[4772]-1001

M.C.M.

FIT-101 : FUNDAMENTAL OF INFORMATION TECHNOLOGY
(2013 Pattern) (Semester-I)

Time : 2¹/₂ Hours]   *[Max. Marks : 50*

Instructions to the candidates:
1) *Question No. 1 and 6 are compulsory.*
2) *Solve any three from the remaining.*
3) *Figures to the right indicate full marks.*

Q1) a) Explain Primary Storage. **[5]**

    b) What do you mean by OMR? Give any two application of OMR. **[5]**

Q2) a) Differentiate between High Level Language and Low Level Language. **[5]**

    b) Explain different types of Computers. **[5]**

Q3) Explain in detail OSI Model (Seven layers). **[10]**

Q4) a) Explain various types of printer. **[5]**

    b) Convert the following numbers (Any Two): **[5]**

       i) $1110001 = ?_{10}$

       ii) $CAD = ?_8$

       iii) $34 = ?_{16}$

Q5) Explain different types of Networks. **[10]**

Q6) Write short notes on (Any Two): **[10]**
    a) Network Topologies.
    b) Floppy Disc.
    c) ASCII.

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[4772] - 1002

M.C.M.

'C' PROGRAMMING AND DATA STRUCTURE

(2013 Pattern) (Semester - I)

Time : 2.30 Hours]   *[Max. Marks : 50*

Instructions to the candidates:

   1)   *Question No. 1 is compulsory.*

   2)   *Solve any four from the remaining.*

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

Q1) a)   Find and explain output of the following programs. Assume suitable header files.   **[6]**

    i)   # define CUBE (x) $x*x*x$

```
void main ( )
{
    int a,b =3;
    a = CUBE (b++);
    print f ("%d, %d", a,b);
}
```

    ii)   int rev (int);

```
void main ( )
{
    int no = 5;
    rev (no);
}
int rev (int no)
{
    if (no = = φ )
        return φ;
    else
        print f ("% d", no);
    rev (- - no);
}
```

b) Explain the following (Any two) **[4]**

   i) Stack

   ii) Data Types in C

   iii) Tertiary if statement

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

ABCDCBA

ABC CBA

AB   BA

A   A

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

Q4) Write a recursive function which receives a number and return the sum of digits of a number. **[10]**

Q5) Write a program to accept itcode, desc, rate and qty of 30 items. Display all the records having qty greater than 100. **[10]**

Q6) Write a program to accept the two file names as command line arguments and copy the contents of second file at the end of first file. **[10]**

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

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[4772]-1003

M.C.M.

103 : SOFTWARE ENGINEERING WITH UML

(Theory) (2013 Pattern) (Semester-I)

Time : 2¹/₂ Hours]   [*Max. Marks : 50*

Instructions to the candidates:

1) *Q. 1 & Q. 5 are compulsory.*
2) *Solve any two from remaining.*
3) *Neat diagram carry marks.*

Q1) STAR Scooter Ltd. has issued an advertisement calling application for various posts. After receiving application scrutiny will made and interview and will be appointed as regular employees.

– Draw ER Diagram. **[7]**

– Design File Layout. **[7]**

Q2) a) In a shopping mall following scheme is introduce.

If you are a regular customer on every shopping of Rs. 5000 and above, you will get 1 point. On collecting such 10 points you get a free tour package. For point below 10 you get a gift coupon. The collected points betⁿ 1 January 2014 to 31 March 2014 are only consider. Draw decision tree for the case. **[6]**

b) Explain RVP in detail. **[6]**

Q3) Consider an auction website (eg eBay), the customer might:

Register for an account, search for items by keyword, place a bid on an item, put an item up for auction, check the status of this item.

a) Draw use-case Diagram. **[6]**

b) Activity Diagram. **[6]**

Q4) a) Explain different sections of SRS. [6]

b) Explain spiral model of SDLC. [6]

Q5) Write short notes (Any Three): [12]

a) Functional & non-functional Requirements.

b) Association & Aggregation.

c) CRC.

d) Role of System Analyst.

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[4772] -1004

M.C.M.

104: DATABASE MANAGEMENT SYSTEM (DBMS)

(2013 Pattern) (Semester - I)

Time : 3 Hours]

[Max. Marks : 50

Instructions to the candidates:
1) *Q.Nos.1 and 5 are compulsory.*
2) *Solve any two from Q.2 to Q.4 from the remaining.*

Q1) Tele company providing mobile services is working in a following manner. To give the membership (subscription) to the customer following procedure is used. There are various schemes of subscription. Pune region is divided into various area sales office. As per the subscription type the customer fills the form and submits the payment to the sales office. After form verification customer gets a mobile no. & the equipment.

Draw an E-R Diagram for the above case and normalize upto 3NF.   **[15]**

Q2) Explain Database architecture in detail.   **[10]**

Q3) Explain locking Techniques.   **[10]**

Q4) Explain log base recovery with explain.   **[10]**

Q5) Write short notes: Any three.   **[15]**
   a)   E-F coddrules [Any five]
   b)   Functions of DBA.
   c)   Generalization
   d)   Data Independence
   e)   Database security issues.

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[4772]-101

M.C.M.

