# P.G.D.C.A. (Semester - II) Examination, 2010 <br> 201 : "C" PROGRAMMING (Old) (2005 Pattern) 

Time : 3 Hours
Max. Marks : 80

Note : Assume appropriate header files are included.

1. Explain the output of following program segments(any 4): 20
1) \#define ABS (X) ( $\mathrm{X}<02 \mathrm{X}^{*}-1$; X$)$
\#define TOLOWER (X) (X + 32)
Main ()
\{ int $\mathrm{i}=-\mathrm{g}$; char ch = 'S' ; $\mathrm{i}=\mathrm{ABS}$ (i); print f("In i = \% d", i) ; $\mathrm{ch}=$ TOLOWER (ch) ; print f(" In ch = \% c", ch) ;
\}
2) main ()
\{
int $\mathrm{x}, \mathrm{y}, \mathrm{z}$;
$x=y=z=-1$;
$\mathrm{z}=++\mathrm{x} \|++\mathrm{y} \& \&++\mathrm{z}$;
print $\mathrm{f}(\mathrm{"x}=\% \mathrm{~d}|\mathrm{ty}=\% \mathrm{~d}| \mathrm{tz}=\% \mathrm{~d} ", \mathrm{x}, \mathrm{y}, \mathrm{z}) ;$
\}
3) main ()
int $\mathrm{i}=5$;
while (i)
\{
i--;
if $(i==3)$
continue ;
print f(" Hello In ") ;
\}
4) main ()
\{ char ch ; int x ;
ch $=$ get $\operatorname{char}()$;
$X=(\mathrm{ch}>=65 \& \& \mathrm{ch}<=90) \& 1: 0$;
X \& puts (" upper case alphabet ") :
puts("other character") ;
\}
5) main ()
$\{$ int $\mathrm{a}=10, \mathrm{~b}=15$;
change ( $\mathrm{a}, \& \mathrm{~b}$ );
print $\mathrm{f}(\mathrm{Ca}=\% \mathrm{~d} \mathrm{~b}=\% \mathrm{~d} ", \mathrm{a}, \mathrm{b})$;
\}
void change (int $x$, int * $y$ )
$\{x=20$;

$$
x y=30 ;
$$

\}
2. Solve any 5 :

1) Define a structure called student that will contain name, address and birthday's month. Declare an array of stud with 20 elements and write a program to read the information about all the 20 records. Accept a month from user and print the list of students whose birthday's month is same as inputted month.
2) Write a program to accept source file on command line. Print the contents of file on console.
3) Write a program to print armstrong numbers from 200 to 700.
4) Write a function vowel count (str) that returns number of vowels in str.
5) Write a recursive function that accepts an integer number and prints binary equivalent of that number.
6) Write a program to accept $3 \times 3$ matrix. Find the maximum element from each row.
7) Write a program to generate following pattern.

|  |  |  | 1 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | 1 | 2 | 1 |  |  |
|  |  | 1 | 2 | 3 | 2 | 1 |
|  |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 3 | 2 |

3. Write short notes (any 2):
1) Scope of variables
2) Dynamic memory allocations in $C$
3) Any 3 inbuilt string functions with e.g.

## P.G.D.C.A. (Semester - I) Examination, 2011 <br> 102 : 'C' PROGRAMMING (2008 Pattern)

Time: 3 Hours
Instruction : Assume appropriate header files are included.

1. A) What will be the output? (Any 3) Explain it .
a) Void main ()
\{
int $\mathrm{x}, \mathrm{y}, \mathrm{z}$;
$\mathrm{x}=\mathrm{y}=\mathrm{z}=-1$;
$\mathrm{z}=++\mathrm{x} 11++\mathrm{y} \& \&++\mathrm{z}$; Printf("x = \%d", x); $\operatorname{Printf}\left(" l t y=\% d^{\prime} z=\% d ", y, z\right) ;$
\}
b) Void main ( )
\{ int $\mathrm{a}=13, \mathrm{~b}=24, \mathrm{c}=3$;
$\mathrm{a}=\mathrm{b} \gg \mathrm{c}$; $\mathrm{b}=\mathrm{a} \ll \mathrm{c}$;
Printf ("a $=\% \mathrm{~d} \backslash \mathrm{t} \mathrm{b}=\% \mathrm{~d} ", \mathrm{a}, \mathrm{b})$;
c) Void main ()
\{ int k , no $=0$; $\mathrm{K}=(\mathrm{no}<5$ ? (no < = 10 ? $100: 200): 500)$;
Printf(" \%d", k);
\}
d) Void main ( )
\{ int $\mathrm{i}=6720, \mathrm{j}=4$;
while $((i \% j)==0)$
\{

