**[3886]-101**

**P. G. D. C. A. (Semester - I) Examination - 2010**

**FUNDAMENTALS OF INFORMATION TECHNOLOGY**

**(2008 Pattern)**

Time : 3 Hours] [Max. Marks : 70

*Instructions :*

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

    *(2) Solve **any four** questions from the remaining.*

    *(3) Figures to the right indicates full marks.*

---

**Q.1)** (A) Define Communication Media and explain all Communication Media in detail. **[08]**

    (B) Differenciate between Client Server and Workgroup Model with example in detail. **[07]**

**Q.2)** Explain Multiprocessing and Multiprogramming in detail with diagram. **[15]**

**Q.3)** (A) Explain any two Output Devices. **[08]**

    (B) Differenciate between Compiler, Interpreter and Assembler. **[07]**

**Q.4)** (A) Explain all Generations of Computers in brief. **[07]**

    (B) Explain BCD and ASCII Code in detail. **[08]**

**Q.5)** (A) Define Operating System and differenciate between DOS and Windows XP with respective features. **[08]**

    (B) Explain Primery Memory in detail. **[07]**

**Q.6)** (A) Define Network and explain LAN, WAN and MAN. **[08]**

(B) Define Computer and explain various types of Computers in detail. **[07]**

**Q.7)** Solve the following : **[10]**

(a) $(270)_{10} = ( )_2$

(b) $(110101101)_2 = ( )_{10}$

(c) $(ABC)_{16} = ( )_{10}$

(d) $(222)_{10} = ( )_8$

(e) $(110.110)_2 = ( )_{10}$

—————————

**[3886]-102**

**P. G. D. C. A. (Semester - I) Examination - 2010**

**'C' PROGRAMMING**

**(2008 Pattern)**

Time : 3 Hours]                                    [Max. Marks : 70

*Instruction :*

   *Assume appropriate header files are included.*

---

**Q.1)** (A)   What will be the output ? Give reasons : (**Any Three**)        [12]

   (a)   void main( )

   {

      int x = 3, y = 4, z = 4;

      printf("ans = %d", (z > = y > = x ? 100 : 200));

   }

   (b)   void main( )

   {

      int a = 3, b = 4, c = 2;

      a = b >> c;

      b = a << c;

      c = c << a >> b;

      printf("a = %d\t b = %d\tc = %d", a,b,c);

   }

(c)    void main( )

     {

       int x[25];

       x[0] = 100;

       x[24] = 400;

       printf("\n%d\t%d", *x,* (x + 24) + * (x + 0));

     }

(d)    void main( )

     {

       int i = 5, j = 10;

       abc(i, j);

       printf("\n i = %d\t j = %d", i, j);

     }

       void abc(int i, int j)

     {

       i = i + j;

       j = i − j;

       i = i − j;

       return;

     }

(B)   (a)   Explain functions used for Dynamic Memory Allocation.     **[04]**

      (b)   Enlist differences between Structure and a Union.     **[04]**

**Q.2)** Solve **any five** :                                                                                     **[50]**

    (a)    Write a program to calculate sum of digits of a number till it reduces to a single digit number i.e. if the number is 987, output 987 24 6.

    (b)    Write a program to print the following pattern :

        a     b    c    d    e

        a     c    e    g

        a     b    c

        a     c

        a

    (c)    Write a program to accept a m × n matrix and find a largest number in a particular row and smallest number in a particular column.

    (d)    Write a recursive function to print sum of digits of a number.

    (e)    Write a 'C' program to copy one string into another string without using standard function.

    (f)    Write a 'C' program to create student structure having fields roll_no, stud name, mark1, mark2, mark3. Calculate total and average of marks and arrange records in descending order of marks.

    (g)    Write a 'C' program to append contents of one file at the end of another file.

