

Reg. No. : .....

D 2513

Q.P. Code : [07 DMCA 13]

(For the candidates admitted from 2007 onwards)

M.C.A. DEGREE EXAMINATION, MAY 2014.

Third Year

SOFTWARE TESTING

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

Each question carries 20 marks.

(5 × 20 = 100)

1. (a) Differentiate between testing and debugging.  
(b) Explain the model for testing process.  
(c) What are the possible consequences of bugs? Also explain its categories.
2. (a) Explain the types of black box testing.  
(b) With a suitable example, explain how nested loops are tested?
3. (a) Explain the issues in integration testing.  
(b) Discuss briefly about path sensitizing.

4. (a) Explain the following: Reviews, Inspections and Walkthrough's.  
(b) List and explain the features that make the design of transaction-flow testing easy.
  5. (a) Explain in detail why static analysis are inadequate.  
(b) Explain the following Slicing, Dicing, Data Flow and Debugging.
  6. (a) What is the role of KV charts in testing logic-intensive routines? Explain  
(b) Explain the various stages of canonical processor.
  7. (a) Write short notes on state and transition bugs.  
(b) Explain the principles for judging good state and bad state graphs.
  8. (a) Explain top - down and bottom up integration testing strategies.  
(b) Discuss in detail the various debugging principles.
-

Reg. No. : .....

**D 2514**

**Q.P. Code : [07 DMCA 14]**

(For the candidates admitted from 2007 onwards)

M.C.A. DEGREE EXAMINATION, MAY 2014.

Third Year

**DATA MINING AND WAREHOUSING**

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

All questions carries 20 marks.

(5 × 20 = 100)

1. (a) Explain various steps in knowledge data discovery process. (10)  
(b) Discuss social implications of data mining. (10)
2. (a) Write short notes on neural networks. (10)  
(b) What are the statistical methods used in data mining? (10)
3. Explain various partitioning algorithms with an example. (20)

4. (a) Compare apriori algorithm with FP growth model for association rule mining.  
(b) Discuss decision trees with an example. (10)
5. Explain the following:  
(a) Distance based algorithms. (10)  
(b) Rule based algorithms. (10)
6. (a) What are the characteristics of data warehouse? (10)  
(b) Write short notes on multidimensional star schema.
7. What are the design considerations and performance considerations for developing a data warehouse? (20)
8. Discuss the following:  
(a) Applications of data mining in government sector  
(b) Applications of data mining to medicine  
(c) OLAP tools  
(d) Star schema.

Reg. No. : .....

**D 2515**

**Q.P. Code : [07 DMCA 15]**

(For the candidates admitted from 2007 onwards)

**M.C.A. DEGREE EXAMINATION, MAY 2014.**

**Third Year**

**Elective — SOFTWARE PROJECT MANAGEMENT**

**Time : Three hours**

**Maximum : 100 marks**

**Answer any FIVE questions.**

**All questions carry equal marks.**

**(5 × 20 = 100)**

1. Explain in detail about the software life cycle model with various phases.
2. Explain requirement engineering process in detail.
3. What is software quality assurance and discuss it's features.
4. Write the functions of maintenance phase in detail.
5. Discuss in detail about design and development phase.

6. Explain the Risk Management Cycle, tools and their techniques.
  7. Explain the phases and methodology of estimation.
  8. What is testing? Explain the issues and metrics for testing phase.
-

Reg. No. : .....

**D 2516**

**Q.P. Code : [07 DMCA 16]**

(For the candidates admitted from 2007 onwards)

M.C.A. DEGREE EXAMINATION, MAY 2014.

Third Year

Elective – WAP AND XML

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

(5 × 20 = 100)

1. (a) Explain the overview of the wireless application protocol.  
(b) Discuss the components and interfaces of WAP architecture.
2. (a) Explain the authoring and document model of WML.  
(b) How can you create a WML document. Illustrate.
3. (a) What is the WML variable? How do you use them.  
(b) Explain about images, tables and links in WML documents.

4. (a) Define user interface design and its applications.  
(b) What are the structured usability methods?
  5. (a) Write note on WML script and applications of WAP.  
(b) Discuss in detail about the WTA architecture.
  6. (a) Discuss about mobile internet.  
(b) Write about beyond browser and beyond cellular.
  7. (a) Describe the applications of WTA.  
(b) Discuss in detail about the design considerations and toolbox available in WTA.
  8. (a) Why the security in wireless is vulnerable? Discuss.  
(b) Write note on designing a usable WAP site.
-



Reg. No. : .....

D 2517

Q.P. Code : [07 DMCA 17]

(For the candidates admitted from 2007 onwards)

M.C.A. DEGREE EXAMINATION, MAY 2014.

Third Year

Elective II – DIGITAL IMAGE PROCESSING

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

(5 × 20 = 100)

1. (a) What are the fundamental steps in digital image processing? (10)  
(b) Write short notes on image sampling. (10)
2. Explain image enhancement using arithmetic and logic operations. (20)
3. (a) Discuss pixel addressing in detail. (10)  
(b) Compare minimum mean square error filtering and constraint least squares filtering. (10)

4. Explain various image restoration techniques in detail. Give an example. (20)
  5. Explain the following image standard.
    - (a) JPEG
    - (b) PNG
    - (c) TIFF
    - (d) GIF.
  6. Explain any one lossless image compression with an example.
  7.
    - (a) Write short notes on edge linking. (10)
    - (b) Discuss boundary deduction in detail. (10)
  8. Explain the following :
    - (a) Morphological watershed
    - (b) Error free compression
    - (c) Histogram
    - (d) SNR values.
-