(For the candidates admitted from 1995 to 1997)
M.C.A. DEGREE EXAMINATION, DECEMBER 2009
Third Year
COMPUTER NETWORKS

Time: Three hours   Maximum: 100 marks

Answer any ~~FIVE questions.~~
ONE from each Unit.

1. a. Describe the common objectives of a computer communication networks. (4)
   b. Discuss the seven layers of the ISO OSI Reference Model. (16)
   (OR)
   c. Describe the network structure and the uses of computer networks. (14)
   d. Explain the different types of services provided by the layers. (6)

2. a. Explain the three different encoding techniques in Baseband Coaxial cable. (14)
   b. Explain the various ISDN services. (6)
   (OR)
   c. Describe the digital transmission in computer Networks. (12)
   d. Explain the working principle of digital PABX. (8)

3. a. Relate channel utilization to channel traffic using Pure ALOHA and Slotted ALOHA. (14)
   b. Explain the Character Stuffing technique. (6)
   (OR)
   c. Explain the Simplex Stop-and-Wait protocol. (14)
   d. Explain the collision-free protocols. (6)

4. a. Describe the different issues of Connection Management. (12)
   b. What is Congestion? Examine any three ways to avoid congestion. (8)
   (OR)
   c. Describe the OSI Session primitives and its functions. (12)
   d. Discuss the design issues of RPC. (8)

5. a. Explain the four functions of Presentation layer. (8)
   b. Discuss the different types of Virtual Terminals. (12)
   (OR)
   c. Explain the general model of the Encryption. (8)
   d. Explain any two widely used secure e-mail systems. (12)

(For candidates admitted from 1998 to 2000)

M.C.A. DEGREE EXAMINATIONS, DECEMBER- 2010

Second Year / Fourth Semester

COMPUTER PERIPHERALS AND TROUBLESHOOTING

Time: 3 Hours   Maximum: 100 marks

Answer all questions
Section A- (10 x 2= 20 marks)

1. Give examples for Volatile and Non-volatile memory.
2. List the various I/O Interrupts.
3. List some Video display adapters.
4. What type of interface is the keyboard?
5. What is meant by POST Sequence?
6. What is the size of PSP?
7. Give the functions of FCB.
8. What is FAT?
9. What are the services provided by ISR?
10. What is meant by memory management?

SECTION B – (5 x 4 = 20 marks)

11. (a) Write note on DMA.

                                                    Or

    (b) Discuss about Branching Instructions.

12. (a) Discuss the functions of PC Bus slot.

                                                    Or

    (b) Write notes on character sets.

13. (a) Discuss about printer services.

                                                    Or

    (b) Write note on COM programs.

1

14. (a) How files are organized in disk?

Or

(b) Explain the use of INT21 H to alter the file attributes.

15. (a) Briefly discuss about Interrupt handlers.

Or

(b) Explain the concept of modifying allocation.

SECTION C – (5 x 8 = 40 marks)

16. (a) Briefly discuss about Input and Output ports.

Or

(b) Write about Data addressing modes.

17. (a) Describe the functions of a disk controller in a PC.

Or

(b) Give the functions of DMA controller

18. (a) Explain the File structure of DOS in detail.

Or

(b) Discuss about serial port services.

19. (a) Give the Read and write Operations performed on a disk storage.

Or

(b) Describe the contents and format of a normal and extended File Control Blocks.

20. (a) Write about program loading and execution cycle.

Or

(b) Write a note on Program Overlays through EXEC.

SECTION D – (2 x 10 = 20 marks)

21. (a) With neat sketch explain the functional block diagram of a PC.

Or

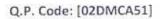(b) Describe the various modes of instruction set of 8086/88.

22. (a) Discuss the fundamentals of DOS in detail.

Or

(b) Write the memory management functions of INT21H.

(For the candidates admitted from 2002 to 2004 calendar year)

M.C.A DEGREE EXAMINATION, DEC-2010

FIFTH SEMESTER

WEB TECHNOLOGY

Time: Three hours   Maximum: 100 marks

Answer ALL questions.