_____

**[3886]-11**

**P. G. D. C. A. (Semester - I) Examination - 2010**

**ELEMENTS OF INFORMATION TECHNOLOGY (EIT)**

**(Old 2005 Pattern)**

**Time : 3 Hours]**　　　　　　　　　　　　　　　**[Max. Marks : 80**

***Instructions :***

    *(1)　Question No. **1** is compulsory. Out of the remaining attempt **any four** questions.*

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

    *(3)　Neat diagrams must be drawn whenever necessary.*

---

**Q.1)** (A)　Explain 5 logic gates with diagram and truth table.　**[05]**

    (B)　Explain types of Softwares in detail.　**[05]**

    (C)　Solve the following :　**[10]**

        (a)　$(1100100)_2 / (100)_2 = (\quad)_{10}$

        (b)　$(0.10111)_2 = (\quad)_{10}$

        (c)　$(1101.1010)_2 = (\quad)_{10}$

        (d)　$(153)_{10} = (\quad)_{16}$

        (e)　$(4B8)_{16} = (\quad)_2$

**Q.2)** Explain all OSI Layers in detail with example.　**[15]**

**Q.3)** (A)　Compare between MS-DOS and UNIX.　**[07]**

    (B)　Define Virus and Anti-virus with examples. Also state its advantages and disadvantages.　**[08]**

**Q.4)** (A) Define Topology and explain Bus, Ring and Star Topology. **[07]**

(B) Write any 8 Boolean Theorems. **[08]**

**Q.5)** Define Microprocessor and explain its architecture in brief. **[15]**

**Q.6)** Write short notes : **(Any Three)** **[15]**

    (a) Device Driver

    (b) Flow Charts

    (c) Types of Softwares

    (d) LAN

    (e) Protocols

——————

**Total No. of Questions : 6]**        **[Total No. of Printed Pages : 1**

# [3886]-12

## P. G. D. C. A. (Semester - I) Examination - 2010
### PRINCIPLES AND PRACTICES OF MANAGEMENT (PPM)
### (Old 2005 Pattern)

**Time : 3 Hours]**        **[Max. Marks : 80**

*Instruction :*

    *Solve **any five** questions.*

---

**Q.1)** Define Management. State its role and importance in Modern Society.

**Q.2)** What is Planning ? "Planning and Controlling are the two sides of the same coin." Explain.

**Q.3)** What is Decision-making ? Explain Process of Decision-making. What are the factors affecting Decision-making ?

**Q.4)** What is meant by Leadership ? State its importance. Explain in brief types of Leaders.

**Q.5)** Explain the terms Centralisation and Decentralisation. What are the advantages of Centralisation ?

**Q.6)** Write short notes : **(Any Two)**

    (a)    Line and Staff Organisation

    (b)    Decentralisation

    (c)    Contribution of Henry Fayol to Management Thought

    (d)    Matrix Organisation

---

# [3886]-201

## P. G. D. C. A. (Semester - II) Examination - 2010

## VISUAL BASIC

### (New 2008 Pattern)

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

***Instruction :***

    *All questions are compulsory.*

---

**Q.1)** Give output for the following Section of Code and explain it : **(Any Five)**                                          **[20]**

    (a)   Dim i as integer, n as integer

         do until n = 10

         if n < = 0 Then Exit do

            n = n – 1

            i = i + 1

         loop

         Msg Box ("The loop run" &i & "times")

    (b)   Dim i as integer

         Dim j as integer

            for i = 1 to 3

            for j = 1 to 5

            print "*"

            next

            i = i + 2

         next

(c)  Dim dt as Date

dt = dateAdd ("m", 3, # 12\12\2009#)

print dt

dt = dateSerial (2008, 22, 11)

print dt

(d)  Dim arr(7) as integer, n as integer

n = 1

for i = 0 to 6

   j = n * n

   a(i) = j

   print a(i)

   n = n + 1

next

(e)  Dim j $

   print VarType (j)

   print TypeName (j)

   print Len (j)

(f)  Dim a(4) as Integer

Redim a(3)

a(1) = 10

a(2) = 20

a(3) = 10

print a(1) + a(2) + a(3)

**Q.2)** Explain properties of the following controls : **(Any Two)** **[10]**

    (a)    Checkbox

    (b)    Listbox

    (c)    Scrollbar

    (d)    Textbox

**Q.3)** Write short notes : **(Any Two)** **[10]**

    (a)    Control Array

    (b)    Common Dialog Box

    (c)    Loops used in Visual Basic

    (d)    Date Functions with example

**Q.4)** Solve **any three** from the following : **[30]**

    (a)    Write a code to accept 15 numbers from user, to find out Maximum, Minimum and Average of them. (Use Array)

    (b)    Create a form with one textbox and one timer. After every two seconds the textbox background colour will change to Red/Green/Blue continuously.

