[4772]-11

M.C.M.

'C' PROGRAMMING

(2008 Pattern) (Semester-I)

Time : 3 Hours] *[Max. Marks : 70*

Instructions to the candidates:

1) *Question No. 1 is compulsory.*

2) *Solve any five from the remaining.*

Q1) A) Find and explain output of the following programs. Assume suitable header files (Any 3): **[12]**

  a) void main( )

   {

    int x;

    x = 4%9 + 6/5;

    printf("x = %d", x);

   }

  b) int x = 10;

   void main( )

   {

   printf("% d",x);

   {

    int x = 20;

    {

     int x = 30;

     printf("%d", x);

    }

   printf("%d", x);

   }

   }

c) void main( )

```c
{
    int x = 2, y = 3;
        x = ++x * ++x;
        y = ++y * ++y;
        x = x++ * y++;
        y = y++ * x++;
        printf("x = %d\t y = %d", x,y);
}
```

d) void main( )

```c
{
    void ser( );
    int i;
    for(i = 0; i < 10; i++)
            ser( );
}
void ser( )
{
    static int n = 9;
    printf("\t%d", n);
    n = n + 9;
}
```

B) Explain the following (Any Two)   **[8]**

a) Data Types in C.

b) Recursive functions.

c) Dynamic memory allocation.

Q2) Write a program to display following pattern using nested loops.   **[10]**

1

2 2

3 3 3

4 4 4 4

Q3) Write a program to accept two 3 × 3 matrices and display the addition on the screen. **[10]**

Q4) Write a recursive function which receives the string and return the length of the string. **[10]**

Q5) Write a program to accept bill no, customer code, name and amount of 100 bills and print the details of the customer with maximum amount. **[10]**

Q6) Write a program to accept two filenames from the user and copy the contents of first file to second file. **[10]**

Q7) Write a program to accept 10 numbers and display the numbers by sorting in descending order. **[10]**

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M.C.M.

102: FUNDAMENTALS OF INFORMATION TECHNOLOGY

(2008 Pattern) (Semester - I)

Time : 3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:

1) *Question No. 1 and 7 are compulsory.*
2) *Attempt any four from the remaining.*
3) *Figures to the right indicate full marks.*

Q1) a)   Define Operating System and different functions of it.   **[8]**

  b)   What is network? Explain it with suitable example.   **[7]**

Q2) What is Magnetic Disk? Explain it in detail.   **[10]**

Q3) What do you mean by Computer Language? Explain different types of Languages.   **[10]**

Q4) What is Cache Memory? Describe various functions of Cache Memory. **[10]**

Q5) a) $(AD)_{16} = (?)_6$

  b) $(28)_{10} = (?)_8$

                                                                   [10]

Q6) Explain Seven Layers model in detail.   **[10]**

Q7) Short note (Any three).   **[15]**

  a)   ASCII

  b)   Types of Computers

  c)   Spooling

  d)   Multiprogramming

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[4772]-13
M.C.M.
103 : SOFTWARE ENGINEERING & BUSINESS PROCESS
(2008 Pattern) (Semester-I)

Time : 3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:
1) *Question No. 1 and 6 are compulsory.*
2) *Attempt any three from the remaining.*

Q1) Customer carries prescription to buy medicines from Krishna Medical Stores. The pharmacist checks the stock as the prescription and if the stock is not available makes entry into purchase register. The bill for the medicines is prepared that contains Doctor's name, Patient's name and the details of medicines. Customer pays by cash or card.

Design the following:

a)   Entity Relationship Diagram.   **[10]**

b)   File Design.   **[10]**

c)   Bill.   **[5]**

Q2) Differentiate between Waterfall and Prototyping Model.   **[10]**

Q3) "Reynolds Pens" is a manufacturing company of various varieties of Pens. The company has decided to computerize their Purchase Order System. Following procedure is followed in the company.

After receiving the purchase requisition from store department, enquiries are made to various suppliers. The suppliers send quotations to the company. All quotations are analyzed and final selection of suppliers is made and accordingly purchase orders to respective suppliers are sent. The suppliers send Invoice along with the raw material. Payment to the supplier is made after verifying the invoice.