$$
\mathrm{i}=\mathrm{i} / \mathrm{j} ;
$$

$$
\mathrm{j}=\mathrm{j}+1
$$

\}
$\operatorname{Printf}(" \mathrm{j}=\% \mathrm{~d} ", \mathrm{j}) ;$
\}
B) Write short note on any 2 :
a) History of C
b) Malloc and calloc functions in C
c) any two input output functions for files.
3. Solve any five :
a) Write a C program to accept a string and print number of words.
e.g. string is "Good day" output is No. of words $=2$
b) Write a recursive function to calculate $x$ raise to $y$.
c) Write a program to accept file name through command line argument and print the contents of file in reverse order.
d) Consider structure-election
(Candidate-id, name, party_name, votes_secured) Accept details of 15 candidates in an array of structure. Display details of candidate. Who secured maximum votes.
e) Accept 10 numbers in an integer array. Display count of even values using pointer to array.
f) Write a program to print following pattern.
A B
C
D E
a
b
c d

A B C
a b

A

# P.G.D.C.A. (Semester - I) Examination, 2011 102 : PRINCIPLES AND PRACTICES OF MANAGEMENT (PPM) (Old) (2005 Pattern) 

Time : 3 Hours
Max. Marks : 80
Instruction: All questions are compulsory.

1. What is management? Discuss the contributions made by Henry Fayol to the study of Management Science. Discuss the contributions made by F. W. Taylor in scientific management.

## OR

1. Examine nature and scope of planning. "Planning is looking ahead and control is looking back", comment.
2. Define the process of decision making. Explain different environments under which decisions have to be taken. Explain with suitable examples.

## OR

2. Discuss the nature of the problems that arise from centralisation of authority in the performances of managerial functions. Suggest suitable solutions to those problems.
3. In what sense is co-ordination called essence of management? State the various steps required for achieving effective co-ordination.

## OR

3. Discuss the concept of "delegation of authority". What factors influence delegation of authority? Suggest some measures for improving delegation of authority.
4. Write short notes on (any three): ..... 30
a) M.B.O.
b) TQM
c) Leadership styles
d) Different Organisation Structures and their importance
e) Types of control.

# P.G.D.C.A. (Semester - II) Examination, 2011 <br> 201 : VISUAL BASIC PROGRAMMING (New) (2008 Pattern) 

Time : 3 Hours
Instruction : All questions are compulsory.

## 1. Explain the output of the following code (any five) :

a) $\operatorname{dim} a$
$\mathrm{a}=\mathrm{instr}$ (1, "wonderful," " n ")
Print a
b). .dim a as integer
for $\dot{a}=1$ to 10 print $\mathrm{a} * 5$
Next
c) $\operatorname{dim} x \&$
$\mathrm{x}=4500$
print Var Type (x)
print Type Name (x)
print Len (x).
d) $\operatorname{dim} d$ as date
$\mathrm{d}=$ dateAdd ("Q", 2, \# 3/9/2011\#)
print d
d = date diff ("m", 2, d)
print d
e) $\operatorname{dim} h$
h $=\operatorname{IIF}(677=90$, "Hello", "Hi")
print h
f) For $\mathrm{c}=65$ to 73
print chr(c)
Next
P.T.O.
2. What will happen ? (any 5). 10
a) If sorted property of combobox is true.
b) If multiline property of textbox is false.
c) If windowstate property of form is false.
d) If autosize property of label is true.
e) If shape property of shape is set to 2 .
f) If top property of label is 200 .
g) If name property of option button is set to opt-gender.
3. Write note on any 2 :

1) Operators in visual basic
2) Cursor type Record Set
3) Methods of Common Dialog Box
4) Mathematical functions in VB.
4. Solve any three from the following :
1) Write a code to accept 20 numbers from user and find no. of odd and no. of even numbers from them (Use Array).
2) Write a visual basic code to accept a string and check whether it is palindrome or not (do not use std. function).
3) Consider a table movie having fields (Movie-no, Hero-name, released-date, flop). Write a program to add, delete and update the table using SQL commands.
4) Design an interface in which take one TextBox and 1 Combobox. Fill the ComboBox with numbers 1 to 10 . Write a code to increase the font size of entered text in Textbox as you select a number from ComboBox.
5) Write a visual basic function to print factorial of a given number.

