traffic movement around the network.
- A.authorized
  - B.authentication
  - C.auto generated
  - D.automatic
- 5.What should be done to harden the operating system?
- A.Keep patches updated
  - B.Boot-up password
  - C.All privileges to all
  - D.Admin Privileges

### Questions for Advanced Learners

1. The objective of B.I. is
  - a) To support decision-making and complex problem solving.
  - b) To support information gathering.
  - c) To support data collection.
  - d) To support data analysis.
  
2. Which of the following is not a component of the business intelligence analysis cycle?
  - a) Analysis
  - b) Insight
  - c) Decision
  - d) Design
  
3. Decision making process is of \_\_\_\_\_ phases.
  - a) Three
  - b) Five
  - c) Two
  - d) Six
  
4. Well defined and recurring decision making procedure is called
  - a) Structured
  - b) Semi-structured
  - c) Operational
  - d) Unstructured
  
5. BI supports \_\_\_\_\_ for data.
  - a) Files
  - b) Data Marts & Data Warehouse.
  - c) Data Mining
  - d) System database
  
6. The fourth phase of the BI cycle involves performance measurement
  - a) Design
  - b) Evaluation
  - c) Intelligence
  - d) Graph
  
7. \_\_\_\_\_ technologies enabling factors that have facilitated development of BI with complex organizations
  - a) Application
  - b) System
  - c) business information
  - d) Hardware and Software
  
8. Phases are in Decision making process
  - a) Intelligence, Design, Choice, Implementation, Control.
  - b) Design, Develop, Apply
  - c) Data, Process, Develop, Implement, Control
  - d) Search, Sort, Design, Develop, Implement

9. Knowledge Management increase in the \_\_\_\_\_

- a) no. of options considered.
- b) no. of difficulties considered
- c) no. of risks considered
- d) no. of models considered

10. Information is transformed into \_\_\_\_\_ when it is used to make decisions and develop the corresponding actions.

- a) Data
- b) Knowledge
- c) Outcome
- d) Experience

### **Questions for Slow Learners**

1. In which model some input information represents random events characterized by a probability distribution?

- a) Stochastic
- b) Iconic
- c) Symbolic
- d) Static

2. \_\_\_\_\_ is the outcome of extraction and processing activities carried out on data.

- a) Data
- b) Information
- c) Knowledge
- d) Wisdom

3. In ETL 'E' stands for

- a) External
- b) Extraction
- c) Extreme
- d) Extra

4. DSS stands for:

- a) Decision Support System.
- b) Definition support System.
- c) Data subsystem
- d) Data storage system.

5. \_\_\_\_\_ is the first stage in developing a decision support system.

- a) Analysis
- b) Design
- c) Knowledge Acquisition
- d) Planning

6. Decision support systems are used by

- a) Line managers.
- b) Top-level managers.



- c) Middle level managers.
- d) System users

7. Which of following is not phase of decision making process

- a) Design
- b) Analysis
- c) Intelligence
- d) Choice

8. Which of the following is true:

- a) Intensity of Relation is low for B2C
- b) Intensity of Relation is low for B2B
- c) Intensity of Relation is high for B2C
- d) Does not depend on whether it is B2B or B2C.

9. Which of the following is not part of Web Mining:

- a) Content Mining
- b) Structure Mining
- c) Database Mining
- d) Usage Mining

10. Which of the following is not a component of relational marketing strategy?

- a) Strategy
- b) Data Mining
- c) Technology
- d) Customers

### **Assignments**

1. \_\_\_\_\_ measurements express the level of conformity of a given system to the objectives for which it was designed.

- a) Effectiveness
- b) Efficiency
- c) Evaluation
- d) Feedback

2. \_\_\_\_\_ are supervised learning methods for predicting the value of a categorical target attribute.

- a) Classification
- b) Clustering
- c) Regression
- d) Customization

3. \_\_\_\_\_ is also called the complete linkage criterion.

- a) Minimum Distance
- b) Maximum Distance
- c) Mean Distance
- d) Distance between centroids

4. Automated vehicle is an example of

- a) Supervised learning
- b) Unsupervised learning
- c) Active learning
- d) Reinforcement learning

5. \_\_\_\_\_ methods make use of classification methods based on simple and intuitive algorithms.

- a) Separation
- b) Regression
- c) Probabilistic
- d) Heuristic

### Principles of Geographic Information Systems( USIT604 )

#### Questions : Advanced Learners

1. What does SDSS stand for \_\_\_\_\_.

- a) Spatial Decision Support Systems.
- b) Spatial Data Support Systems.
- c) Spatial Data Support Schemas.
- d) Spatial Decision Semi Systems.

2. In \_\_\_\_\_ step major concern has been taken because the quality level of different datasets has to be consistent and errors should not be introduced while data presentation.

- a) Data Presentation.
- b) Data Acquisition.
- c) Data Verification.
- d) Data Separation.