    (c)    Write a VB Code to accept Name and Password from user, when the command button "Login" is clicked, display "Hello! Friends" message if user name and password is correct, else display "Sorry, wrong password entered".

    (d)    Accept two numbers from user and print all odd and even numbers between them.

———————

**[3886]-202**

## P. G. D. C. A. (Semester - II) Examination - 2010

### BASIC JAVA

### (New 2008 Pattern)

Time : 3 Hours]                                       [Max. Marks : 70

*Instructions :*

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

     *(2) Solve **any four** from the remaining.*

---

**Q.1) (A)** Solve the following :                                       **[06]**

    **(a)** Select true statements :

       **(i)** Object of interface can be created using new key word.

       **(ii)** All variables in interface are static and public.

       **(iii)** In interface method implementation of any of the methods can be declared.

       **(iv)** All methods in interface are abstract.

    **(b)** Select true statements :

       **(i)** Main( ) method can be overloaded.

       **(ii)** Constructor returns nothing.

       **(iii)** New key word is used to call constructor.

       **(iv)** Constructor can be declared as private.

    **(c)** Select true statements :

       **(i)** Overloaded methods have same signature.

       **(ii)** Overridden methods have same signature.

       **(iii)** Overloaded methods are declared in same class.

       **(iv)** Overridden methods are declared in same class.

(B)  Write short notes : **(Any Two)**                              [08]

    (a)   Thread Life Cycle

    (b)   Wrapper Classes

    (c)   Vector

    (d)   Data types in Java

**Q.2)** Create Animal as an abstract class with eat( ), grow( ) as abstract methods. Create abstract class Bird as subclass of Animal with fly( ) as abstract method. Then create concrete classes Parrot, Sparrow which are Birds.                              [14]

**Q.3)** Write an awt application which will have a list, a text field and a button with caption 'Add'. When Add button is clicked, contents of text field should be added to list.                              [14]

**Q.4)** Write a threaded application which will add 1 to the caption of button after every second. Initially Button has caption "1".                              [14]

**Q.5)** Write an application which will accept a number from command line. If the given number is odd number, then throw "oddNumber" user defined exception.                              [14]

**Q.6)** Write an application which will accept a file name using command line. Then show odd positioned lines of that file. Handle exceptions. **[14]**

———————

**[3886]-21**

## P. G. D. C. A. (Semester - II) Examination - 2010
## 'C' PROGRAMMING
### (Old 2005 Pattern)

**Time : 3 Hours]**                                    **[Max. Marks : 80**

*Instruction :*

*Assume appropriate header files are included.*

---

**Q.1)** (A)   What will be the Output ? Give reasons : **(Any Three)**      [20]

(a) void main( )

```
{
    int x, i, y;
    x = 3;
    y = 1;
    for (i = 1; i < 7; i++);
      {
         printf("%d", i);
         if(i == x)
      {
         printf("#");
         printf("\n");
         x = (x + 3) − y;
         y+ = 1;
      }
    }
    printf("#");
}
```

(b)　void　main( )

```
{
    int x, y, z;
    x = y = z = -1;
    z = ++x || ++y && ++z;
    printf("x = %d\ty = %d\tz = %d", x, y, z);
}
```

(c)　void　main( )

```
{
    static char * s[] = {"pune", "delhi", "bangalore"};
    printf("d%", sizeof(s))'
    printf("\n%d", sizeof(s[1]));
    printf("\n%d", sizeof(*s[1]));
}
```

(d)　void　main( )

```
{
    int b[] = {10, 20, 30, 40 50};
    int i, * ptr;
    ptr = &b[4] - 4;
    for(i = 0; i < 4; i++)
    {
    printf("%d\t",*ptr);
    ptr++;
    }
}
```

(e)  int func(int);

```
void main( )
{
int n = 10;
printf("\n%d", func(n));
}
int func(int n)
{
if(n > 0)
return(n + func(n – 2));
else
return 0;
}
```

(B)  (a)  What is Recursion ? Explain with example.  **[05]**

   (b)  Explain any four string functions with an example.  **[05]**

**Q.2)** Solve **any five** :  **[50]**

(a)  Accept a number, find sum of digits of the number and reverse the number.

   i.e. if the number is 978, output sum = 24, reverse = 879.

(b)  Write a 'C' program to accept 'n' numbers from user, store these numbers into an array and sort numbers of an array.

(c)  Write a program to find factorial of a number using function.

