Academic Year (2018-19)

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

Question Bank

Semester – VI

Software Quality Assurance (USIT601)

Advanced Learner

- 1. What are the Different types of requirements?
- 2. What are different characteristics of software?
- 3. Explain software development processes.
- 4. How are products classified depending upon their criticality?
- 5. Which are the problematic areas of SDLC?
- 6. Explain software quality management.
- 7. Why does software have defects?
- 8. Which processes are related to software quality?
- 9. Explain generic view of quality management system.
- 10. Which are pillars of quality management system? Explain important aspect of Quality management

Slow Learner

- 1. What is TQM?
- 2. What is PDCA?
- 3. State salient features of good testing.
- 4. What are the challenges faced by tester?
- 5. What is Unit Testing? State its Advantages
- 6. What is Equivalence class testing?
- 7. Write a short note on Acceptance Testing.
- 8. Write a short note on Concerns of verification.
- 9. Write short on Requirements testing
- 10. What is Big Bang Testing?

Assignment

- 1. Why and how to use SPC?
- 2. How to establish testing policy?
- 3. How Improved Equivalence classes ting?
- 4. Explain Levels of Validations.
- 5. Describe Compatibility Testing.

Security in Computing (USIT602)

Questions: Advanced Learner

- 1. How the different security controls protect systems against various threat vectors? Explain.
- 2. Give the various categories of security controls and its implementation strategy.
- 3. Explain the zones of trust.
- **4.** Explain CHAP and MS-CHAP.

- **5.** Explain working of Kerberos.
- **6.** What is SIEM? What are its features?
- 7. List the various VoIP components. Explain any 2.
- **8.** What is hypervisor? How to protect the hypervisor?
- **9.** How to protect the guest OS, virtual storage and virtual networks?
- **10.** Explain any two confidentiality risks associated with cloud computing and their remediation.

Questions: Slow Learner

- 11. What is APT? Explain in detail
- 12. Explain a defense model Lollipop model
- 13. Describe a DDoS attack. Explain its types.
- **14.** Explain perimeter blockade and open access models.
- **15.** Write the steps for creating a security defense plan.
- 16. Explain storage networks.
- 17. Explain Espionage, Packet Sniffing and Packet Replay.
- **18.** Write a short note on classification of assets.
- **19.** Explain any 5 criteria for choosing site location for security?
- **20.** Write a short note on strategies for securing assets.

Assignments

- 1. Write a short note on evolution of information security.
- 2. Describe three Ds of security in context of your own home.
- 3. Write a short note on TCSEC.
- 4. Explain Role Based Authorization (RBAC).
- 5. Explain different types of ICMP messages.

Business Intelligence (USIT603)

Questions: Advanced Learner

- 1. Explain major potential advantages deriving from the adoption of DSS.
- 2.Describe development of decision support system
- 3. Explain the process of problem-solving.
- 4.Describe the structure of Mathematical Model.
- 5.Explain following classes of mathematical models in details:
 - i Predictive Models.
 - ii Pattern recognition and learning models.
 - iii Optimization models.
 - iv Project management models.
 - v Risk analysis models.
- 6.Describe all phases of development of mathematical model.
- 7. What are the characteristics of clustering method?
- 8.Explain K-mean method.
- 9. Explain optimization models for Logistics Planning.
- 10.Explain Efficient Frontier, Efficiency measures in details.

Questions: Slow Learner

- 1. What is Data, Information, Knowledge, Wisdom?
- 2. Compare Artificial Intelligence and Natural Intelligence.
- 3. What is Supply chain management? How can it be optimized? Explain with examples.
- 4. Write a short note on Sale force arrangement
- 5. Write short note on nominal attributes.
- 6. Write a short note on the Bayesian method.
- 7. What is meant by Data Validation? Explain it in brief with different kinds of it.
- 8.Draw and explain the architecture of data mining.
- 9. Explain various new components of DSS structure?
- 10.Explain the importance of Ethics in Business Intelligence.

Assignments

- 1. Explain major components of Business Intelligence.
- 2. Write short note on role of mathematical model.
- 3. Write short note on Data Reduction.
- 4.Explain the ROC curve chart. Explain the cumulative gain and lift chart.
- 5. Explain Multi-level Feed-Forward Network.

Principles of Geographic Information Systems (USIT604)

IT Service Management(USIT606)

Questions: Advanced Learner

- 1. Elaborate Service Life Cycle of ITSM.(OR Draw and explain Service lifecycle)
- 2. Who is a Service Provider? What are its types?(OR List and explain various service providers in ITSM)
- 3. Explain in detail about Service Level Management process of Service design.
- 4. Explain the Sub-Processes in Capacity Management. (OR What is the goal of capacity management? List and explain the sub-processes of capacity management)
- 5. Explain service V model.
- 6. Write a short note on the DIKW Model of ITIL Knowledge Management.
- 7. Write a short note on Operational Health in Service Operation Phase.
- 8. Write a short note on Meetings in regards with Service Operation Phase.
- 9. List and Explain Sub-Processes of Process Evaluation.
- 10. What is Benchmarking? Explain its procedure.

Questions: Slow Learner

- 1. What do you mean by ITSM? What are the issues related to ITSM?
- 2. What is ITIL? List its various stages
- 3. Define Service Design. List and explain its goals.
- 4. Explain in detail about Subsequent design activities.
- 5. What is Service Transition? Explain its Objective and Goals.

- 6. Explain ITIL Change Management life cycle.
- 7. What is Incident Prioritization?
- 8. What is a service operation module?
- 9. Explain Continual Service Improvement with its Objectives and Scope.
- 10. Write a short note on the Seven-Step Improvement Process.

Assignments

- 1. Write short note on Pattern of Business Activity
- 2. List and Explain activities of Information Security Management process.(OR What is the goal of Information Security Management?)
- 3. What is Change Management? What are the goals & objectives of change management? List and explain different types of changes.
- 4. Explain Objective, Purpose and Scope of Event Management Process
- 5. Write short note on Service Knowledge Management