3. In a TIN model, the world is represented as a network of:

- a) Triangles
- b) Circles
- c) Squares
- d) Hexagons

4. GIS aids users to make

- a) complex analyses only
- b) display maps only
- c) complex analyses and display maps
- d) Display geographic locations

5. Cartographers requires GIS to

- a) store geographic information
- b) use geographic information

- c) view geographic information
- d) store, use and view geographic information

6. DBMS stands for\_\_\_\_\_.

- a) Database Management System
- b) Database Monitoring System
- c) Database Manager System
- d) Database Manufacturing Systems

7. Standards for Geo-databases are\_\_\_\_\_.

- a) OGC
- b) UNESCO
- c) ISO
- d) ISI

8. Which of the following is true about DBMS?

- a) A DBMS provide user defined declarations
- b) A DBMS supports the use of reference models.
- c) A DBMS includes 'data backup' and 'recovery' functions to ensure data availability
- d) A DBMS is platform independent language.

A 'data model' is a language that allows the definition of\_\_\_\_\_.

- a) The 'structures' that will be not used to store the base data
- b) The 'integrity constraints' that the stored data has to obey at all moments in time
- c) Different data types with attribute values.
- d) Data Redundancy can be eliminated

9. Which of the following statements is true?

- a) A table or relation is itself not a collection of 'tuples' (or records)
- b) Each table is a collection of tuples that are similarly reshaped
- c) An 'attribute' is a named field of a tuple, with which each tuple associates a value, the tuple's 'attribute value'
- d) Table cannot have multiple columns.

10. The fundamental principle which refers to the fact that locations that are closer together are more likely to have similar values than locations that are far apart, is commonly referred to as\_\_\_\_\_.

- a) Tobler's first law of Geography
- b) Kepler's first law of Geography
- c) Anthony's first law of Geography
- d) Thompson's first law of Geography

### **Questions: Slow Learner**

1. GIS stands for\_\_\_\_\_

- a. General Information System
- b. Geographic Information System
- c. Geography Information System
- d. Geographic Information Sharing

2. What do u mean by spatial data?

- a. Complex values

- b. Decimal values
- c. Positional values
- d. Graphic values

3. Which type of Field is used in GIS?

- a. Continuous only
- b. Discrete only
- c. Numeric only
- d. Continuous or Discrete

4. Example of a Discrete field is.

- a. Elevation
- b. Road
- c. Air temperature
- d. Soil Salinity

5. 'Metadata' is referred as\_\_\_\_\_.

- a. It is oceanic data
- b. It is meteorological data
- c. It is data about data
- d. It is contour data

6. Spatial data describe as\_\_\_\_\_

- a. characteristics
- b. locations
- c. complex value
- d. simplex value

7. 'Attribute data' describe

- a. locations
- b. Decimal values
- c. Characteristic
- d. Graphic values

8. What do u mean by 'Temporal accuracy'?

- a. Data is up to date
- b. History of data
- c. Logically structured data
- d. Horizontal data

9. Which operations data exploration doesn't include?

- a. Attribute data query
- b. Spatial data query
- c. Geographical visualization
- d. Overlays

10. Which of the following statements is true about GIS SCIENCE?

- a. Georeferencing
- b. Data management, including storage and maintenance

- c. Geometric Transformation
- d. Geographic Information Analysis

Assignments

1. \_\_\_\_\_ is used to represent a real-world feature on two-dimensional surfaces.
  - a) Plan
  - b) Drawing
  - c) Scale
  - d) Map
2. For a map classification, which of the following sets represent are correct?
  - a) Cadastral, thematic
  - b) Thematic, geographic
  - c) Cadastral, geographic
  - d) Geographic, topographic
3. The map, which can explain a particular feature in detail is \_\_\_\_\_ .
  - a) Cadastral map
  - b) Topographic map
  - c) Thematic map
  - d) Geographic map
4. To represent a large-scale map \_\_\_\_\_ should be less.
  - a) Number of Scale
  - b) Number of Size
  - c) Number of elements
  - d) Number of features
5. What is the correct way to represent projected meridians in cylindrical projection?
  - a) Mathematical
  - b) Geometrical
  - c) Horizontal
  - d) Vertical

**IT Service Management( USIT606 )**

**Questions: Advanced Learner**

- Q1. Which of the following is proper sequence of ITSM Life cycle Phases?
- a. design, strategy, transition, operation , continual improvement
  - b. strategy, design, transition, operation , continual improvement
  - c. transition, strategy, design, operation , continual improvement
  - d. strategy, continual improvement, design, transition, operation
- Q2 What is the RACI model used for?
- a. Documenting the roles and relationships of stakeholders in a process or activity
  - b. Defining requirements for a new service or process
  - c. Analyzing the business impact of an incident
  - d. Creating a balanced scorecard showing the overall status of Service Management
- Q3. Which of the following statements is CORRECT about patterns of demand generated by the customer's business?