(d)  Write a 'C' program to accept a string from user and generate the following pattern (e.g. input is string "abcd")

```
a
a   b
a   b   c
a   b   c   d
a   b   c
a   b
a
```

(e)  Write a 'C' program to accept 'n' numbers from user and find out maximum elements out of them by using dynamic memory allocation.

(f)  Write a 'C' program to check whether given string is palindrome or not.

(g)  Write a 'C' program to create student structure having fields roll_no, stud name, marks of 6 subjects. Calculate total and percentage of marks.

(h)  Write a 'C' program to copy contents of one file into another file.

———————

**[3886]-22**

## P. G. D. C. A. (Semester - II) Examination - 2010

### DATABASE MANAGEMENT SYSTEM (DBMS)

### (Old 2005 Pattern)

**Time : 3 Hours]** [Max. Marks : 80

*Instructions :*

> *(1) Question No. 1 is compulsory.*
>
> *(2) Solve **any four** from the remaining.*
>
> *(3) All questions carry equal marks.*

**Q.1)** Consider the following table structure to write SQL queries :

**Item Table :**

itemno number(3), iname varchar2(30), stock number(4), min_level number(3), reorder_level number(3), reorder_qty number(3).

**Supplier Table :**

suppno number(2), sname varchar2(30), saddress varchar2(30).

**Item Supplier Table :**

itemno number(3), suppno number(2), rate number(7).

(a) List all suppliers from Pune City.

(b) List all items having stock = 100.

(c) Show alphabetical list of suppliers.

(d) Show all suppliers names and rate for "washing machines".

(e) Display names of items starting with letter "s".

(f) Create item table with proper constraints.

(g) Insert a record in supplier table.

(h) Delete record from item table if stock is zero.

**Q.2)** (A) Discuss advantages and limitations of DBMS.

(B) What is Anomaly ? Explain different types of Anomalies with example.

**Q.3)** (A) Explain concept, properties, state of transaction.

(B) Compare HDM, NDM and RDM.

**Q.4)** (A) Distinguish between Generalisation and Specialisation.

(B) Explain Log Based Recovery.

**Q.5)** Explain E.F. Codd's Rules.

**Q.6)** Write short notes : **(Any Two)**

(a) Keys in DBMS

(b) Mapping Cardinalities

(c) Aggregation

(d) Shadow Paging

_____

**Total No. of Questions : 5]**         **[Total No. of Printed Pages : 2**

## [3886]-301

### P. G. D. C. A. (Semester - III) Examination - 2010

### SOFTWARE ENGINEERING AND BUSINESS PROCESS

### (New 2008 Pattern)

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

*Instructions :*

    *(1) Q. No. **1** must be answered.*

    *(2) Attempt **any three** from the remaining.*

    *(3) Draw neat diagrams. Neat diagrams carry marks.*

---

**Q.1)** Bookshop Automation Software (BAS) should help user query whether a book is in stock or not. If book is in stock, exact number of copies available and the rack number in which the book is located should be displayed. BAS should maintain price of various books. As soon as customer selects a book for purchase, the sale clerk should enter title for BAS to update stock and generate sales receipt. This software should also allow employees to update inventory when new supply arrives.

    (a)    Draw First Level Diagram                                **[05]**

    (b)    Draw ERD                                                **[05]**

    (c)    Design Sales Receipt Data Entry Form                   **[05]**

    (d)    Normalised File Layouts                              **[10]**

**Q.2)** Design the following reports from Payroll System :        **[15]**

    (a)    Pay Slip

    (b)    Pay Sheet

    (c)    Professional Tax Statement to be submitted to State Government

**Q.3)** What are the various roles played by System Analyst and a Programmer ? **[15]**

**Q.4)** Give list of Decision Tools used in SDLC. Draw Decision Table to print grade obtained by student : **[15]**

- – Percentage below 40% Fail
- – Percentage between 40% and 50% Grade C
- – Percentage between 51% and 60% Grade B
- – Percentage between 61% and 70% Grade A
- – Percentage above 70% Distinction

**Q.5)** Write short notes : **(Any Three)** **[15]**

(a) Feasibility Study

(b) Software Testing

(c) Elements / Characteristics of System

(d) Prototyping Model

**[3886]-302**

## P. G. D. C. A. (Semester - III) Examination - 2010

### ORACLE

### (New 2008 Pattern)

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

*Instructions :*

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

    *(2) Solve **any five** questions from the remaining.*

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

---

**Q.1)** Consider the following table structure to write SQL queries :      **[20]**

**Emp Table :**

empno number(3), ename varchar2(30), sal number(4), comm number(3), job varchar2(10), deptno number(2), joindate date, address varchar2(30), mgr number(3)

**Dept Table :**

deptno number(2), dname varchar2(30), location varchar2(30)

  (a)    Display managers having 2 subordinates.