FIT-101 : FUNDAMENTAL OF INFORMATION TECHNOLOGY

(2012 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 Computer and explain different types of Computer. **[8]**

     b) What is scanner? Explain any two scanning devices: **[7]**

Q2) What is magnetic tape? Explain it in detail. **[10]**

Q3) Explain different types of Process Devices. **[10]**

Q4) What is CRT? Describe it with suitable diagram. **[10]**

Q5) Explain microprocessor in detail. **[10]**

Q6) Explain OSI Model (Seven Layers) in detail. **[10]**

Q7) Solve the following (Any Three): **[15]**

     a) $(1110111)_2 = (?)_6$

     b) $(AC)_{16} = (?)_{10}$

     c) $(215)_{10} = (?)_2$

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

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[4772] - 102

M.C.M.

'C' PROGRAMMING AND DATA STRUCTURE

(2012 Pattern) (Semester - I)

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

Instructions to the candidates:

  1)   *Q.No.1 is compulsory.*

  2)   *Solve any five from the remaining.*

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

Q1) a)   Find and explain the output of the following programs. Assume suitable header files. **[12]**

  i)   void main ( )

```
{
    int a[5] = {5,1,15,20,25};
    int i, j,m;
    i = ++ a[1];
    j = a [1] ++ ;
    m = a [i++] ;
    printf ("% d, % d, % d", i,j,m);
}
```

  ii)   void main ( )

```
{
    int a = 500, b = 100, c;
    if (!a > = 400)
        b = 300;
        c = 200;
    printf("b = % d, c = % d", b,c);
}
```

iii) void main ( )
```
{
    int x = 3;
    float y = 3.0;
    if (x == y)
        printf("x and y are equal");
    else
        printf ("x and y are not equal");
}
```

iv) What will be the content of 'file.c' after executing the following program?

```
void main ( )
{
    FILE *fpl, *fp2;
    fp1 = fopen ("file.c", "w");
    fp2 = fopen ("file.c", "w");
    fputc ('A', fpl);
    fputc('B', fp2);
    fclose (fpl); fclose (fp2);
}
```

b) Explain the following (Any two).   **[8]**
   i)   Linked list
   ii) String functions
   iii) Loop statements in C.

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

```
   A
  AB
 ABC
ABCD
```

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

Q4) Write a function which receives a number and return 1 if the number is prime otherwise θ. **[10]**

Q5) Write a program to accept itcode, desc, rate and qty of 30 items. Display all the records in tabular form having qty greater than 10. **[10]**

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

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

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[4772]-103
M.C.M.
103 : SOFTWARE ENGINEERING WITH UML
(2012 Pattern) (Semester-I)

Time : 3 Hours] *[Max. Marks : 70*
Instructions to the candidates:
   1) Q. No. 1 & 7 are compulsory.
   2) Solve any four from remaining.
   3) Neat diagram carry marks.

Q1) A Famous Biscuit Company wants to develop the software for their wholesaler. Main focus of the company is to track the order and inventory monitoring of/ at wholesaler. To develop the software following system specification are given to System Analyst.

   – on every update, price list is given to wholesaler, retailer resp.

   – wholesaler gives orders, collected by retailer to company's sales dept.

   – Company maintain all stack.

   – Individual wholesaler makes collective payments against order to company A/c. As system analyst, design the following:

   a) Draw DFD. **[10]**

   b) Design two suitable entry screen. **[10]**

   c) Prepare menu design for proposed software. **[5]**

Q2) Explain various Fact-finding methods. **[10]**

Q3) Explain classic model [waterfall] in detail. **[10]**

Q4) Explain RUP in detail. **[10]**

Q5) Draw Use Case Diagram for an online shopping system. **[10]**

Q6) Draw State Transition Diagram for online Railway Reservation System. **[10]**

Q7) Write short note (Any Three): **[15]**

    a)   OOAD & SSAD.

    b)   Role of System Analyst.

    c)   Decision Tree & Decision Table.

    d)   Design pattern.

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[4772] - 104

M.C.M.

104: DATABASE MANAGEMENT SYSTEM (DBMS)

(2012 Pattern) (Semester - I)

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

Instructions to the candidates:

    1)   *Q.No.1 is compulsory.*

    2)   *Solve any five from remaining.*

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

Q1) a)   "Apple Airways" is one of the private airlines in India, which caters large no. of people. It has about 10 planes, in which 5 serves for domestic and 5 for international. As the company is doing good business, they want to make the reservation system as a computerized Airline Reservation System. Consider the plane details, their departure, and arrival time, source and destination. Draw ERD and convert into relational database (Tables).

                                                                           [10]

     b)   Normalize the following layout upto 3NF.   **[10]**

         Ticket No: _____   Bus Name: _____

         Bus No: _____   Departure Time: _____

         Date of Journey: _____

Sr. No. Name of Passenger Gender Age Seat No. Reservation Charges Amount

         Date: _____   Total Amount: _____

Q2) Explain the characteristics of DBMS.   **[10]**

Q3) a) Explain states of Transactions with neat diagram. **[5]**

b) What is transaction? Explain ACID properties of Transaction. **[5]**

Q4) Explain any five E.F. codd rules. **[10]**

Q5) What is concurrency control? Explain time stamp based protocol with example. **[10]**

Q6) a) Explain select and project operations in relational algebra with example. **[6]**

b) Explain mandatory access control. **[4]**

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

a) Database users.

b) Data independence

c) Integrity constraints.

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[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( )
   {
       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( )
   {
       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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[4772] - 12

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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[4772] - 14

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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[4772] - 15

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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[4772] - 2001

M.C.M.

201: BUSINESS APPLICATION AND ERP TOOLS

(2013 Pattern) (Semester - II)

Time : 2.5 Hours]   *[Max. Marks : 50*

Instructions to the candidates:

   1)   *All questions are compulsory.*

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

Q1) Explain EOQ, EBQ and Calculation of labour efficiency.   **[10]**

OR

Explain process of receipt of material with the help of First level DFD.