Draw CLD and 1st level DFD.   **[10]**

Q4) OnlinePlacements.com is an online placement website. User registers to the website and uploads the updated resume on the website. The companies also register to the website and post their requirements on the website. User searches for the requirements and applies if found suitable post. Companies scrutinize the resume of the candidate and calls for an interview if found suitable.

Draw Use case Diagram for the above case. **[10]**

Q5) Explain Decision Tree and Structured English with suitable example. **[10]**

Q6) Write short notes for following (Any Three): **[15]**

a) Role of System Analyst.

b) Case Tools.

c) Reverse Engineering.

d) Fact Finding Techniques.

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M.C.M.

PRINCIPLES & PRACTICES OF MANAGEMENT

104: Organizational Behaviour

(2008 Pattern) (Semester - I)

Time :3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:

    1)   *Question No. 1 is compulsory.*

    2)   *Solve any three out of the remaining.*

Q1) a)   Define 'management' and explain various functions of management.**[15]**

    b)   Define motivation. Describe maslow's theory in details.   **[10]**

Q2) Define 'Leadership'. Explain various 'styles' of Leadership.   **[15]**

Q3) Why the theory of modern management is valid in recent times? Also explain its features.   **[15]**

Q4) What is an organization? Explain different types of organizational structures.**[15]**

Q5) Explain the concept of conflict and discucss measures to avoid conflict.**[15]**

Q6) Elaborate contributions made by F.W. Taylor to the management Theory.**[15]**

Q7) Short Notes (any three).   **[15]**

    a)   Managerial skills.

    b)   Decentralization.

    c)   Transactional Analysis.

    d)   Types of manager.

    e)   Theory X.

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M.C.M.

COMMERCE

105: WEB PROGRAMMING AND E-COMMERCE

(2008 Pattern) (Semester - I)

Time :3 Hours]

[Max. Marks : 70

Instructions to the candidates:

   1) Question No. 1 & 7 are compulsory.
   2) Attempt any four from the remaining.
   3) Figures to the right indicate full marks.
   4) Draw neat diagrams wherever necessary.

Q1) Define E-commerce? Explain the impact of E - commerce on value chain.**[10]**

Q2) Explain various ways of On-line marketing in detail & state their advantages and disadvantages. **[10]**

Q3) List and explain various legal Issues in E-commerce. **[10]**

Q4) What is cryptography? Explain various types of cryptography with the help of suitable diagrams. **[10]**

Q5) Discuss in detail steps to build an E-commerce Web application. **[10]**

Q6) What is Electronic Data Interchange? Give the advantages & disadvantages of EDI. **[10]**

Q7) Write Short Notes on (any FOUR). **[20]**

   a) Cyber sqatting.
   b) Deep linking.
   c) History of Internet Development.
   d) Types of E-commerce.
   e) Mobile computing.

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M.C.M.

DATA STRUCTURE AND ALGORITHMS

(2008 Pattern) (Semester - II)

Time : 3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:

    1)   All questions are compulsory.

    2)   State your assumptions clearly, if any.

    3)   Write appropriate structure definitions wherever necessary.

Q1) a)   Evaluate the following postfix form: **[8]**

       ABC* +DE/ -

       where A = 8, B = 6, C = 5, D = 24, E = 4

       Show contents of the stack at each step.

<div align="center">OR</div>

       Evaluate the following prefix form:

       –/*A + BC DG

       Where A = 2, B = 1, C = 3, D = 3, G = 1

       Show contents of stack each step in tabular form.

    b)   Write an ANSI 'C' code for deleting a Node from linked list.   **[7]**

Q2) a)   Consider a message: **[6]**

       COORDINATION

       Draw Huffman Tree for the message. What kind of tree is Huffman Tree?

    b)   Write ANSI 'C' codes for any three of the following: **[9]**

       i)   To count number of nodes of a given tree.

       ii)   To display data stored in different nodes of BST in ascending order.

iii) To push the element to stack.

iv) Searching an element from integer array using binary search. Assume array is stored in ascending order.

Q3) Answer any three of the following: **[15]**

a) Write ANSI 'C' function to add node in singly linked list of integers.

b) Write function for printing data stored in a linear doubly linked list of integers in reverse order.

c) Write function for finding sum of data stored in a linear linked list of integers.

d) Write function to count non-leaf nodes of BST.