  (b)    List employee name and his manager name.

  (c)    Display all employees who joined organisation in the month of March.

  (d)    Display name of the department having highest no. of employees.

  (e)    Display managers having salary more than 5,000.

  (f)    Display empno, name, department name and annual salary for all employees.

  (g)    List employees working in SALES Department.

  (h)    Display name of the person getting highest salary.

  (i)    Display name of the employees not getting commission.

  (j)    Create emp table with proper constraints.

**Q.2)** Write a stored procedure which will accept department number and will return total salary paid to that department. **[10]**

**Q.3)** Write a PL/SQL block which will accept name of the person and will print name in reverse order. **[10]**

**Q.4)** Write a user defined function which will accept name of the employee and will return job of that employee. **[10]**

**Q.5)** Write a PL/SQL block which will accept a number. If it is prime, then user defined exception must be shown. **[10]**

**Q.6)** Write a PL/SQL block which will accept department number. Using cursor display employee name, job and salary of employees working in that department. **[10]**

**Q.7)** Write short notes : **(Any Two)** **[10]**

    (a)    Triggers

    (b)    Cursors

    (c)    Aggregate Functions

    (d)    Constraints

**P. G. D. C. A. (Semester - III) Examination - 2010**
**OBJECT ORIENTED PROGRAMMING WITH JAVA (OOPJ)**
**(Old 2005 Pattern)**

**Time : 3 Hours]**                                   [**Max. Marks : 80**

*Instructions :*

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

      *(2)  Solve **any four** from the remaining.*

---

**Q.1)** (A)  What will be Output ? Justify your answer :          [06]

    (a)  Class MyDemo

```
{
    public static void main(string s[])
    {
        int x = 10, y = 15;
        x = ((x < y) ? (y + x) : (y - x));
        system.out.print\n ("x" + x);
    }
}
```

    (b)  Which of the following is overloading method for int sum (int x, int y) {} method.

      (i)  int sum (int x, int y, int z)

      (ii)  int sum (int x, int y)

      (iii)  float sum (int x, int y)

      (iv)  int sum (int x, int y, float z)

(c) Class MainDemo

```
{
    Public static void main (string s[])
    {
        boolean  b  =  true;
        system.out.print\n  ("XXX");
        if(!b)
        return;
        system.out.print\n  ("YYY");
    }
}
```

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

(a) Access Modifiers

(b) Static Keyword

(c) Use of Final Keyword

**Q.2)** Accept E-mail from user and if @ symbol is not present then throw user defined exception which is "InvalidSymbolException". [16]

**Q.3)** Write a program to read content of file and replace 'the' word with 'other'. [16]

**Q.4)** Write threaded Application where first thread prints even numbers from 1 to 100 and other thread prints alternative characters from A to Z. [16]

**Q.5)**

| | Book | Rate | Qty. |
|---|---|---|---|
| ☐ | JAVA | 250 | ☐ |
| ☐ | DBMS | 360 | ☐ |
| ☐ | VB | 200 | ☐ |
| | | BILL | |

Design above Applet, if user selects books by clicking on checkbox and writes quantity required. When bill button is clicked print bill details with proper format. **[16]**

**Q.6)** Write abstract class staff with abstract method, calculate Salary( ) and Instance Method Print Data (int no, string name).

Write Typist Class as sub-class of staff with speed as instance variable, if speed less than 40, then salary 4000 else 5000.

Write main class to implement above classes. **[16]**

———————

# [3886]-32

## P. G. D. C. A. (Semester - III) Examination - 2010

## UNIX

## (Old 2005 Pattern)

**Time : 3 Hours]**　　　　　　　　　　　　　　**[Max. Marks : 80**

***Instructions :***

　　*(1)　Sections I and II are compulsory.*

　　*(2)　All the questions are compulsory.*

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

---

## SECTION - I

**Q.1)** Solve **any five** :　　　　　　　　　　　　　　**[10]**

　　(a)　Display all the lines from the file EMP having word 'Tomy'.