Q2) Draw format of Quotation.   **[10]**

OR

Explain sales Budgeting.

Q3) Draw format of Balance sheet and explain purpose of Balance sheet.   **[10]**

OR

Explain Employee Appraisal methods.

Q4) Draw format of payslip and explain statutory earnings and Deductions. **[10]**

OR

Explain need and advantages of ERP.

Q5) Explain ERP Implementation Life cycle.   **[10]**

OR

Explain Post Implementation Review of ERP packages in service organization.

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[4772] - 2002
M.C.M.
202: PRINCIPLES OF MANAGEMENT AND ORGANIZATIONAL BEHAVIOUR
(2013 Pattern) (Semester - II)

Time : 2.5 Hours]
[Max. Marks : 50

Instructions to the candidates:
    1)   All questions are compulsory.
    2)   All questions carry equal marks.

Q1) Define Management. Explain various managerial levels.

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

Differentiate between Line and Staff Managers.

Q2) Elaborate the contributions put forth by Henry Fayol towards evolution of management thoughts.

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

Explain system approach to Management.

Q3) Explain Herbert Simon's model for Decision Maker.

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

Define organization and need for organization. What are the types of organization?

Q4) Define OB.State need and importance of OB.

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

Explain Johari Window in brief.

Q5) Define Leadership. Explain the various styles of leadership.

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

Explain Z theory of Motivation.

<div align="center">✿   ✿   ✿</div>

[4772] - 2003
M.C.M.
ADVANCED RELATIONAL DATABASE MANAGEMENT SYSTEM (RDBMS) USING ORACLE
(2013 Pattern) (Semester - II)

Time : 2 Hours]   *[Max. Marks : 50*

Instructions to the candidates:

    1)   *Question No. 1 is compulsory.*

    2)   *Attempt any three from the remaining.*

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

Consider the following tables to solve Queries and PL/SQL given below:-

EMPLOYEE (E_No, Ename, Job, Mgr, Hiredate, Salary, Comm, DeptNo)

DEPARTMENT (Deptno, Dname, Location)

Q1) Solve any ten Queries given below: **[20]**

    a)   Create the above two tables with constraints.

    b)   Name the employees who are working in 'PUNE'.

    c)   Name the employees whose first letter starts with "A".

    d)   Find the average salary of employees location -wise.

    e)   Display Name of the employee. Who is getting highest salary.

    f)   Display the Name of the employee who is getting lowest salary.

    g)   Display the Name of the employees, Who joined after 1st January, 2014.

    h)   Name the employees of 'RESEARCH' department.

    i)   Display the total No. of employees working in each department.

j)   Find the location where the average salary of the employees in highest.

k)   Display the name of CLERK who is getting lowest salary.

l)   Display the name of employees who are working in 'PUNE'.

Q2) Write a cursor to display top 5 salaried employees. (Display only three columns: E-No, Ename, salary). **[10]**

Q3) Write a function Display_info ( ) to accept the E_No and display its following details of that employee: (E_No, Ename, Dname, Salary). **[10]**

Q4) Write a PL/SQL procedure to select employees from EMPLOYEE table who get a salary of Rs. 10,000. Give them an increment of 10%. But if more than one employee exist then give a message "Too many numbers". If no employee is selected then also display a message "No such employee". **[10]**

Q5) Write a trigger that will not allow user to update record in EMPLOYEE table on "SUNDAY" **[10]**

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[4772] - 2004

M.C.M.

204: JAVA PROGRAMMING

(2013 Pattern) (Semester - II)

Time :2 ½ Hours]   *[Max. Marks : 50*

Instructions to the candidates:

    1)   Q.1 is compulsory.

    2)   All questions carry equal marks.

    3)   Solve any '4' from remaining.

Q1) Solve the following:

    a)   Explain protected access specifier.

    b)   What is JVM?

    c)   Explain abstract keyword

    d)   What is adapter class

    e)   List methods of inter thread communication.

Q2) Write an application which will accept '2' file names from command line and append the contents of file 1 to other file.

Q3) Write a applet program to move strin from left to right.

Q4) Write an application which will accept age from command line. If the given age is less than '18' years , then throw. "NotEligible for Driving" user defined exception.

Q5) Write a multithreaded application to show following threads.

    a)   Display table of '20'

    b)   Display even numbers between '20' to '100'.

Q6) Explain with example function overloading and overriding.

Q7) Short notes any Two.

    a)   Wrapper class

    b)   Vector class

    c)   How final, finally, finalize ( ) used.

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[4772] - 201

M.C.M.

201: BUSINESS APPLICATION AND ERP TOOLS

(2012 Pattern) (Semester - II)

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

Instructions to the candidates:

    1)   *Question No.1 & Question No. 6 are compulsory.*

    2)   *Solve any THREE from remaining.*

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

Q1) Explain steps involved in Purchase order processing with help of First Level DFD. Draw format of purchase Order. **[20]**

Q2) Explain process of preparation of Quotation. Draw format of Quotation. **[10]**

Q3) What is purpose of Trial Balance. Draw format of Trial Balance. **[10]**

Q4) Explain Salary calculation. Draw format of various deduction reports. **[10]**

Q5) Explain ERP Implementation cycle in detail. **[10]**

Q6) Write short Notes (Any four): **[4×5 = 20]**

    a)   MPS

    b)   Ratios

    c)   Growth of ERP

    d)   Bonus

    e)   Vendor Analysis

    f)   Market segments

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[4772] - 202

M.C.M.