*Q4)* Solve any three of the following: **[15]**

a) Consider declaration:

int arr [20][30];

compute row major and column major address of an element arr[6] [11], when base address of array is 100 and each element 2 bytes in memory.

b) Construct AVL tree with the following:

PASCAL, FORTRAN, C, COBOL, BASIC, PROLOG

c) Sort the following sequence at numbers using Heat Sort Method. Show all the steps in sorting.

25,27, 48, 37, 12, 92, 84,33.

d) Define the following terms:

i) Tree

ii) Complexity of algoirthm

iii) Stack

iv) Deque

Q5) Answer using the following graph. [10]
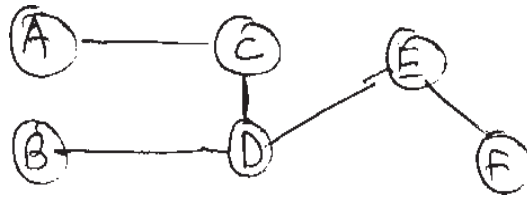
a) Generate output of Breadth first search (BFS) for above graph, when starting vertex is A. Adjacent vertices be picked up in alphabetical order.

b) Generate output of Depth First Search (DFS) for above graph, when starting vertex is A.

c) Its Adjacency Matrix.

d) Its Adjacency list Representation.

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M.C.M.

202: DATABASE MANAGEMENT SYSTEM (D.B.M.S.)

(2008 Pattern) (Semester - II)

Time : 3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:

  1) Q.No. 1 is compulsory.

  2) Solve any five from the remaining questions.

Q1) a)   Normalize following case upto 3NF: **[12]**

ABC Advertisement & Publicity Agency					Cash/Credit Memo	
Client Name:		Bill No:			Bill Date	
Client Address:		Release Order No.:			Release Order Date	
		Receipt No.			Receipt Date	
Client Type		Excise Charge				
		Code No.				
Sr.No	Publication	Publication Type	Size Col. X Cm	Rate	Amount Rs.	Amount Ps.
Signature		Service Tax Charge				
		Box Charge				
		Other Charges				
		Total				

  b)   Write in brief about Codd's any Eight Rules.   **[8]**

Q2) Explain Three Tier Architecture of DBMS.   **[10]**

Q3) Explain differences between NDM and RDM with proper example.   **[10]**

Q4) Explain Time Stamp Based Ordering Protocol with proper example.   **[10]**

Q5) What is Join? Explain all types of Join with example. **[10]**

Q6) Explain differences between Data Mining and Normal Query. **[10]**

Q7) Write short notes: (Any Two). **[2×5 = 10]**

    a)   Data Distribution Techniques.

    b)   ACID Property of Transaction.

    c)   Advantages and Disadvantages of DDBMS.

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M.C.M.
203: ORACLE
(2008 Pattern) (Semester - II)

Time :3 Hours]

[Max. Marks : 70

Instructions to the candidates:
1) *All questions are compulsory.*
2) *Figures to the right indicate full marks.*

Q1) Consider the following tables:

   i.   Employee (empno, empname, salary, designation)

   ii.   Department (deptno, deptname, location, empno)

   a)   Create above tables with suitable constraints and add two records in each.   **[10]**

   b)   Solve any five SQL Queries for the following: **[10]**

      i)   Display all details of employees who are working at 'Pune' location.

      ii)   Display department name wise list of Employees

      iii) Count the number of employees who are working in 'Computer' department.

      iv) Display maximum salary of the employee.

      v)   List the names of the employees who salary are more than 5000.

      vi) Display average salary for every designation.

Q2) Write PL/SQL block for the following: (Attempt Any Five).   **[25]**

   a)   Write a function that accepts empno as a parameter and returns true is salary is grater than 10,000; otherwise returns false.

   b)   While inserting a record in Employee table, if salary is less than or equal to 5000, trigger should be fired and message "salary <=5000 not allowed" should be displayed.

P.T.O.

c) Write a procedure that accepts empno as parameter. Search this empno in Employee table. If found, set Joining-date to current date. If not found, raise an exception which displays error message "EMPNO NOT FOUND".

d) Accept deptno from user and delete that record from Department table

e) Display top 3 employee records with highest salary.

f) Accept empno and display empname and designation.

Q3) Write Short Note: [Any Five]   **[5×5 = 25]**

a) Views.

b) Index

c) Grant and Revoke

d) Group Functions in SQL

e) Any Five Data Types

f) Set Operators

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M.C.M.