SECTION – A (20 X 1 = 20 Marks)

1.   What is the use of <TR> tag in HTML?

2.   _____ is the tag used in HTML for linking an external document.

3.   What are the attributes used with FRAMSET tag?

4.   How can we embed an image in a HTML document?

5.   A cookie is a program that runs at _____.(Server/Client)

6.   ADO stands for _____.

7.   What is a hash data type in Perl?

8.   What is ODBC?

9.   What are the two types of requests possible in a Java Servlet?

10.   How is a page directive used in JSP?

11.   How many implicit objects are available in JSP?

12.   What is the use of URL rewriting?

13.   How is a bookmark referred in a web document?

14.   What is the use of image maps?

15.   What does the term 'padding' refers in CSS?

16.   What are xml namespaces?

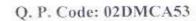17.   Among DOM and SAX which is faster at run time?

18.   Tree of nodes.[DOM/SAX]

19.   What is the use of the symbol '@' in Xpath expression?

20.   What is XSL-FO?

SECTION B – (5 X 4 = 20 Marks)

21. (a) List the HTML tags used to construct a table.

Or

(b) Write brief notes on web cookies.

22. (a) What are the advantages of client side scripting over the server side scripting?

Or

(b) What are regular expressions in Perl?

23. (a) What is the difference between servlets and Java Server Pages? Which is preferred?

Or

(b) What are JSP scriplets? Gives its syntax.

24. (a) Show how an external style sheet may be linked to an HTML document using LINK element.

Or

(b) What is the difference between DTD and XML schema?

25. (a) Compare SAX with DOM.

Or

(b) Define the Xlink terms 'arcs' and 'traversal'.

SECTION – C (5 X 12 = 60 Marks)

26. (a) Discuss in detail the tags of HTML for text formatting in a document. (12)

Or

(b) Demonstrate with a suitable example the use of frames in HTML documents. (12)

27. (a) Write an ASP that connects to a student database from a server and retrieve the details (12)
such as marks scored in selected subjects.

Or

(b) Develop a perl script to convert to parse a given text file and make the first alphabet of (12)
every sentence to uppercase.

28. (a) Explain the architecture and access models of JSP. (12)

Or

(b) Discuss the common issues and solutions for synchronization in JSP. (12)

29. (a) Describe with suitable examples the important features of CSS in HTML pages. (12)

Or

(b) Develop an XML schema for an online quiz application. (12)

30. (a) Describe the following properties of XSL: informational, paragraph and character. (12)

Or

(b) What is Xpath? Describe its data model. (12)

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(For candidates admitted from 2002 to 2004 calendar year)

M.C.A. DEGREE EXAMINATIONS, DECEMBER – 2010

NETWORK OPERATING SYSTEM AND ADMINISTRATION

Time: 3 Hours   Maximum: 100 marks

Answer ALL questions

All questions carry equal marks.

SECTION A – (20 x 1 = 20 marks)

Fill in the blanks:

1. Define Network.
2. Give any two common type of transmission media cable.
3. Arcnet is a _____ protocol.
4. Define the term 'Network Topology'.
5. _____ is a widely ported operating system kernel.
6. What is the main design goal of NT?
7. Define File system.
8. What is server?
9. NDS stands for _____
10. Expand the term HPFS.
11. What is a driver?
12. NTFS means _____
13. RISC stands for _____
14. Define inode.
15. What is subnet?
16. ICMP stands for _____
17. What is DHCP?
18. NFS means _____
19. Mention the use of BOOTP.
20. Define trouble shooting.

SECTION B – (5x4 = 20)

21. a. Discuss about the Ethernet.
                    Or
    b. Describe about the Network Transmission Media.

22. a. How to create a login process in network administration?
                    Or
    b. Discuss about the setting of file system security in network.

23. a. Describe network adapter driver.

                    Or

    b. Compare NTFS and FAT

24. a. Describe about the software installation in Linux environment.

                    Or

    b. Explain the File system process in Linux administration.

25. a. Discuss about the routing process.

                    Or

    b. Explain Domain Naming System.

SECTION C - (5 x 12 = 60 marks)

26. a. Explain in detail about the various types of Network model.

                    Or

    b. Describe briefly about the Token ring topology in network with necessary diagram.