　　(b)　To merge two files

　　(c)　To see contents of file

　　(d)　To see system date

　　(e)　To see current user of the system

　　(f)　To count total number of users

**Q.2)** Write short notes :　　　　　　　　　　　　　　**[20]**

　　(a)　Kernel

　　(b)　Sort with all options

　　(c)　Grape with all options

　　(d)　File permissions

**Q.3)** Explain the following commands : **(Any Five)** [10]

    (a)   pipe

    (b)   wc

    (c)   cp & mv

    (d)   version

    (e)   chmod

    (f)   Is

# SECTION - II

**Q.1)** Write a Shell Script which accepts two file names from keyboard and merge contents of two files and print number of lines from merged file. **[10]**

**Q.2)** Write a short note on Arrays in control loops in AWK. **[05]**

**Q.3)** Write AWK Script which will replace all spaces by # in the given text file. **[05]**

**Q.4)** Write a Shell Script to accept a string from the terminal and echo suitable message if it doesn't have at least 10 characters. **[08]**

**Q.5)** Write a Shell Script that will accept a number from the keyboard and determine whether the year is an odd or even. **[06]**

**Q.6)** Write a Shell Script to print prime numbers from 1 to 50. **[06]**

_____

**[3886]-401**

**P. G. D. C. A. (Semester - IV) Examination - 2010**

**DATA STRUCTURES AND ALGORITHMS**

**(New 2008 Pattern)**

Time : 3 Hours]                                        [Max. Marks : 70

*Instructions :*

    *(1)  Attempt **any seven** questions.*

    *(2)  Figures on the right are full marks.*

    *(3)  Answer all sub-questions of a question at one place.*

    *(4)  State your assumptions clearly.*

    *(5)  Use ANSI 'C' language in your codes.*

---

**Q.1)** Consider a 2-D array, A, of 25 rows and 15 columns. Compute address of member A (15, 10) of this array by both row major and column major methods. Assume that each value of this array consumes 2 bytes of computer's storage and base address of the array as 100. Show all steps of your calculations.                **[10]**

**Q.2)** (A)  Convert the following infix form to its prefix form :

      A * (B + C) / D - E

      Show contents of both the stacks at each step in a tabular form.                **[05]**

    (B)  Evaluate the following posfix form :

      ABC + * D/E-

      where A = 1, B = 2, C = 3, D = 4, E = 5.

      Show contents of stack at each step in a tabular form.          **[05]**

**Q.3)** (A) Write a function to add an element in a linear queue of characters implemented as a linked list. **[05]**

(B) Write a function to push an element into a stack of characters implemented as an array. **[05]**

**Q.4)** (A) Write a function to insert a node in a linear single linked list of integers. **[05]**

(B) Write a function that prints contents of a doubly linked list of integers. **[05]**

**Q.5)** (A) Write a function which accepts address of Head node of a Circular Double Linked List as a parameter and prints number of nodes in it. **[05]**

(B) Explain concept of Generalized List (GList). **[05]**

**Q.6)** (A) Write a function to create a copy of binary search tree. **[05]**

(B) Write a function that counts number of leaf nodes in a binary search tree. **[05]**

**Q.7)** Construct an AVL tree for the following data : **[10]**

TWENTY, SIXTY, FORTY, FIFTY, THIRTY, EIGHTY, SEVENTY, NINETY

**Q.8)** Consider message "MANAGEMENT" and draw HUFFMAN's tree. **[10]**

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**[3886]-402**

**P. G. D. C. A. (Semester - IV) Examination - 2010**

**PRINCIPLES AND PRACTICES OF MANAGEMENT AND ORGANISATIONAL BEHAVIOUR**

**(New 2008 Pattern)**

Time : 3 Hours]                                        [Max. Marks : 70

***Instructions :***

> *(1)  Question No. **1** is compulsory.*
>
> *(2)  Attempt **any three** from the remaining.*
>
> *(3)  Figures to the right indicate full marks.*

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**Q.1)** (A)  Explain in detail the emerging challenges in Organisational Behaviour, with reference  to globalisation and its impact on people  management.                                                **[15]**