204: BASIC JAVA

(2008 Pattern) (Semester - II)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

    1)   Q.Nos.1 & 7 are compulsory.

    2)   Solve any three from Q.2 to Q.6.

    3)   Figures to the right indicate full marks.

Q1) Predict the outputs for the following and give an explanation: (Any three).**[15]**

    a)   int i = 0;

         if (i)

         System.out. println ("Hello World");

         else

         System.out.println ("Bye...");

    b)   class arr{

         public static void main (string args [ ])

         {

            int var [ ] = new int [10];

            for (int i = 0; i<10; ++i){

          var [i] = i;

          System.out.print(var [i] + " ");

          i ++;

          }

         }

         }

c) class base {int x = 10;}

  class derived extends base {int x = 20;}

  base b = new base ( );

  derived d = new derived ( );

  base bd = new derived ( );

  system.out.println (b.x + " " + d.x);

d) String s1 = "HELLO WORLD";

  s1.toLowerCase ( );

  System.out.println (s1);

Q2) Create a form with fields Name, age, gender and a button. Name and age is text box and gender is radio button. use relevant classes in AWT. If age is >=18 display message "Eligible for Driving licence" else display message "Not eligible for Driving licence" in a label. **[15]**

Q3) Create an interface Shape with methods area and perimeter. Implement the interface for Circle and Rectangle class. In main class create the objects for the concrete classes Circle and Rectangle and call the methods. **[15]**

Q4) Write an applet to move a ball from left to right (use multithreading). **[15]**

Q5) Write an application to accept the name, age and salary of an employee through command line. If user enters less parameters throw user defined exception "Insufficient DataException". **[15]**

Q6) Write an application to accept two file names. Append the contents of file 1 to file 2. Perform necessary validations. **[15]**

Q7) Write short notes: (Any Two). **[10]**

  a) Hashtable

  b) Garbage Collection

  c) User defined packages.

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M.C.M.

205: CORE RUBY

(2008 Pattern) (Semester - II)

Time : 3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:
1) *All questions are compulsory.*
2) *Neat Diagrams carry marks.*

Q1) Find the output and justify your answer. (Any 5)   **[15]**

   a)   begin

         raise "The message"

      rescue Exception => e

         puts e.to_s

      end

   b)   p = lambda do

         def hello

         "Hello, Dave"

          end

      end

      FriendlyClass = Class.new (&p)

      f=FriendlyClass.new

      puts f.hello

   c) $_ = "quick brown fox"

      gsub/[aeiou]/, '*'

      print $_

   d)   a = 1

      puts a*= 2 while a <50

      puts a – =5 until a <50

e) at_exit {puts "at _exit function"}

ObjectSpace.define_finalizer ("string", lambda {puts "in finalizer"})

f) def get _binding (param)

      return binding

  end

  b = get _binding ("hello")

print eval ("param", b)

g) class Array

def find

    for i in 0.. size

      value = self [i]

      return value if yield (value)

    end

    return nil

  end

end

puts [1,3,5,7,9]. find {|v| v*v>30}

Q2) Solve (Any four). **[40]**

a) Write a ruby program to create a file, store text and display the content in uppercase letter, read the file character by character.

#assumptions: the file exist in the same folder as the program.

b) Write a ruby program to find the size of file, words, characters with space, characters without space

#assumptions: the file exist in the same folder as the program.

c) A hospital keeps a file of blood donors in which each records has the format name, address, age, blood type. Write a program to read the file and print a list of all blood donors whose age is below 25.

d)   In a inter-college competition, various sports like cricket, basketball, football, hockey, lawns tennis, table tennis, carom and chess are played between different colleges. The information regarding the games won by a particular colleges.

e)   Write a ruby program to draw the following pattern

```
   *
  ***
 *****
*******
```

Q3) Short notes (any 3)   **[15]**

a)   Ruby Modules

b)   Unit Testing

c)   Duck Typing

d)   Inheritance and Polymorphism

e)   Abstract class.

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M.C.M.

OBJECT ORIENTED DESIGNING

(2008 Pattern) (Semester - II)

Time : 3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:

1)   Question No. 1 is compulsory.

2)   Answer any 5 from the remaining.

3)   Mention assumptions made for solving case study.