27. a. How to perform the Novell Directory Services security? Explain in detail.

                    Or

    b. Explain in detail about monitoring the Novell Netware Server performance.

28. a. Describe briefly about how to install and configure the Windows NT workstation.

                    Or

    b. Explain in detail about the RISC platform in various Operating system environments.

29. a. Describe about the file system organization and how to perform a system backup and restoring process in Linux environment.

                    Or

    b. Describe in detail about the Linux Administration.

30. a. Discuss briefly about the configuration of Network Information System.

                    Or

    b. Explain in detail structure about the TCP/IP architecture.

M.C.A DEGREE EXAMINATION, DECEMBER 2010.

Second Semester

COMPUTER GRAPHICS

Time : Three hours   Maximum: 100 marks

Answer ALL questions

SECTION A—(20 x 1 = 20 marks)

1. Define Aspect ratio.
2. Give any two disadvantages of DDA algorithm.
3. What is pixel addressing?
4. Give any two circle generating algorithm.
5. Give the formula for ellipse.
6. What is scaling?
7. Give the matrix for 2D translation.
8. What are curved lines?
9. What is matrix for shearing?
10. What are the advantages of GUI interface?
11. Give matrix representation for 3D translation.
12. Why splines are used?
13. Define the formula for cubic splines.
14. Give diagrammatic representation of polygon.
15. Define projection.
16. Define point clipping.
17. Cohen-Sutherland algorithm is ------------------ technique.
18. Give any two advantages of scanline method.
19. RGB is an example of --------------------.
20. Define animation

P.T.O.

21.(a) Discuss any one input devices in detail.

OR

(b) Compare raster scan and random scan graphics.

22.(a) Explain the matrix representation of graphics.

OR

(b) Derive window-viewport formula.

23.(a) Write short notes on quadratic surfaces.

OR

(b) Write short notes on fractals.

24.(a) Compare cavalier and cabinet projections.

OR

(b) Write the procedure for polygon clipping.

25.(a) Give the advantages of RGB colour model.

OR

(b) Write short notes on Computer Animation.

SECTION C—(5 × 12 = 60 marks)

26. (a) Explain Shadow mask CRT working principle with neat diagram.

OR

(b) Write the Breshanham line drawing algorithm. Using this algorithm draw the line from (2,3) to (5, 6).

27. (a) Explain 2D transformations with suitable example.

OR

(b)Describe Cohen- Sutherland line clipping technique with an example.

28.(a) Explain cubic Spline interpolation in detail.

OR

(b) Derive the formula for three dimensional rotations with respect to an arbitrary point.

29. (a) Discuss any two hidden surface elimination methods in detail.

OR

(b) Explain ant two region filling algorithms.

30. (a) Explain any two colour models in detail.

OR

(b) Write short notes on following

(i) Polygon rendering methods.

(ii) Applications of computer graphics.

(For candidates admitted during 2004 & 2005 calendar year)

M.C.A. DEGREE EXAMINATIONS, DECEMBER- 2010

Second Semester

RELATIONAL DATABASE MANAGEMENT SYSTEM

Time : Three hours   Maximum: 100 marks

Answer ALL questions

SECTION A—(20 x 1 = 20 marks)

1. Give any two disadvantages of file systems.
2. What is database?
3. Expand ACID.
4. Define Entity.
5. Define association.
6. What is procedural language?
7. Define foreign key.
8. Define complete binary tree.
9. What is view?
10. Give the syntax for alter the table.
11. Give any two advantages of SQL.
12. Give the syntax for intersect and union command in SQL.
13. What are triggers?
14. What is correlated sub query?
15. What is cursor?
16. Define first normal form.
17. What is transitive property?
18. Give the advantages of distributed database.
19. OODBMS stands for --------------------------?
20. What is parallel database?

SECTION B – (5 x 4 = 20 marks)

21. (a) Give the diagrammatic structure of DBMS?

OR

(b) Discuss Data definition commands in SQL.

22. (a) Compare procedural and non-procedural languages.

OR

(b) Explain different types of constraints in SQL.

23. (a) How relational algebra is converted to SQL? Explain with an example.