(B)  Explain meaning, need and scope of Management.          **[10]**

**Q.2)** Elaborate contributions put forth by F.W. Taylor and Henri Fayol towards evolution of Management Thoughts.                   **[15]**

**Q.3)** Explain limitations and advantages of Planning. What should be done to overcome its limitations ?                              **[15]**

**Q.4)** What are the characteristics of Leadership ? Explain various styles of Leadership.                                                **[15]**

**Q.5)** Controlling is an important function of Management. Explain relevance of controlling and its process.                         **[15]**

**Q.6)** What is the significance of Decision-making in Organisational Effectiveness.                                                   **[15]**

**Q.7)** Write short notes : **(Any Three)** [15]

    (a)    Team Building

    (b)    MBO

    (c)    OB Models

    (d)    Types of Conflicts

    (e)    Johari Window

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**[3886]-41**

**P. G. D. C. A. (Semester - IV) Examination - 2010**

**SOFTWARE ENGINEERING**

**(Old 2005 Pattern)**

**Time : 3 Hours]**                                    **[Max. Marks : 80**

***Instructions :***

   *(1) Question No. 1 must be answered.*

   *(2) Attempt **any four** from the remaining.*

   *(3) Draw neat diagrams. Neat diagrams carry marks.*

**Q.1)** Fitness Centre is Health Club offering Health Services such as fully equipped gym, instructions in aerobics, yoga and proper diet. People from various age groups join Club. The Club provides various programs such as weight loss, weight increase, fitness etc. depending on their needs. Health Club caters to member's needs by keeping in mind their condition of Health.

   (a)  Draw Context Level Diagram                           **[05]**

   (b)  Draw ERD                                              **[05]**

   (c)  Screen Layout to display health report of a member    **[05]**

   (d)  Design Normalized Tables                              **[05]**

**Q.2)** Design a data entry screen for Library System of Management Institute to issue books to members. Also state important data validations. **[15]**

**Q.3)** What is System ? Explain System Development Life Cycle with the help of block diagram.                                        **[15]**

**Q.4)** State importance of Decision Tools. Draw Decision Tree for the following case : **[15]**

XYZ classes has following scheme for payment of fees :

– Student who has scored > = 60% marks is enrolled for scholar batch.

– Student who has scored > = 45% and < 60% marks is enrolled for ordinary batch.

– Student who has scored < 45% marks is not given admission.

– Student can opt for prime time batch or regular batch.

For prime time batch, 10% additional fees are charged.

– Students paying full fees before 15th August are given 5% discount in fees.

**Q.5)** Write short notes : **(Any Three)** **[15]**

(a) Types of Systems

(b) Functional Decomposition Diagram (FDD)

(c) Open Vs Closed System

(d) Spiral Model

**Q.6)** Describe purpose of Data Flow Diagram and also state its limitations. Draw a DFD of the system given in Q 2. **[15]**

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**[3886]-42**

**P. G. D. C. A. (Semester - IV) Examination - 2010**
**BUSINESS APPLICATION**
**(Old 2005 Pattern)**

**Time : 3 Hours]**                                                    **[Max. Marks : 80**

***Instructions :***

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

      *(2)  Solve **any four** from the remaining.*

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**Q.1)** Write short notes : **(Any Four)**                              **[20]**

    (a)  FIFO

    (b)  Ratio Analysis

    (c)  Computerised Trial Balance

    (d)  Sales Analysis

    (e)  Bin Card

**Q.2)** What is BOM ? How it is useful for Material Requirement Planning ? **[15]**

**Q.3)** Godavari Urban Bank, Nasik accepts fixed deposits from its customers and employees. Name of the scheme is called DHANVRUDHHI. Under this scheme he/she can deposit Rs. 20,000 minimum and in multiples of Rs. 5,000. The deposit can be made for single name or jointly upto 2 persons. The compound interest paid after 2 years @ rate of 8% p.a. The depositors money is transferred after maturity to their Savings Account.

You are required to design -                                           **[15]**

    (a)  Application Form

    (b)  Draw ERD

    (c)  Normalize File Layouts

**Q.4)** Draw a layout of Payslip and Bank Statement of Payroll System. Explain rules for preparing Payroll. **[15]**

**Q.5)** Explain Raw Material Rejection Analysis Report. How it helps Purchase Department ? **[15]**

**Q.6)** What is an Inventory Management ? How ABC Analysis Reports support it ? **[15]**

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