

**FACULTY OF INFORMATICS**  
**M.C.A. III - Year I - Semester (New) (Main & Backlog) Examination,**  
**January / February 2015**

**Subject: Information Security**

**Time: 3 Hours**

**Max. Marks: 80**

**Note: Answer one question from each unit. All questions carry equal marks.**

**Unit - I**

- 1 (a) Define Information Security. What are the three components of CIA triangle? What are they use for? (6)  
 (b) Explain the Security System Development life cycle. (10)
- OR**
- 2 (a) Define threat. Explain the various types of threats in information security. (10)  
 (b) What are the business needs of Information Security? (6)

**Unit - II**

- 3 (a) Discuss the law and Ethics in Information Security. (6)  
 (b) Discuss about risk assessment. What are the factors responsible for risk assessment? (10)
- OR**
- 4 (a) Explain about risk identification. (8)  
 (b) Discuss the Quantitative Versus and Qualitative Risk Control. (8)

**Unit - III**

- 5 (a) How a Security framework assist in the design and implementation of a Security infrastructure? (8)  
 (b) Discuss briefly about Vp N's. (8)
- OR**
- 6 (a) Explain the configuration of firewall is done. (8)  
 (b) Discuss the Disaster Recovery planning. (8)

**Unit - IV**

- 7 (a) Write about the biometric access control. (8)  
 (b) Explain the steps / process in SHA. (8)
- OR**
- 8 (a) Discuss in detail about advantages and disadvantages of IDPS. (6)  
 (b) Explain the Diffie – Hellman Algorithm with an example. (10)

**Unit - V**

- 9 (a) Write about the Bull's – Eye Model. (6)  
 (b) Discuss the Digital forensics with advantages and disadvantages. (10)
- OR**
- 10 Write the overview and phases of National information Assurance Certification and Accreditation Process (NIA CAP). (16)

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**FACULTY OF INFORMATICS**

**M.C.A. III - Year I – Semester (Old) Examination, January / February 2015**

**Subject: Software Testing**

**Time: 3 hours**

**Max. Marks: 80**

**Note: Answer ONE question from each unit. All questions carry equal marks.**

**UNIT – I**

1 What is functional testing? Explain boundary value testing with an example.

**OR**

- 2 a) Explain the guidelines for equivalence class testing.  
b) Discuss the importance of decision table based testing in functional testing.

**UNIT – II**

- 3 a) Explain McCabe's basis path testing method.  
b) Explain the use of data flow testing.

**OR**

- 4 a) Write about structural testing explaining its importance.  
b) Explain the use of path testing by taking suitable example.

**UNIT – III**

- 5 a) Discuss about various levels of testing.  
b) Explain the different strategies for system testing.

**OR**

6 Explain interaction testing with an example.

**UNIT – IV**

- 7 a) Explain how methods can be used as units in object-oriented testing with an example.  
b) How does GUI testing prevent user input errors? Explain.

**OR**

- 8 a) Discuss the importance of treating classes as units in object oriented testing with the help of an example.  
b) What are the issues in object-oriented testing? Explain.

**UNIT - V**

9 Explain in detail model-based testing with an example.

**OR**

10 Discuss about the top 10 best practices for software testing excellence.

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