Q1) a)   Design the Use Case and Class Diagram for the following case: **[15]**

A reputed college is conducting multiple courses. The college has Online Faculty Feedback System. The feedback can be given only by the students studying in the college for current academic year. Each course in the college has many faculties teaching various subjects in various courses. Students can give Feedback for faculty who has taught him/her for the current semester.
The Online Feedback System should include following:

·   Login for Faculty

·   Login for Students

·   Login for HOD

·   One student can fill the Feedback form only once in a semester.

·   According to the points given by the students in the feedback, system calculates the grades of faculty.

·   Faculty can only view the feedback grades given by the students without seeing name of the student.

Appropriate action will be taken by the HOD, if Feedback of the particular faculty is below certain level.

  b)   Explain Abstraction and Encapsulation along with example.   **[5]**

Q2) Explain Object Modeling Technique (OMT) by Rumbaugh. **[10]**

Q3) Explain Rational Unified Process in detail. **[10]**

Q4) Explain 'Noun Phrase Approach' for identification of classes in detail. **[10]**

Q5) Draw an activity diagram for Online Hotel Room Booking. **[10]**

Q6) a) Draw a sequence diagram for ATM System. **[5]**

b) Draw collaboration diagram for registering new E-mail Account. **[5]**

Q7) Short notes: (Any Two): **[10]**

a) Object Persistence.

b) Guidelines for developing test cases.

c) Explain types of pattern

d) What is Problem Analysis?

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[4772]-31

M.C.M.

301 : LINUX PROGRAMMING

(2008 Pattern) (Semester-III)

Time : 3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:

   1)   *Question No. 1 and 7 are compulsory.*

   2)   *Solve any three from the remaining.*

Q1) a)   Write PHP Script which accepts customer number and displays details of customer in HTML format. Use suitable database and table. **[10]**

    b)   Explain Apache directives written in httpd. conf file. **[10]**

Q2) Explain the following Linux Commands: **[10]**

    a)   sort

    b)   kill

    c)   init

    d)   rpm

    e)   cat

Q3) Write MySQL Commands for the following: **[10]**

    a)   To create database INVENTORY of type MYISAM.

    b)   To create table ITEM with proper constraints.

    c)   To create user staff having permission to access INVENTORY database.

    d)   To take backup of ITEM table in text file.

    e)   To display items having stock zero.

    f)   To add column inventoryclass in table ITEM.

Q4) Explain different types of arrays in PHP with example. **[10]**

Q5) Explain built in database function in PHP. **[10]**

Q6) Explain use of include( ) and require( ) in PHP with suitable example. **[10]**

Q7) Write short notes (Any Four): **[4 x 5 = 20]**

    a)   MySQL GUI Tools.

    b)   Classes in PHP.

    c)   GET and POST.

    d)   Php.ini

    e)   mysqladmin and mysqlshow.

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M.C.M.

302: BUSINESS APPLICATIONS

(2008 Pattern) (Semester - III)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

1) *Question No. 1 is compulsory. Attempt any five from the remaining.*
2) *Figures to the right indicate full marks.*
3) *State your assumptions clearly.*

Q1) Draw the first level data flow diagram for store system. Design normalized data base for it. **[20]**

Q2) Explain with examples the difference between Bin-card and Store ledger. **[10]**

Q3) What should be the menu for Recruitment System. Explain in which order it works. **[10]**

Q4) Draw a layout of any one financial accounting report with its purpose and few entries. **[10]**

Q5) Design data entry screen for purchase order with required validations. **[10]**

Q6) What is ratio-analysis? How it helps to take financial decisions? **[10]**

Q7) Write short notes (Any Two) **[10]**

a) ROQ

b) BOM

c) Payslip

d) Performance Appraisal System.

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M.C.M.

303 : ADVANCED JAVA

(2008 Pattern) (Semester-III)

Time : 3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:
1) *Question No. 1 is compulsory.*
2) *Attempt any four from the remaining.*

Q1) Solve the following (Any Two):   **[10]**

    a)   Servlet API.

    b)   Thread safe servlet.

    c)   Session Management.

Q2) Write HTML page to accept employee details (Consider suitable table structure). Using servlet insert these details into employee table. Display the same record in tabular format and allow user to edit/delete the same record.