202: PRINCIPLES AND PRACTICES OF MANAGEMENT AND ORGANIZATIONAL BEHAVIOUR

(2012 Pattern) (Semester - II)

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

Instructions to the candidates:

1) *Attempt any five questions.*
2) *All questions carry equal marks.*

Q1) Define Management. Explain Need and scope of management.

Q2) Elaborate the contributions put forth by Henry Fayol towards evolution of management thoughts.

Q3) ''Almost Every position in any business is a decisional centre''. Do you agree? Discuss the various types of decisions.

Q4) Define organization and need for organization. What are the types of organization?

Q5) Explain different concepts of OB. What are the different models of OB.?

Q6) Define Leadership. Explain the various styles of leadership.

Q7) Write short notes on: (Any TWO)
     a)   Interpersonal conflict and intrapersonal conflict.
     b)   Functions of management
     c)   Transactional Analysis
     d)   Managerial levels.

✿   ✿   ✿

[4772] - 203

M.C.M.

203: ADVANCED RELATIONAL DATABASE MANAGEMENT SYSTEM (RDBMS) USING ORACLE

(2012 Pattern) (Semester - II)

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

Instructions to the candidates:

1) *Question Nos. 1 and 7 are compulsory.*
2) *Attempt any three from the remaining.*
3) *Figures to the right indicate full marks.*
4) *Draw Neat diagrams wherever necessary.*

Consider the following tables to solve Queries and PLSQL given below:-

PATIENT (Pno, Pname, City, date_of_admission, date_of_discharge, room no)

DOCTOR (D_id, Dname)

Medicine (M_id, Medicine_Name, rate)

Treatment (Pno, D_id, M_id, qty, date_of _check up, diagnosis_detail)

Q1) Solve any ten Queries given below: **[20]**

a) Create patient table with constraints.

b) Display the name of the patients who belongs to "PUNE".

c) Display the name of the doctor whose first letter is "A".

d) Display the name of the patients who were treated between '1-Jan-2014' to '12-Jan-2014'.

e) What medicine has the Dr. ANAND prescribed to patient Mr. AMIT.

f) Count the number of patients admitted in each room.

g) Find total number of patients treated by each doctor.

h) Name the patient (s) who has purchased the costly medicine.

i) Name the patient (o) who has purchased the cheapest medicine.

j) Name the patients who have purchased the "CITRAZINE"Medicine.

k) Count the Number of patients who were admitted in the hospital month-wise.

l) Add a column "Contact_No" to Doctor table.

Q2) Write a cursor to display top 5 costly medicines (Display only M_id, Medicine_Name). **[10]**

Q3) Write a procedure display_info to accept the pno and display the following details of that patient (Pno, Pname, date_of_admission). **[10]**

Q4) Write a function to calculate the Medicine_total_cost ( ) for the treatment given by Dr. ANAND to patient Mr. AMIT on medicine prescribed. **[10]**

Q5) Write a package specification and body which contains the followings: **[10]**

a) A procedure which accepts three numbers and calculate the largest number.

b) A function which accept the number and return if it is prime or not.

Q6) Write a trigger that will not allow user to update record in 'Treatment' table on sunday. **[10]**

Q7) Write a short Notes:(Any Four).   **[20]**

    a)   Recover from loss of a control file

    b)   Constraints

    c)   Locks in oracle

    d)   Join Operations

    e)   Data Types in Oracle

    f)   Stages of Database startup and shutdown options.

✧   ✧   ✧

[4772] - 204

M.C.M.

204: JAVA PROGRAMMING

(2012 Pattern) (Semester - II)

Time :3 Hours]

[Max. Marks : 70

Instructions to the candidates:

1)   Q.1 is compulsory.

2)   All questions carry equal marks.

3)   Solve any six from Q.2 to Q.8.

Q1) Solve the following:

   a)   What is abstract class?

   b)   Listout Thread life cycle methods.

   c)   What is Marker interface?

   d)   What is layout manager.

   e)   List any four methods of file class.

Q2) Write a application which will accept age from command line. If given age is less than '18' years then throw ''NOTEligibleForVoting'' user defined exception.

Q3) Write a program to read the file. File name should be given from command line print the contents in uppercase.

Q4) Write thread application where first thread prints even number from '1' to '100' and other thread prints alternative characters from 'A' to 'Z'.

Q5) Create class voter with attributes votername, voteraddress,votercontactNo., Voteraddhar, etc. Accept details of '10' voters in an array of objects and display the accepted details.

Q6) Write an applet to display mouse position on status line.

Q7) Write an awt application which will have a list, a text field, & a button with caption 'Add' when 'Add' button is clicked contents of text field should be added to list.

Q8) Write notes any Two.

    a)   Differentiate between latebinding & early binding.

    b)   Wrapper classes

    c)   Runnable Interface

    d)   Garbage collection.

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[4772] - 21

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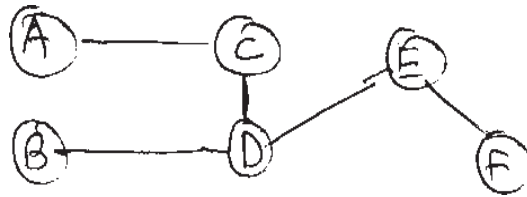
a) Generate output of Breadth first search (BFS) for above graph, when starting vertex is A. Adjacent vertices be picked up in alphabetical order.

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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SEAT No. :

P1887

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[Total No. of Pages : 2

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.	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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[4772] - 23

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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[4772] - 24

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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[4772] - 25

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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[4772] - 26

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] - 3001

M.C.M.