OR

(b) Discuss any one lock based protocol.

24. (a) Define 3-NF and BCNF.

OR

(b) Explain 4-NF with suitable example?

25. (a) Write short notes on OODBMS.

OR

(b) List the advantages of Object oriented design.

SECTION C—(5 × 12 = 60 marks)

26. (a) Discuss E-R data model with Library database as example.

OR

(b) Compare DBMS and File Processing Systems.

27. (a) Explain various operations of Relational algebra.

OR

(b) Discuss Relational calculus and its various operations.

28. (a) Explain Transaction management in detail.

OR
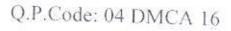
(b) Discuss PL/SQL programming with suitable example.

29. (a) Describe various database security mechanisms in detail.

OR

(b) Explain concurrency control mechanism in detail.

30. (a) Explain Distributed database and its various advantages.

OR

(b) Discuss object oriented database design using bank as database.

Q.P.Code: 04 DMCA 16

(For the candidates admitted during 2004 and 2005 calendar year)

M.C.A. DEGREE EXAMINATION, DEC 2010

Fourth Semester

ADVANCED JAVA

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

SECTION A – (20*1=20 marks)

1. Define JVM

2. Give the syntax for Switch statement

3. Define Java tokens?

4. Give the types of Inheritance in Java.

5. Define class scope.

6. Define static class member.

7. Define Information hiding.

8. Give the usage of keyword 'super'.

9. What is meant by copy constructor?

10. What is the use of getChars method.

11. Define Swing.

12. Give the syntax for drawing arcs.

13. Define exception.

14. What is the use of finally?

15. What is a Thread?

16. State any four Exceptions.

17. Give the Lifecycle methods of a Servlet.

18. Define RMI.

19. What is a Bean class?

20. Define session.

SECTION B – (5*4=20 marks)

21. (a) Write about the conditional statements in Java.

Or

(b) Write an applet program to draw lines, circles and squares.

22. (a) Explain Method Overloading in Java with example.

Or

(b) Explain how arrays are passed to methods with examples.

23. (a) Write about string tokenizer class and its usage with an example

Or

(b) Write a program in Swing to find Prime numbers between 1 and 100.

24. (a) Define thread. Explain runnable interface with an example

Or

(b) Write about the creating, reading and updating a sequential access file.

25. (a) Write notes on java beans.

Or

(b) Write a program to send message from HTML to Servlet.

SECTION C – (5*12=60 marks)

26. (a) Explain Operators in Java with examples.

Or

(b) Explain Control Structures in Java.

27. (a) Write about Multiple subscripted arrays in Java with an example.

Or

(b) Write a program and explain Inheritance.

28. (a) Explain the String handling functions with examples.

Or

(b) Explain Layout manager and Panels in Swing.

29. (a) Write a program using Threads for the Producer Consumer Problem..

Or

(b) Write a student marksheet preparation program using files and stream.

30. (a) Create a Servlet application that displays current Date and Time.

Or

(b) i. Explain the properties of a JavaBean class with example.
ii. Explain the BeanInfo class.

(For candidates admitted from 2004 to 2007 calendar year)

M.C.A. DEGREE EXAMINATIONS, DECEMBER – 2010

Fourth / Fifth Semester

Elective: EMBEDDED SYSTEMS

Time: 3 Hours   Maximum: 100 marks

Answer ALL questions

All questions carry equal marks.

SECTION A – (20 x 1 = 20 marks)

1. Define embedded system.
2. RTC means _____ .
3. _____ is an important device for getting user input.
4. Define processor.
5. ROM stands for _____ .
6. What is multiplexing?
7. PCI stands for _____ .
8. Define serial port.
9. SIPO stands for _____ .
10. What is Interrupt Latency?
11. Define model.
12. Define Software Testing.
13. What is mailbox?
14. SCI stands for _____ .
15. ISR means _____ .
16. What is kernel?
17. Define unlock.
18. IDE stands for _____ .
19. What are the various states in a task?
20. VLSI stands for _____ .

SECTION B – (5x4 = 20)

21. a. Discuss about the microprocessor.