       [15]

Q3) Create JSP page which will contain a text box to accept Rollno and submit button. When user clicks on submit button, student detail should get display. If record not found, then display proper error message.   **[15]**

Q4) Write JDBC code to display total number records in product table. Display all attributes of the same table (consider suitable table structure).   **[15]**

Q5) Write detailed note on strut framework with suitable diagram and explain following terms.   **[15]**

    a)   Action servlet.

    b)   Action form.

    c)   Action Mapping.

Q6) Write short notes (Any Three):   [15]

    a)   JDBC Drivers.

    b)   RMI Architecture.

    c)   Difference between stateless and statefull session Bean.

    d)   Servlet life cycle.

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M.C.M.
304:ADVANCED RUBY
(2008 Pattern) (Semester - III)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:
  1) *All Questions are compulsory.*
  2) *Neat diagrams carry marks.*

Short Notes:

Q1) Check and identify all the corresponding steps and phases, if found get full marks otherwise give the marks according to steps.

Q2) Check and identify all the corresponding diagram if found get full marks otherwise give the marks according to the diagram.

Q3) Check the format of file and their required fields, if found get full marks otherwise give the marks according to their fields.

Programs:

Q4) Check and identify the programs, variables, method and classes name as given in the program.

Q5) Check the class format, method declaration format, if found get full marks otherwise reduce the marks.

Q6) Check the logic of the program, if found get full marks otherwise give the marks according to steps.

Q7) Check file pointer, file method, packages that is required to import. If found get full marks otherwise given the marks according to steps.

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M.C.M.

305: VB. NET

(2008 Pattern) (Semester - III)

Time :3 Hours]

[Max. Marks : 70

Instructions to the candidates:

1) *Question No. 1 is compulsory.*

2) *Solve any FOUR questions from Q.No. 2 to Q.No.7.*

3) *Figures to the right indicate full marks.*

Q1) Draw and Explain .NET Framework architecture in detail. **[10]**

Q2) Design a form and write code to perform Insert, Updata, Delete, First, Next, Previous and Last operations on BookTable (BookID, Title, Price, Author, Publisher). Server Name: UOP, User Name: MCM, Password: MCM. **[15]**

Q3) Write a program to read and write a data in a file using stream reader and stream writer classes. **[15]**

Q4) What do you mean by structured exception handling? Create and Check and Throw your own defined ''Negative Number Exception''. **[15]**

Q5) Write a function for the following:

a) To accept principal amt, rate of interest for the year and return interested amount for the quarter. **[7]**

b) To accept an array and a number and return an array of numbers divisible by the given number. **[8]**

Q6) Explain the following controls: (Any THREE). **[15]**

    a)   List Box Control

    b)   Tree View Control

    c)   Text Box Control

    d)   Error Provider Control

Q7) Write short notes on following: (Any THREE). **[15]**

    a)   Concept of Inheritance

    b)   Access Modifiers

    c)   Namespaces

    d)   Overloading and Overriding

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M.C.M.

306: SOFTWARE PROJECT MANAGEMENT

(2008 Pattern) (Semester - III)

Time :3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:

    1)   Question No. 1 & 7 are compulsory.

    2)   Solve any four from remaining.

Q1) a)   Explain contents of project plan.   **[8]**

    b)   Explain various techniques of project tracking.   **[7]**

Q2) Why IT professionals leave the job? Also explain various techniques of retaining them.   **[10]**

Q3) What care is taken by IT companies while purchasing any hardware & software.   **[10]**

Q4) Explain & differentiate between ISO & CMM.   **[10]**

Q5) Explain need of change management also explain configuration audit.   **[10]**

Q6) Explain & differentiate between Network diagram & Gantt chart.   **[10]**

Q7) Write short note on any three.   **[15]**

    a)   Function point analysis

    b)   COCOMO.

    c)   Various types of Tisks

    d)   Benchmarking

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M.C.M

401: MOBILE COMPUTING

(2008 Pattern) (Semester - IV)

Time : 3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:

   1)   ***Question No.7 is compulsory.***

   2)   ***Solve any 5 from the remaining.***

Q1) What is MAC? Explain its Requirement.   **[10]**

Q2) Explain Mobile IP and why is it Required.   **[10]**

Q3) Define WAP. What is its importance?   **[10]**

Q4) Explain wireless LAN and why is it required.   **[10]**

Q5) Explain Transport layer and briefly explain why is it required.   **[10]**

Q6) What is Dynamic DNS? Why is it required?   **[10]**

Q7) Write short notes on: (ANY Four).   **[20]**

   a)   IEEE 802.11.

   b)   Bluetooth.

   c)   Routing in Mobile Hosts.

   d)   Transaction Oriented TCP.

   e)   Context aware computing.