- a. They are driven by patterns of business activity
- b. It is impossible to predict how they behave
- c. It is impossible to influence demand patterns
- d. They are driven by the delivery schedule generated by capacity management Complements

Q4 The \_\_\_\_\_ Publication provides guidance on how to design, develop and implement service management, not only as an organisational capability but also a service assets.

- a. Service Strategy
- b. Service Transition
- c. Service Operation
- d. Service improvement

Q5 A structure and \_\_\_\_\_ approach to design activities should be adopted.

- a. holistic
- b. unrealistic
- c. intermittent
- d. historical

Q6 \_\_\_\_\_ refers to information exchange between parties in secured and trusted manner.

- a. Authenticity and repudiation
- b. Unauthenticity and repudiation
- c. Unauthenticity and Non repudiation
- d. Authenticity and Non repudiation

Q7 Change management, release and deployment management are a part of \_\_\_\_\_.

- a. Transition planning and support activities.
- b. Change planning and support activities.
- c. Requirement planning and support activities.
- d. Transition planning and work flow

Q8. Which of the following is the correct list of service operation functions described in ITIL?

- a. Technical management function, facilities management function, service desk function
- b. Infrastructure management function, desktop support function, application management function, service desk function
- c. Technical management function, operations management function, application management function, service desk function
- d. Infrastructure management function, service desk function, application development function

Q9. Incident management aims to restore normal service operation as quickly as possible. How is normal service operation defined?

- a. It is the level of service that the user requires.
- b. It is the level of service that the technical management staff members say is reasonable.
- c. It is the level of service defined in the SLA.
- d. It is the level of service that IT believes is optimal.

Q10. Which three aspects must be balanced in a balanced design?

- a. Time, cost, complexity
- b. Resources, time, functionality

- c. Resources, utility, warranty
- d. Functionality, consistency, resources

**Questions: Slow Learner**

Q 1 ITSM is performed by IT Service \_\_\_\_\_ through an appropriate mix of people, process and information technology.

- a. Subscriber
- b. Developer
- c. Customer
- d. Provider

Q2 Which of the following is NOT from four perspectives (4P's) or attributes to explain the concept of ITSM :

- a. Piracy
- b. Products
- c. Partners
- d. Processes

Q3. Which of the following is NOT one of the ITIL core publications?

- a. Service Optimization
- b. Service Transition
- c. Service Design
- d. Service Strategy

Q4 What are the 4 P's of Service Design?

- a. People, Products, Processes and Partners
- b. Public, Processes, Products and Partners
- c. Private, Processes, Partners, Products
- d. People, Partners, Public, Products

Q5 \_\_\_\_\_ is not-for-profit, international consortium that drives the development convergence and adoption of e-business standards.

- a. SOA
- b. OASIS
- c. SOP
- d. OLAP

Q.6 SKMS in Service transition stands for:

- a. Service Knowledge Meet System
- b. System Knowledge Management System
- c. Service Knowledge Management System
- d. Service Knowledge Mode System

Q7 \_\_\_\_\_ release is related to making significant changes to existing functionality.

- a. Major
- b. Minor
- c. Emergency
- d. Milestone

Q8. Which process or function is responsible for management of the Data centre facility?

- a. IT Operations Control
- b. Supplier Management
- c. Facilities Management
- d. Technical Function

Q9. “A warning that a threshold has been reached, something has changed, or a failure has occurred” describes which of the following?

- a. An Incident
- b. An Alert
- c. A Warning
- d. A Change

Q10. Which ITIL concept could be described as a “generic description for many varying types of demands that are placed upon the IT Department by the users”

- a. Service Request
- b. Standard Change
- c. A customer requested event
- d. Service demand

#### Assignments

Q1 An additional evaluation stage may be necessary if \_\_\_\_\_ services and solutions are involved.

- a. external supplier
- b. internal supplier
- c. existence
- d. internet

Q2 Development phase includes translating \_\_\_\_\_ in to plan for development.

- a. Service operation
- b. Service Design
- c. Service Strategy
- d. Service Operation

Q3 \_\_\_\_\_ layer of SKMS offers an interface for users to report analysable information

- a. Data Information layer
- b. Knowledge processing layer
- c. Presentation layer
- d. Information Integration layer

Q4 OASIS Stands for:

- a. Organization for Advancement of System Information Standards
- b. Organization for Adoption of Structured Information Standards
- c. Organization for Adoption of Structured Information Standards
- d. Organization for Advancement of Structured Integration Standards

Q5. The BEST definition of an event is?

- a. A situation where a capacity threshold has been exceeded and an agreed Service Level has already been impacted
- b. An occurrence that is significant for the management of the IT Infrastructure or delivery of services



c. A problem that requires immediate attention

d. A social gathering of IT staff to celebrate the release of a service