301: INFORMATION SECURITY AND AUDIT

(2013 Pattern) (Semester - III)

Time : 2 ½ Hours]   *[Max. Marks : 50*

Instructions to the candidates:

1)   *Question No.6 is compulsory.*

2)   *Solve any 3 from the remaining.*

Q1)   Explain Different Kinds of Biometric Security Available for Securing a Server Room.   **[10]**

Q2)   What is a Digital Certificate, and why do you need one?   **[10]**

Q3)   What are the Security Threats in the E-commerce Environment?   **[10]**

Q4)   Explain the security of electronic mailing systems.   **[10]**

Q5)   Discuss SSE-CMM model in detail.   **[10]**

Q6)   Write short notes on any 4.   **[4×5 = 20]**

a)   Digital signature.

b)   SAS 70

c)   Firewall and its types

d)   Intrusion detection system

e)   Copy right

f)   Disaster recovery planning

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[4772] - 3002

M.C.M.

302 NT: BASICS OF NETWORK TECHNOLOGIES

(2013 Pattern) (Semester - III)

Time : 2.5 Hours]

[Max. Marks : 50

Instructions to the candidates:

1) All questions are compulsory.

2) Figures to the right indicate full marks.

Q1) Explain virtual Private Network and various Tunneling protocols. **[10]**

OR

Compare various topologies in detail. **[10]**

Q2) Explain functioning of switches, Routers and modems. **[10]**

OR

Explain File and print services and storage management in windows 2003 server. **[10]**

Q3) Explain steps for configuration of DHCP server in windows 2003. **[10]**

OR

Explain various mail protocols. **[10]**

Q4) Explain various user management commands in Linux. **[10]**

OR

Explain configuration of Apache web server in Linux. **[10]**

Q5) Explain Linux File system and default Directories in Linux. **[10]**

OR

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

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[4772] - 3003

M.C.M.

302-ST: QUALITY CONTROL & ASSURANCE

(New 2013 Pattern) (Semester - IV)

Time : 2 ½ Hours] *[Max. Marks : 50*

Instructions to the candidates:

    1) *Solve any five Questions.*

    2) *Figures on the right show marks.*

Q1) Define Software Project Management. Explain components of management system. **[10]**

Q2) Define Software Quality. Describe reason for poor quality. Explain concept of product quality and process quality. **[10]**

Q3) a) Explain different features of ISO9001 and ISO 9003. **[5]**

    b) What do you mean by contract review? **[5]**

Q4) Define and explain software errors, software faults and software failures with example. **[10]**

Q5) What do you understand by SQA? Describe major activities necessary for effective SQA. **[10]**

Q6) Write short notes: (Any Two) **[10]**

    a) Staff training.

    b) Software testing

    c) SEI CMM.

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[4772] - 3004

M.C.M.

SOFTWARE DEVELOPMENT SPECIALIZATION

302SD: Program and Design with ASP.NET

(2013 Pattern) (Semester - III)

Time : 2 Hours]

[Max. Marks : 50

Instructions to the candidates:

1) Question 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) Design a form and write code to: **[10]**

a)   Add a record

b)   Delete Selected Record

c)   Edit Selected Record

Use connected architecture. Name of Server: MyAspDB (SQL Server)

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

Q2) Explain Tree View and Menu Control in detail.   **[10]**

Q3) Explain Login Control and Create User Wizard Control in detail.   **[10]**

Q4) Draw and Explain ASP.NET architecture in detail.   **[10]**

Q5) Define a class Book with appropriate attributes. Write parameterized constructor for the same. write a method to check book is available in library or not. Write a main program to demonstrate your functionality.   **[10]**

Q6) Explain the following controls: (Any TWO) **[10]**

    a)   Bulleted List Control

    b)   Range Validator Control

    c)   CheckBox Control

Q7) Write short notes on following: (Any TWO) **[10]**

    a)   Creating and Applying Themes

    b)   Web Service

    c)   Ajax Server Control

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[4772]-3005
M.C.M.
303-NT : SERVER & DESKTOP TECHNOLOGIES
(2013 Pattern) (Semester-III)

Time : 2.5 Hours]   *[Max. Marks : 50*

Instructions to the candidates:

    1)   *All questions are compulsory.*

    2)   *Each question carries equal marks.*

Q1) Explain USB, Serial and Parallel ports with their functioning.

<p style="text-align:center">OR</p>

Explain various types of RAM.

Q2) Explain various addressing modes with example.

<p style="text-align:center">OR</p>

Explain pipelining with example.

Q3) Explain 32-Bit Architecture with diagram.

<p style="text-align:center">OR</p>

Explain steps in repairing Windows XP.

Q4) Explain steps for Windows 7 clean install.

<p style="text-align:center">OR</p>

Explain network installation and Wi-Fi configuration in Windows 7.

Q5) Explain various types of printers with their functioning.

<p style="text-align:center">OR</p>

Explain any one Antivirus Tool.

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[4772]-3006
M.C.M.
303-ST : SOFTWARE TESTING PROCESSES AND DOCUMENTATION
(2013 Pattern) (Semester-III)

Time : 2¹/₂ Hours] *[Max. Marks : 50*

Instructions to the candidates:
 1) Question Nos. 1 and 6 are compulsory.
 2) Solve any three of the remaining.
 3) Figures to the right indicate full marks.