Or

b. What are the various forms of memories in an embedded system?

22. a. Write short notes on Direct Memory Access.

Or

b. Describe about Virtual Device Driver.

23. a. Make a note on control DFG model.

Or

b. Discuss about FSM state table.

24. a. Describe about Semaphores.

Or

b. Explain about multiple threads in an application.

25. a. What are the uses of target system?

Or

b. Explain the scope and logic analysis for system hardware test.

SECTION C - (5 x 12 = 60 marks)

26. a. Explain in detail about the embedded system on chip and the use of VLSI circuit design technology.

Or

b. Explain in detail about the processor specific Assembly language.

27. a. How many types of handling mechanisms in processor hardware? Explain in detail.

Or

b. Briefly discuss about the parallel device port.

28. a. Describe about the software development life cycle with illustration diagram.

Or

b. Explain about verifying and validating.

29. a. Describe in detail about multiple process in an application.

Or

b. Explain the design principle when using an RTOS to design an embedded system.

30. a. Discuss in detail about the issues of project management in an embedded system.

Or

b. Explain briefly the case study of embedded system application for a smart card.

Q.P.Code: [05 DMCA 06]

(For the candidates admitted from 2005 to 2007 calendar year)

M.C.A DEGREE EXAMINATION, DECEMBER 2010.

Second Semester

DATA STRUCTURES AND ALGORITHMS

Time : Three hours   Maximum: 100 marks

Answer ALL questions

SECTION A—(20 x 1 = 20 marks)

1. Give any two characteristics of an algorithm.
2. How 2D array is represented in C.
3. Give any two applications of stack.
4. Convert the (a+(c+d)) into postfix notation.
5. Define recurrence relation.
6. What is dynamic allocation?
7. Define sparse matrix.
8. Define complete binary tree.
9. What is transitive closure?
10. Give the diagrammatic representation of doubly linked list.
11. What is external sorting?
12. Give the worst case time complexity for merge sort?
13. Give the time complexity for bubble sort.
14. Define symbol table.
15. Define hash function.
16. Give the disadvantages of sequential files.
17. What is indexing?
18. Define recursion.
19. How string is compared in C language?
20. Define game tree.

SECTION B – (5 x 4 = 20 marks)

21. (a) How an algorithm is analyzed?

OR

(b) Write the C code for finding factorial value using recursion.

22. (a) Give the advantages of single linked list.

OR

(b) Write short notes on compaction techniques.

23. (a) Discuss any one storage devices in detail.

OR

(b) Discuss shell sort with an example.

24. (a) Compare quick sort and merge sort.

OR

(b) How static tree table is constructed?

25. (a) Write the procedure for tower of Hanoi problem.

OR

(b) Describe any four string functions with an example.

SECTION C—(5 x 12 = 60 marks)

26. (a) Write the algorithm for Queue using array.

OR

(b) Discuss any two applications of stack in detail.

27. (a) Explain tree traversal techniques with suitable example.

OR

(b) Explain Single source shortest path algorithm with an example.

28. (a) Write Quick sort procedure using that arrange the following numbers in ascending order.

2, 3, 1, 0, -9, 7, 5, 10, -6, 11, 4

OR

(b) Explain K-way merging of files with an example.

29. (a) Discuss dynamic tree tables with suitable example.

OR

(b) Discuss Indexing techniques in detail.

30. (a) Explain Game trees in detail.

OR

(b) Write short notes on following

(i) Types of recursion

(ii) Pattern Matching techniques.

Q.P Code: 05DMCA07

(For the candidates admitted from 2005 to 2007)
M.C.A Degree Examination, DEC- 2010
First Year / Second Semester
RELATIONAL DATABASE MANAGEMENT SYSTEM

Time: Three hours   Maximum: 100 marks

Answer all questions
SECTION – A (20 * 1 = 20 marks)

1. What is data?

2. Compare Data and Information?

3. What is entity set?

4. What is Primary key?

5. What is a View?

6. State First Normal Form.

7. Define distributed database.

8. Why Normalization is needed?

9. What is OODBMS?

10. Define Entity relationship models.

11. Define access control with respect to databases.

12. What is the command that is used to destroy a table?

13. What is relational Database?

14. What is concurrency?

15. What is Query Optimization?

16. What are reference types with respect to Objects?

17. What is a Lock?

18. What is a Trigger?

19. Define Integrity constraints?

20. What is a foreign key?

SECTION – B (5 * 4 = 20 marks)

21. (a) Explain attributes and relationship sets.