# P.G.D.C.A. (Semester - II) Examination, 2011 202 : JAVA (New) (2008 Pattern) 

Max. Marks : 70
Note: 1) $Q .1$ and $Q .7$ are compulsory.
2) Solve any 4 from the remaining.

1. Justify your answer.
a) What is the data type returned by constructor?
i) Null
ii) Integer
iii) String
iv) No data type is returned
b) Which of the following are not primitive data types?
i) "Hello"
ii) ' $D$ '
iii) true
iv) 3.14
c) Which of the following returns size of the array ?

If array is $\operatorname{lnt}[] \mathrm{a}=\{1,2,3,4,5,6\}$;
i) a.length;
ii) a[].length();
iii) a.length();
iv) a.size( );
2. Write an application which will accept marks from command line. If marks are not in the range 0-100 then throw "outOfRange" user defined Exception.
3. Write an awt application which will accept values for 2 numbers there are 4 buttons having caption "add", "subtract", "multiply", "divide" show the result in text field accordingly.
4. Write a threaded application which will print 1-100 numbers and a-z characters.
5. Write Employee class with empno, name, salary as instance variables and print() as method which will print instance variables. Write 2 constructors.
6. Write an application which will accept a file name using Buffered Reader. Then display the contents of the file. Do necessary validations.
7. Write short notes (any 2) : $\mathbf{8}$
a) Data types in Java
b) Applet life cycle
c) Access modifiers
d) Overloading and overriding.

# P.G.D.C.A. (Semester - II) Examination, 2011 201 : 'C' PROGRAMMING (Old) (2005 Pattern) 

Time : 3 Hours
Max. Marks : 80

1. A) What will be the output ? Explain any 3 : 12
a) Void main ()
\{
int $\mathrm{c}=0$; int d=5, e=10, a;
$a=(c>1 ?(d>1| | e>1 ? 100: 900): 999) ;$
printf ("a = \% d", a) ;
\}
b) Void main ()
\{
char str [ ] = "Welcome to C language" ;
printf (" $\%$ S In $\%$ S In $\%$ S", str, str +6 , str + 9) ;
\}
c) Void main ()
\{

$$
\text { int } \mathrm{a}=5, \mathrm{~b}, \mathrm{c} \text {; }
$$

$$
\mathrm{b}=\mathrm{a}++\quad+\quad++\mathrm{a} \quad+\mathrm{a}++
$$

$$
\mathrm{c}=++\mathrm{a} \quad+\mathrm{a}++\quad+\mathrm{a}--
$$ printf (" In $\mathrm{a}=\% \mathrm{~d}, \mathrm{~b}=\% \mathrm{~d}$ ", $\mathrm{c}=\% \mathrm{~d}$ ", $\mathrm{a}, \mathrm{b}, \mathrm{c}$ ); \}

d) Void main () \{ int $\mathrm{z}=0$; while ( $\mathrm{z}++<4$ ) printf ("hi") ; do \{ printf ("Bye") ; \} while ( $\mathrm{z}++<8$ ) ;
B) Explain the following (any 2) :
a) Data Types in ' C '
b) Command Line Arguments
c) Structures in ' C '.
2. Solve any six :
a) Write a program to create a text file and copy the file into another file by replacing characters with its toggle case.
b) Write a program to accept 20 integer numbers from the user and store them in an array. The program should then sort numbers in descending order and print minimum and maximum of the numbers.
c) Write a program to print the following :

A
a b
A B C
a b c d
A B C D E
d) Write a program to accept data for 50 records with fields

1) Account number
2) Account holder name
3) Amount deposited or amount withdrawn
4) Balance

For each customer and print report. Print the record with minimum balance, use structure.
e) Write a C program to find sum of digits using recursive function.
f) Write a program to accept two $4 \times 4$ matrices and print the addition of these 2 matrices.
g) Write a program to reverse a string. (User defined function).