Q1) a) Explain software Testing constraints. **[5]**

 b) Explain Tester's workbench. **[5]**

Q2) Explain Verification and Validation in detail. **[10]**

Q3) Explain White box and black box testingin detail. **[10]**

Q4) Discuss Contracted software test process **[10]**

Q5) Discuss Internal control models. **[10]**

Q6) Write short notes on (Any Two): **[10]**
 a) Technique to test security.
 b) Test work processes.
 c) Functional and structural testing.

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[4772]-3007

M.C.M.

303 SD : MOBILE PROGRAMMING USING ANDROID

(2013 Pattern) (Semester-III)

Time : 2.5 Hours]   *[Max. Marks : 50*

Instructions to the candidates:

1)   All questions are compulsory.

2)   All questions carry equal marks.

Q1) Explain Android SDK versions and their features.

OR

Explain Building Blocks of Android.

Q2) Write xml file code to create login form using vertical and horizontal orientation property of LINEAR LAYOUT.

OR

Write .java code file for displaying list view of array values.

Q3) Write .java code file for creating DrawView and sets it as activity's main content. Also sets the borderless window.

OR

How to Play Audio and Video files in Android? Explain with example.

Q4) Explain method for creation, insertion and fetching SQLite Database in android.

OR

Explain use of Content Provider with example.

Q5) Explain service life cycle in android.

OR

What are preferences? Explain any three common preferences in android.

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[4772] - 3008

M.C.M.

304 NT: SYSTEM ADMINISTRATION AND SERVER INTEGRATION

(2013 Pattern) (Semester - III)

Time : 2 Hours 30 Mins.]

[Max. Marks : 50

Instructions to the candidates:

1) *Question 1 is compulsory.*
2) *Answer any three questions from the remaining.*
3) *Figures to the right side indicate full marks.*

Q1) a) Explain concept of Domains and Active Directory. Explain steps for Active Directory Installation. **[10]**

b) Explain steps for Samba Server Installation. **[10]**

Q2) Explain how to manage Groups and Computer Account in Window Server 2008. **[10]**

Q3) Explain default Directory structure and their purpose in Fedora Linux. **[10]**

Q4) Set by step explain DHCP server installation in Window 2003. **[10]**

Q5) Illustrate package management in Linux. **[10]**

Q6) Draw and explain Architecture of Linux with reference to Kernel and Shell. **[10]**

Q7) Write short notes (any TWO).   [10]

    a)   Distributed O.S.

    b)   Virtual Private Networks

    c)   Boot loader.

    d)   Secure Administration.

    e)   X-Window System

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[4772] - 3009

M.C.M.

304ST: SOFTWARE TEST PLANNING AND DOCUMENTATION
(New 2013 Pattern) (Semester - III)

Time : 2½Hours]   *[Max. Marks : 50*

Instructions to the candidates:
  1) Q.Nos.1 &6 are compulsory.
  2) Solve any three from the remaining.
  3) Figures to the right indicate full marks.

Q1) Explain pre-requistic of test planning.   **[10]**

Q2) What is test plan? Explain test objective and acceptance criteria.   **[10]**

Q3) Explain Functional test cases, Structural test cases in detail.   **[10]**

Q4) Discuss uses of tools in testing.   **[10]**

Q5) Explain defect management in detail.   **[10]**

Q6) Write short notes on: (Any Two).   **[10]**

  a)   user acceptance testing

  b)   test result reporting

  c)   Histogram

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[4772]-301

M.C.M.

301 : INFORMATION SECURITY AND AUDITS

(Management Faculty)

(2012 Pattern) (Semester-III)

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

Q1) RANBAN is a pharmaceutical company which has multiple branches across the country and all the branch offices are interconnected through the network. **[20]**

    i)   As a security consultant identify different risks involved with this network.

    ii)   Also suggest different Intrusion Detection Systems for maintaining the network security and specify importance of it in maintaining the network security.

Q2) Discuss different Biometric Controls for protecting Information System.

                                                                   [10]

Q3) "Proper implementation of IPR helps to reduce the threats with organizational information". Comment.   **[10]**

Q4) What is Security? Enlist different security models. Discuss ISO 27001. **[10]**

Q5) Discuss security in wireless networks.   **[10]**

                                                                    [4 x 5 = 20]

Q6) a)   Disaster Recovery Planning.

     b)   Cryptographic Techniques.

     c)   Privacy Issues in Web Services.

     d)   Biometric Controls.

     e)   Role of Internet in Global Information System.

     f)   Technological Impact on Data Privacy.

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[4772] - 3010

M.C.M. -II

SOFTWARE DEVELOPMENT SPECIALIZATION

304SD: Advanced Java

(2013 Pattern) (Semester - III)

Time : 2½ Hours]   *[Max. Marks : 50*

Instructions to the candidates:

    1)   *Q.Nos.1 & 6 are compulsory.*

    2)   *Solve any three questions from the remaining.*

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

Q1) Solve the following.   **[10]**

    a)   What is RMI Registry?

    b)   Write two methods from Result set Metadata with an example.

Q2) Write a client server socket program to accept a string from the client. The server will reverse the string and print it.   **[10]**

Q3) Write servlet code to accept information of students registered for 'MCM' course.   **[10]**

Q4) Write JDBC code to print the number of employees. Display the attributes also.   **[10]**

Q5) Write a HTML page which will accept details about patient. Insert details into patient table using JSP.   **[10]**

Q6) Write short notes: (Any Two).   **[10]**

    a)   JSP Directives.

    b)   Session tracking in servlets.

    c)   JNDI.

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[4772] - 302

M.C.M.