(OR)

(b) Explain the ACID properties?

22. (a) Explain concurrency control.

(OR)

(b) Describe the star join with example.

23. (a) Explain UNION and INTERSECT queries with example.

(OR)

(b) What is complex integrity constraint in SQL?

24. (a) Explain the Read-Write anomalies?

(OR)

(b) Explain the difference between 3-NF and BGNF.

25. (a) What are the difference categories in 2PL?

(OR)

(b) What are structure data types, explain with examples.

SECTION – C (5 * 12 = 60 marks)

26. (a) Describe in detail about 3-tier architecture in DBMS.

(OR)

(b) Explain conceptual database design with ER model.

27. (a) Explain DDL and DML commands with appropriate examples.

(OR)

(b) Explain different types of relational operators with examples.

28. (a) Explain nested queries with examples.

(OR)

(b) Explain multi version lock based protocol.

29. (a) Explain different normalization forms with suitable example.

(OR)

(b) Explain access control..

30. (a) Compare OODBMS and RDBMS.

(OR)

(b) What are the options for parallel joins?

———

(For the candidates admitted from 2005 to 2007 calendar year)

M.C.A. DEGREE EXAMINATION. DEC - 2010

SECOND SEMESTER

SYSTEM SOFTWARE AND INTRODUCTION TO OPERATING SYSTEM

Time: Three hours.   Maximum: 100 marks.

Answer all questions.

SECTION A - (20 X 1 = 20 marks)

1. What is a system program?
2. What is an assembler?
3. What is a compiler?
4. What is a macro in an assembly language?
5. List the three types of analysis in analysis phase of a compiler.
6. What are the functions performed by a loader?
7. Define the term "relocation factor".
8. Define the term "linkage editor".
9. Define the term "Operating System".
10. Define the term "multiprogramming".
11. What is semaphore?
12. What is multithreading?
13. Define the term 'process'.
14. Define 'deadlock'.
15. Define 'context switch'.
16. What is critical region?
17. What are the different types of scheduling?
18. List any four file attributes.
19. What is programmed I/O?
20. List the several criteria in choosing a file organization.

SECTION - B (5 X 4 = 20 MARKS)

21. a. Explain the various components of system software.

(OR)

b. Discuss about software processors.

22. a. Explain the process of compilation of control structures.

(OR)

b. Write the program linking scheme algorithm.

23. a. Explain life cycle of a process.

(OR)

b. Explain the various services provided by the operating system.

24. a. Explain the four conditions for deadlock.

(OR)

b. Explain the concept of Virtual memory.

25. a. Discuss about any one file organization and access.

(OR)

b. Explain the concept of file sharing.

26. a. Discuss about evolution of system software.

(OR)

    b. Highlight the salient aspects of macro definition and usage.

27. a. Discuss about Code Optimization.

(OR)

    b. Discuss the design of the linkage editor for IBM PC.

28. a. Describe the evolution of an operating system.

(OR)

    b. Explain the concept of process synchronization with semaphores.

29. a. Describe the FIFO, LRU and LFU page replacement strategies in detail.

(OR)

    b. Explain segment address translation by direct mapping.

30. a. Describe any three process scheduling discipline.

(OR)

    b. Explain three types of directory systems.