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[4772] - 42

M.C.M.

402: ASP. NET

(2008 Pattern) (Semester - IV)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

1) *Q.No. 1 is compulsory.*
2) *Solve any FOUR questions from Q.No. 2 to Q.No. 7.*
3) *Figures to the right side indicate full marks.*

Q1) Differentiate between ASP and ASP.NET.   **[10]**

Q2) Explain client side state management techniques in detail.   **[15]**

Q3) Explain the concept of error paging and error logging in detail with suitable example.   **[15]**

Q4) Design a form and write code to: **[15]**

   a)   Populate and display books names in a drop down list.

   b)   Select a book from drop down list & display its details in underlying text boxes.

   c)   Add a record.

   d)   Delete Selected Record

   e)   Edit Selected Record

   Use connected architecture. Name of Server: MyAsp DB (SQL Server)

   Name of Table: BookMaster (BookID, Title, Author, Publisher, Price).

Q5) Explain any two navigation controls in detail with the help of web.sitemap file.   **[15]**

P.T.O.

Q6) Explain the following controls: (Any Three)   **[15]**

    a)   Bulleted List Control

    b)   Radiobutton List Control

    c)   Range Validator Control

    d)   Label Control

Q7) Write short notes on following: (Any Three).   **[15]**

    a)   Creating and Applying Themes

    b)   Web Service

    c)   ADO. NET architecture

    d)   Authentication and Authorization.

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M.C.M. (Management)
403: INFORMATION SECURITY
(2008 Pattern) (Semester - IV)

Time :3 Hours]

[Max. Marks : 70

Instructions to the candidates:

1) *Question No. 1 and 6 are compulsory.*
2) *Solve any three from the remaining.*

Q1) Case study : (solve any one case) **[20]**

Intellectual property Theft:

The complainant (software company based in Bangalore) alleged that some of the company's former employees had accessed the company's IT system and tampered with the source code of the software under development.

a) What precaution was not taken by the organization to present it? What is your suggestion in this regrd?

b) Write down the steps to investigate and suggest required internal control on this.

OR

Kolhapur Rural Development bank decided to compute rize its operation along with ATM facility. As a computer policy planner of the Bank what security model you will study and implement? **[20]**

Q2) Discuss SSE-CMM model in detail. **[10]**

Q3) What are various ethical issues concerned with the information system professionals? **[10]**

Q4) Explain the different Types of Bio-metric controls that can be used for Information security system. **[10]**

Q5) What are the Threats in Infrastructure security? **[10]**

Q6) Write short Note on [Any four] **[20]**

    a)   COBIT.

    b)   Role of Internet in Global Information system.

    c)   Cryptographic Techniques.

    d)   Copy right Act.

    e)   Security standards (ISO) 27001 and 27002.

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M.C.M.

404: CYBER LAW

(2008 Pattern) (Semester - IV)

Time : 3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:

   1)   Q.No. 1 & 6 are compulsory.

   2)   Solve any three from the remaining.

   3)   Figures to the right indicate full marks.

Q1) Solve any two cases.   **[20]**

Case 1:

Brain Software developer is a growing I.T. company developing different software product. The company wants to use original programming code for the software development but the employee used the readymade code from internet to complete development task as security expert create security policy to protect coping code and also suggest some security to protect unauthorized access of data from external users.

Case 2:

The institute wants to use biometric device for attendance and keeping watch on movement of students. As a security manager suggest proper biometric device for the purpose along with its merits and demerits.

Case 3:

Aryan private LTD Company is Government Company developing missile. The production going on remote place which is far away from India. The plan and design for missile designed by group of people from India. This group shares the design of missile over the internet by sending the mail to each other as well as production department. As security expert find out threats for design exchange and also implements security.