# P.G.D.C.A. (Semester - II) Examination, 2011 203 : DATA BASE MANAGEMENT SYSTEM (DBMS) (Old) (2005 Pattern) 

Time : 3 Hours

Max. Marks : 80
Note: 1) All questions carry equal marks.
2) $Q . \boldsymbol{1}$ is compulsory.
3) Solve any 4 from the remaining.

1. Consider following table structure to write SQL queries :

## Emp table

empno number(3), ename varchar2(30), sal number(4),
comm number(3), job varchar(10), deptno number(2), joindate date, address varcher2(30)

## Dept table

deptno number(2), dname varcher2(30), location varcher2(30)
a) List all employees from Delhi and Mumbai city.
b) List all employees having "P" as fifth character in their name.
c) Show alphabetical list of employees.
d) Show all employees working in sales department.
e) Display names of employees who get comm.
f) Display how many employees are working in the organisation.
g) Delete record from dept table for deptno $=50$.
h) Create dept table with proper constraints.
2. a) Explain 3-tier architecture of DBMS.
b) What is anomaly ? Explain different types of anomalies with example.
3. a) Explain various users of DBMS.
b) Compare HDM, NDM and RDM.
4. a) Software modules in DBMS.
b) Explain use of Normalization and what the rules of normalization are.
5. Explain E.F. Codd's rules.
6. Write short notes on (any 2) :
a) Security and privacy
b) Aggregation
c) Recovery mechanism
d) Distributed database.

# P.G.D.C.A. (Semester - III) Examination, 2011 <br> 302 : ORACLE <br> (2008 Pattern) (New) 

## Time : 3 Hours

Max. Marks : 70

Instructions:1) Q. 1 is compulsory.
2) Solve any five questions from the remaining.
3) Figures to the right indicate full marks.

1. Consider following table structure to write SQL queries. 20

## Book table

Bookno number (5), Title varchar2(30), noOf Pages number (4), price number (5)
Edition number (2), publication varchar2 (40),

## Author table

AuNo number (4), Aname varchar2(30), address varchar2(30)

## Book-Author table

Bookno number (5), AuNo number (4),

1) List all book from BPB publication
2) List all book information having 2 authors.
3) Display all books whose price is more than Rs. 1,000
4) Display most popular books.
5) Display which author has written maximum books.
6) Create BOOK table with proper constraints.
7) Display all authors who stay in Pune.
8) Display various publications.
9) Insert one record in author table.
10) How many books on "Oracle" subject are available ?
2. Write a stored procedure which will accept author number and will return total
books authored by that author.
3. Write a PL/SQL block which will accept name of the person and will print name in reverse order.
4. Write a user defined function which will accept name of the book and will return no. of pages of that book.
5. Write a PL/SQL block which will accept a number if it is odd number then user defined exception must be shown.
6. Write a PL/SQL block which will accept author number. Using cursor display author name, title and price and publication.
7. Write short notes (any two) : 10
a) Joins.
b) Set operators.
c) DDL statements.

# P.G.D.C.A. (Semester - III) Examination, 2011 <br> 302 : OBJECT ORIENTED PROGRAMMING WITH JAVA (OOPJ) (Old) (2005 Pattern) 

Time : 3 Hours

Max. Marks : 80

## Note: $Q .1$ and $Q .7$ are compulsory. Solve any 4 from the remaining.

1. Justify your answer:
a) Which methods are used in threads ?
i) sleep ()
ii) start ()
iii) action performed ()
iv) wait ()
b) Which of the following are not primitive data types ?
i) "Pune"
ii) ' Y '
iii) false
iv) 7.44
c) Which method will give size of the array ?

If array is $\operatorname{Int}[] \mathrm{a}=\{12,45,34,66\}:$
i) a. length ;
ii) a[]. length();
iii) a.size();
iv) a.length();
2. Write an application which will accept a number from command line. If number is not divisible by 13 then throw "not Divible By 13 " user defined Exception. 16
3. Write an awt application which will accept values for 2 numbers show the result in text field as total no of odd numbers between those given two numbers".
4. Write a threaded application which will print numbers from $100-1$ and $\mathrm{a}-\mathrm{z}$ characters. ..... 16
5. Write Student class with rollno, name, marks as instance variables and print () as method which will print instance variables. Write 2 constructors . ..... 16
6. Write an application which will accept a file name. Then display the contents of the file. Do necessary validations. ..... 16
7. Write short notes (any 2): ..... 10
a) Data types in Java
b) Applet life cycle
c) Object oriented concepts
d) Overloading and overriding.