NETWORKING SPECIALIZATION

302 - NT: Basics of Network Technologies

(2012 Pattern) (Semester - III)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

  1)   Question No. 1 and Q.No. 6 are compulsory.

  2)   Solve any three from the remaining.

  3)   Figures to the right indicate full marks.

Q1) a)   Explain steps in installation of windows 2003 server.   **[10]**

   b)   Explain configuration of Apache web server in Linux.   **[10]**

Q2) Explain Active Directory in Windows 2003 server.   **[10]**

Q3) Explain process management commands in Linux.   **[10]**

Q4) Explain various application protocols.   **[10]**

Q5) Explain network topologies with their advantages and disadvantages.   **[10]**

Q6) Write short notes: (Any Four)   **[4×5 = 20]**

   a)   Wireless Network

   b)   POP and IMAP

   c)   ISDN modem

   d)   IIS

   e)   Linux File system

   f)   Group policy

✿   ✿   ✿

[4772]-303

M.C.M. (Management Faculty)
NETWORKING SPECIALIZATION
303-NT : Server and Desktop Technologies
(2012 Pattern) (Semester-III)

Time : 3 Hours]   *[Max. Marks : 70*
Instructions to the candidates:
1) *Question No. 1 and 6 are compulsory.*
2) *Attempt any three from remaining.*

Q1) What is meant by Micro programmed control units? What are its advantages? Explain briefly its operation. **[20]**

Q2) What is Drive? Enlist and discuss different types of drives. **[10]**

Q3) Explain with block diagram the 64 bits Pentium Dual Core Architecture. **[10]**

Q4) What is meant by pipelining? Explain different types of pipelining in detail. **[10]**

Q5) Elaborate recovery console process. Also focus on partition types in windows XP. **[10]**

Q6) Explain the process of hardware and driver installation in windows 7. Discuss network installation process in windows 7. **[10]**

Q7) Write short notes on (Any Four): **[4 x 5 = 20]**
     a)   SMPS.
     b)   Addressing modes.
     c)   CD and DVD.
     d)   User Management in Windows XP.
     e)   Wi-Fi configuration in Windows-7.

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[4772] -304

M.C.M.
NETWORKING SPECIALIZATION
304-NT: System Administration and Server Integration
(2012 Pattern) (Semester - III)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:
  1) *Question 1 & 7 are compulsory.*
  2) *Answer any three questions from remaining.*
  3) *Figures to the right side indicate full marks.*

Q1) a) Explain concept of Domains and Active Directory. Explain steps for Active Directory Installation. **[10]**

  b) Explain Installation of Fedora Linux in Text Mode. **[10]**

Q2) Explain how to manage Groups and Computer Account in Window Server 2008. **[10]**

Q3) Explain default Directory structure and their purpose in Fedora Linux. **[10]**

Q4) Set by step explain DHCP server in Window 2003. **[10]**

Q5) Illustrate package management in Linux. **[10]**

Q6) Draw and explain Architecture of Linux with reference to Kernel and Shell.**[10]**

Q7) Write short notes on (any four). **[20]**
  a) Advantages of Distributed System.
  b) Application Server
  c) Samba Server
  d) Virtual hosting
  e) Groups in Windows

✿   ✿   ✿

[4772] - 305

M.C.M.

SOFTWARE TESTING SPECIALIZATION

302-ST: Quality Control and Software Testing

(2012 Pattern) (Semester - III)

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)   Role of Software tester in project team?   **[4]**

     b)   Write test cases for mobile phone.   **[10]**

Q2) Explain various testing methods and techniques.   **[14]**

Q3) What is Review? What is its purpose? Explain different types of Review. **[14]**

Q4) Who is stakeholder? How they are important in software testing?   **[14]**

Q5) What is TMM? Explain different levels of TMM.   **[14]**

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

     a)   Agile & Extreme testing.

     b)   Data warehouse

     c)   Acceptance testing.

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[4772]-306

M.C.M.

SOFTWARE TESTING SPECIALIZATION

303-ST : Software Testing Processes & Documentation

(2012 Pattern) (Semester-III)

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

Instructions to the candidates:

 1) *Question No. 1 is compulsory.*

 2) *Solve any four from remaining.*

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

Q1) a) What is software testing? Explain software testing life cycle in detail with neat diagram. **[10]**

 b) Explain verification and validation testing. **[4]**

Q2) a) Differentiate white box and black box testing. **[7]**

 b) Write a brief note on testing tools. **[7]**

Q3) Describe various testing levels with suitable examples. **[14]**

Q4) What are test cases? Write test cases for ATM money withdrawal operation. Prepare a checklist for the functional testing of ATM money withdrawal application. **[14]**

Q5) a) What do you mean by internal controls of software testing? Explain various internal control models. **[7]**

 b) Write a brief note on COTS software test process. **[7]**

Q6) Write short notes on (any two): **[14]**

 a) Security testing techniques.

 b) Wireless application testing.

 c) Test plan.

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[4772] -307

M.C.M.

SOFTWARE TESTING SPECIALIZATION

304-ST: Software Test Planning and Documentation

(2012 Pattern) (Semester - III)

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

Instructions to the candidates:

　　1)　Q.Nos.7 is compulsory.

　　2)　Solve any five from the remaining.

Q1) Differentiate user's roel and tester's role in software testing.　　**[12]**

Q2) Define test report. Explain pareto charts and voting.　　**[12]**

Q3) Discuss in detail the usage of tools in testing.　　**[12]**

Q4) Explain functional test cases and stress test cases.　　**[12]**

Q5) Define test plan. How to develop a test matrix?　　**[12]**

Q6) What is risk? Explain risk associated with software testing.　　**[12]**

Q7) Write short notes on any 2.　　**[2×5 = 10]**

　　a)　Test plan standards.

　　b)　Regression analysis.

　　c)　Test script.