Q2) Explain Biometrics technology with its working?   **[10]**

Q3) Explain Cryptography with its merits & demerits?   **[10]**

Q4) What is E-Banking and also share threats related to E-banking?   **[10]**

Q5) Explain most common network attacks and how to protect from them? **[10]**

Q6) Write short note on [ANY 4].   **[20]**

    a)   Working of IRT

    b)   Hacking

    c)   Security Alarm

    d)   Multilevel Security

    e)   Threats in Distributed system.

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[4772] - 45

M.C.M.

MULTIMEDIA AND WEB DESIGNING

(New 2008 Pattern) (Semester - IV)

Time : 3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:

    1)   Question No. 1 is compulsory.

    2)   Attempt any five from the Q.2 to 7.

Q1) Design Following Form to accept Student Registration Details from Participant and validate any four Field using JavaScript/VBScript.   **[20]**

Q2) Write a Code for following program which explain image mapping.   **[10]**
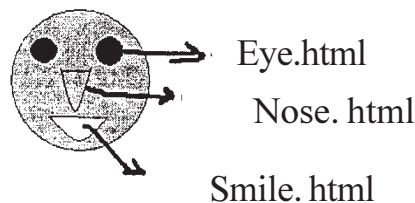
Q3) Explain various Operators. Loops in VB Script with example.   **[10]**

Q4) Explain use of function explain string functions in VBScript.   **[10]**

Q5) Session Objects with Example in ASP. [10]

Q6) Explain various types of Style Sheets in HTML. [10]

Q7) Write short notes: (Any two): [2×5 = 10]

a) Request and Response Objects in ASP.

b) XSLT.

c) MIDI

d) Image File Data Types.

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[4772] - 46

M.C.M.

406: SOFT SKILLS

(2008 Pattern) (Semester - IV)

Time : 3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:

    1)   Q.No.1 is compulsory.

    2)   Solve any three questions from remaining.

Q1) a)   What is communication? Discuss four principles of communication. Give examples.   **[15]**

    b)   Explain difference between formal and non - formal communication with example.   **[10]**

Q2) What is report writing? Discuss with types of reports in organisation.   **[15]**

Q3) Electronic media plays important role in todays business. Give example.**[15]**

Q4) Discuss importance of Body language in communication.   **[15]**

Q5) What is Upward and Downward communication? What are the methods used to encourage such communication.   **[15]**

Q6) Define Listening process with Hearing. Why are these process important.**[15]**

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M.C.M.

QUALITY CONTROL AND SOFTWARE TESTING

(New 2008 Pattern) (Semester - IV)

Time : 3 Hours]   *[Max. Marks : 70*

Instructions to the candidates:

1) Question No. 1 is compulsory.

2) Solve any four from the remaining.

3) Figures to the right show marks.

Q1) a)   What is software testing? What is it does?   **[4]**

   b)   Write test cases for simple calculator.   **[10]**

Q2) Explain verification techniques in detail.   **[14]**

   (inspection, walk through, peer review)

Q3) What is a Test Plan? List down contents of a Test Plan.   **[14]**

Q4) Discuss Quality, Productivity and their relation. Explain in detail the concept of cost of quality.   **[14]**

Q5) What is Defect Management? How is it important? Explain Process of Defect Recording and Tracking.   **[14]**

Q6) Write short notes: (Any Two)   **[14]**

   a)   Static versus Dynamic Testing.

   b)   Project Scheduling.

   c)   Website Testing.

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M.C.M. (Management Faculty)
408: NETWORK TECHNOLOGIES
(2008 Pattern) (Semester - IV)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:
 1) *Question 1 and 7 are compulsory.*
 2) *Answer any three questions from remaining questions.*
 3) *Draw neat diagrams whenever necessary.*

Q1) Answer the following: **[20]**

 a) Describe the Linux File System and structure in detail.

 b) Explain Procedure to configure DHCP Server in Windows 2003 Server.

Q2) Discuss the Features of Microsoft Windows Server 2003 and its role in detail.
[10]

Q3) Explain Web server and Mail server. Enlist the various services provided by Web application services. **[10]**

Q4) Explain Network Management and File Management Commands in Linux.**[10]**

Q5) Write the steps for the Implementation of Windows 2003 VPN. **[10]**

Q6) Explain installing and configuring packages in Linux. **[10]**

Q7) Write short notes on (any four): [20]

    a)   Network types.

    b)   Difference between IPv6 and IPv4.

    c)   Hub and Switch.

    d)   Mail Protocols.

    e)   Network topologies.

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