# P.G.D.C.A. (Semester- III) Examination 2011 303: UNIX (Old) <br> (2005 Pattern) 

Time : 3 Hours<br>Max. Marks : 80<br>Note: A) All questions are compulsory.<br>B) Write both sections on same answer sheets.

## SECTION - I

## 1. Explain the following commands with example. (any five):

A) nice
B) date
C) sleep
D) mv
E) tail
F) mkdir.
2. Answer any two: 10
A) Explain sort command with example.
B) Explain mail command with example.
C) Explain ls command with example.
3. Write Unix commands. (any five): $\mathbf{1 0}$
A) Print number of characters in file file1.
B) Change ownership of file 1 to the user pgdca.
C) Display the day of the month.
D) Display all ordinary files in current directory.
E) Delete entire "unix - prog" directory using single command.
F) Send message "Welcome" to all the users currently logged in.
4. Explain the concept of command line argument in shell programming.
[3986] - 32
SECTION - II
5. Solve any four. ..... 40
A) Write shell script to print the numbers 1 to 100 , their squares and cubes.
B) Write a shell script which accept two numbers as command line arguments and print tables of all numbers between given two numbers.
C) Explain Unix file structure.
D) Write shell script to print today's date in the form date - monthname - year.
E) Write awk program to print first word and last word of each line from abc.txt file.

# P.G.D.C.A. (Semester - IV) Examination, 2011 401 : DATA STRUCTURES AND ALGORITHMS (2008 Pattern) 

## Time : 3 Hours

Max. Marks : 70
Instructions: a) Write structure definitions.
b) Answer all sub questions of a question at one place.

1. A) Convert the following infix form to its postfix form.

A* $(B-C) / D+E$
Show the contents of both the stacks at each step in a tabular form.
OR
A) Write C implementation for conversion of infix to postfix expression.
B) Evaluate the following prefix form.
$-+\mathrm{AB}-* \mathrm{C}+\mathrm{DE}$ where $\mathrm{A}=2 \quad \mathrm{~B}=3 \quad \mathrm{C}=4 \quad \mathrm{D}=5 \quad \mathrm{E}=1$
Show the contents of stack at each step in a tabular form.
OR
B) Write C implementation for evaluation of prefix expression.7
2. A) Write a function that returns count of leaf nodes in a binary tree.

OR
A) Give the steps for sorting following numbers using Quick sort
$\begin{array}{llllll}3 & 1 & 2 & 6 & 5 & 4\end{array}$
B) Write a function to add an element in a circular queue of characters implemented as a linked list.

## OR

B) Write a function for post-order and pre-order traversal of Binary Search Tree.
3. A) Compute row major and column major address of the member a[20][30] of a 2 -d array a[30][40] where base address of the array is 2000 and each member occupies 2 bytes of memory.
B) Write a function that prints elements of a doubly linked list of integers. OR
B) Write a function that returns sum of data of all nodes in a linked list.
4. Consider the following graph.

a) Write adjacency matrix
b) Write adjacency list
c) Generate the output of Breadth First Search (BFS) when starting vertex is 1
d) Generate the output of Depth First Search (DFS) when starting vertex is 1
e) Write indegree of each vertex.
5. Design Huffman's tree for the following message.
networktopologies
What kind of tree is a Huffman's tree ?