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[4772] - 308

M.C.M.

SOFTWARE DEVELOPMENT SPECIALIZATION

302 SD: Programme and Design with ASP.NET

(2012 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 ASP.NET architecture in detail.   **[10]**

Q2) Explain Comparison Validators, Range Validators and Regular Expression Validators in detail with suitable examples.   **[15]**

Q3) Explain various navigation controls in detail with the help of web.sitemap file.   **[15]**

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

   a)   Populate and display Author's names in a drop down list.

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

   c)   Add a record

   d)   Delete Selected Record

   e)   Edit Selected Record

   Use disconnected architecture. Name of Server: MyAspDB (SQL Server)

   Name of Table: AuthorMaster (AuID, FirstName, LastName, City, Email).

Q5) Define a class Book with appropriate attributes. Write default and parameterized constructor for the same. Write a method to check book is available in library or not. Write a main program to demonstrate your functionality.   **[15]**

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

    a)   File Upload Control

    b)   Image Map Control

    c)   Checkbox List Control

    d)   Grid View Control

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

    a)   Creating and Using Master Pages

    b)   Exception Handling

    c)   WPF and WCF

    d)   LINQ

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[4772]-309

M.C.M. (Management Faculty)
SOFTWARE DEVELOPMENT SPECIALIZATION
303-SD : Mobile Programming using Android
(2012 Pattern) (Semester-III)

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

Instructions to the candidates:

1) *Question 1 & 8 are compulsory.*
2) *Answer any four questions from remaining questions.*

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

    a) Discuss the features and need of sqlite database in android.

    b) Write down the detail procedure to create views and layout in android. Explain with suitable example.

Q2) Explain the various services provided by android. Also explain the implementation and life cycle of service.   **[10]**

Q3) Differentiate between interface and abstract class with suitable example in detail.   **[10]**

Q4) Discuss android features over the other mobile application platform. Describe the software development kit for android in detail.   **[10]**

Q5) Describe cursor in sqlite. Explain it with an example.   **[10]**

Q6) Elaborate cursors and content values in android.   **[10]**

Q7) Explain in detail java classes and objects with suitable example.   **[10]**

Q8) Write short notes on (any two):   **[10]**

    a) UI components.

    b) Types of preferences.

    c) Android versions and features.

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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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[4772] - 310

M.C.M. -II

SOFTWARE DEVELOPMENT SPECIALIZATION

304 - SD: Advanced Java

(2012 Pattern) (Semester - III)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

    1)   *Q.No.1 is compulsory.*

    2)   *Solve any four questions from remaining.*

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

Q1) Solve the following: **[10]**

    a)   Write socket and server socket class constructor.

    b)   Write a code to call stored procedure using JDBC.

    c)   What is UDP.

    d)   Explain the factory methods using java.net package

    e)   Write two methods from ResultSetMeta Data.

Q2) Write a client-server socket program to accept a string from client. The server will check whether the string is a palindrome or not and send response. **[15]**

Q3) Write servlet for accepting two numbers from user and works as a simple calculator with add, subtract, multiply and divide. **[15]**

Q4) Write a JDBC code to display the list of students who scored grade 'A' is their result. Assume suitable table structure. **[15]**

Q5) Write HTML page to accept employee information (name, dept, designation). Create bean information. Write JSP page to display information in tabular format. **[15]**

Q6) Short notes (any 3). **[15]**

    a)   JNDI.

    b)   Types of JDBC drivers.

    c)   Session Tracking in servlets.

    d)   JSP directives.

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[4772] - 32

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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SEAT No. :

[Total No. of Pages : 2

[4772]-33

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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[4772] - 34
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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[4772] - 35

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

✧   ✧   ✧

[4772] - 36

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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[4772] - 401

M.C.M. (Management Faculty)
IT-401: CURRENT TRENDS IN IT
(2012 Pattern) (Semester - IV)

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

Instructions to the candidates:

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

Q1) A Life Insurance Company needs to create a customer -centric business model to understand its customer needs. It also needs to streamline the operations, reduce cost, focus on growing market Segment and provide a wide range of services. The insurance Company has therefore decided to stay ahead by implementing. Enterprize Content Management. For the above case, design a suitable content Management System. **[15]**

Q2) Explain features and need of social network sites. **[10]**

Q3) Explain cloud computing and its models. **[10]**

Q4) What is Electronic Document Management (EDM)? Explain in detail. **[10]**

Q5) What is E-commerce? Discuss its advantages and disadvantages. **[10]**

Q6) What is e-Learning? Explain its types. **[10]**

Q7) Write A short Note (Any 3): **[15]**
   a) Cloud types
   b) Advantages of social networking sites
   c) Virtual School system
   d) Mobile shopping
   e) Online discussion
   f) CMS

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[4772] - 41

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]**

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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[4772] - 43

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.

<p style="text-align:center">OR</p>

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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[4772] - 44

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]**
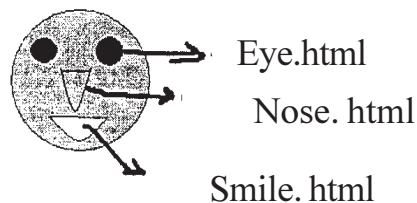
Q3) Explain various Operators. Loops in VB Script with example.   **[10]**

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

P.T.O.

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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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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