(For candidates admitted from 2005 to 2007 calendar year)

M.C.A. DEGREE EXAMINATIONS, DECEMBER – 2010

Third Semester

ANALYSIS AND DESIGN OF INFORMATION SYSTEMS

Time: 3 Hours   Maximum:

Answer ALL questions

SECTION A – (20 x 1 = 20 marks)

1. Define information.
2. Define Operational Information.
3. Who is a Line manager?
4. Define the term OLAP.
5. What is batch processing?
6. What are the tools used by system analyst?
7. Who interact with managers, users and application programmers in designing system?
8. Which is used to gather quantitative information such as sales statistics?
9. List out the strategy to gather information.
10. Define analysts.
11. What is the use of data dictionary?
12. What is modularization?
13. What is the objective of cost-benefit analysis?
14. Which is used to examine whether technology is available to carry out the project?
15. What are the techniques used to express computational procedure?
16. Define the term DEDT.
17. Which is used to detect redundant rules?
18. When the off-line data entry is suitable.
19. List out some of common output devices?
20. Define virus.

SECTION B – (5x4 = 20)

21. a. Explain in detail about the significance of computer based information syst
                    Or
    b. List out the qualities of an information.

22. a. Discuss about the Interviewing Techniques.
                    Or
    b. What are the characteristics of a good information system?

23. a. Explain the various steps in system analysis with diagram.

               Or

    b. What are the various stages of feasibility analysis with diagram?

24. a. Explain the term 'Decision Structure' with diagram.

               Or

    b. Write short notes on Karnaugh maps.

25. a. Explain the type of common coding techniques.

               Or

    b. Why controls are necessary in an Information System?

SECTION C - (5 x 12 = 60 marks)

26. a. Explain in detail about the various categories of information

               Or

    b. Discuss about the various management and their information requirements.

27. a. Describe about the different stages of system development life cycle.

               Or

    b. List out the role and tasks of a system analyst. Explain in detail.

28. a. Explain in detail about the system requirements specification with flow diagram.

               Or

    b. What are the symbols used in DFD? Explain in detail and give example.

29. a. How to establish the logical correctness of decision tables? Explain with diagram.

               Or

    b. Explain the term process specification. How redundancy is eliminated in information?

30. a. Explain in detail about the classification of Information System test.

               Or

    b. Discuss about the following:

        (i) Modulus 11 – codes

        (ii) Error Detection

(For the candidates admitted from 2005 to 2007 calendar year)

M.C.A Degree Examination, DEC - 2010

Fifth Semester

Elective - SOFTWARE PROJECT MANAGEMENT

Time: Three hours   Maximum: 100 marks

Answer all questions

SECTION – A (20 * 1 = 20 marks)

1. Define Software.

2. Software is _____, it is not manufactured in the classical sense.

3. What is project life cycle model?

4. List out the different phases of a Waterfall model.

5. _____ is the first activity in software project planning.

6. How risks are identified?

7. What do you understand the term risk quantification?

8. Why is quality important in software?

9. What do you mean by SCM?

10. List out any two SCM tools.

11. What are the three phases of estimation?

12. What is requirement refinement?

13. Mention any two SQA tools.

14. Compare Shrink and wrapped software.

15. Give any two design model.

16. Component level design is to translate the design model into _____.

17. What is testing?

18. "Are we building the product right"? Is known as _____.

19. What are the activities that make up testing?

20. List any two project management activities.

21. (a) Describe the Product life cycle model.

(OR)

(b) What are the approaches for software prototyping? Describe in detail.

22. (a) What are software quality analyst's functions?

(OR)

(b) Discuss about operational principles in analysis phase.

23. (a) Write the requirement specification for a student mark processing system.

(OR)

(b) What are the steps to be followed during requirement gathering?

24. (a) Explain the salient features of design.

(OR)

(b) Explain the Metrices for testing phase.

25. (a) Explain the activities during the maintenance phase.

(OR)

(b) Explain the skill sets for the people in the maintenance phase.

SECTION – C (5 * 12 = 60 marks)

26. (a) What is project life cycle? Explain the project lifecycle in detail.

(OR)

(b) Explain the Rapid Application Development model in detail.

27. (a) Explain with an example, Compare Quality Assurance and Quality Control.

(OR)

(b) Explain the importance of risk management in detail.

28. (a) How decision tree is useful to control risks? Explain.

(OR)

(b) Explain in detail about the challenges during estimation.

29. (a) Discuss the various people issues in testing phase.

(OR)

(b) Discuss in detail about various design models available in software project management.

30. (a) Explain the globalization issues in project management.

(OR)

(b) Explain the effect of internet on project management.