# P.G. Diploma in Computer Applications (Sem. - IV) Examination, 2011 402 : PRINCIPLES AND PRACTICES OF MANAGEMENT AND ORGANISATIONAL BEHAVIOUR <br> (2008 Pattern) 

Time : 3 Hours
Max. Marks : 70

## Instructions : 1) $Q$. No. 1 is compulsory.

2) Solve any three questions from remaining questions.
3) Figures to the right indicates full marks.
1. a) Define motivation. Critically differentiate theories of motivation by Herzberg
and Maslow.
b) Explain the need and steps of decision making. 10
2. Explain concept of conflict management. What are the types of conflict ? How will resolve them? ..... 15
3. Elaborate in detail the contributions made by F.W. Taylor towards management thoughts. ..... 15
4. What are the functions of management ? Are they relevant to IT industries. ..... 15
5. Explain various styles of leadership with their advantages and disadvantages. Give suitable examples. ..... 15
6. Write short notes on (any two) : ..... 15
a) TransactionalAnalysis
b) Team building
c) Johari window.

# P.G.D.C.A. (Semester - IV) Examination, 2011 401 : SOFTWARE ENGINEERING (Old) (2005 Pattern) 

## Time : 3 Hours

Max. Marks : 70

> Instructions : 1) Q. 1. must be answered.
> 2) Attempt any 5 from remaining.
> 3) Draw neat diagrams. Neat diagrams carry marks.
> 4) State assumptions.

1. ABC auto manufacturing company proposes to computerise purchase order system. Material requirement note is received from stores deptt. purchase officer invites quotations from vendors. After analysing the quotations, a short-listed vendor is given a purchase order for various items. After delivering the items, vendor gives purchase bill, which is passed for payment. Accounts deptt. makes the payment to the vendor.
Draw:
1) D.F.D. $-1^{\text {st }}$ level
2) Normalised file layouts
3) $E$ - R Diagram
4) Purchase order layout.
2. Write a detailed note on feasibility study report.
3. A TV network company provides TV channel services to the customers. There are about 1000 customers on records of the company. Company charges Rs. $1,000 /-$ as deposit and Rs. 500/- as monthly rent. If the customer wants to disconnect the services, the same is accepted by the company and the deposit amount is returned to the customer.

Draw:

1) CLD
2) Normalised file layouts.
4. Draw $\mathrm{E}-\mathrm{R}$ diagram a file layouts for college library system. There are 10,000books in the library, on various subject and by various authors. Library is alsoequipped with CD's and magazines. Student and staff members are issued booksand periodicals on weekly basis. Students can draw 2 books and staff-memberscan draw 3 books per week. Library head can charge fine ofRs. 5/- per day, if the books are not returned, in time.10
5. Compare waterfall and spiral models used to design a system. Give examples. ..... 10
6. Define system. State characteristics of a system. ..... 10
7. Write notes on (any 2) : ..... 10

- Rules for designing a data entry screen
- F.D.D.- Structured English- Code-less system.


# Post Graduate Diploma in Computer Application (P.G.D.C.A.) (Semester - I) Examination, 2011 <br> 101 : FUNDAMENTALS OF INFORMATION TECHNOLOGY (2008 Pattern) 

Time : 3 Hours

Max.Marks: 70

## Instructions : 1) Question No. 1 and 6 compulsory. <br> 2) Attempt any three from remaining. <br> 3) Draw diagram wherever required.

1. A) Define Computer with block diagram. Also explain function of each block. ..... 10
B) Explain storage devices in detail. ..... 4
2. A) Use of mini, micro and main frame computers with their functional areas. ..... 7
B) Draw diagram and truth table for following logic gates : ..... 7
1) AND
2) $O R$
3) NOT
3. A) Define DATA representation in Digital Computers. Explain Binary, Octal, Hexadecimal data representation. ..... 7
B) Explain Gated Flip-Flop with diagram and truth table. ..... 7
4. A) What is Virus and Vaccines ? Explain any antivirus with example. ..... 7
B) What is computer language ? ..... 7
Explain
a) Machine languageb) Assembly languagec) High level language.P.T.O.
5. A) Explain Open Systems Interconncetion (OSI) model with 7 layers. ..... 7
B) What is Network Technology ? Type of topology ? ..... 7
6. Write short notes (any three) : ..... 14
1) Unix
2) $8086 / 8088$ microprocessor
3) Round Robin
4) Input devices
5) File organization.

# P.G.D.C.A. (Semester - III) Examination, 2011 301 : SOFTWARE ENGINEERING AND BUSINESS PROCESS (New) (2008 Pattern) 

Time : 3 Hours

Total Marks : 70
Note : 1) Make your own assumptions, whenever necessary.
2) Solve any five questions [14×5=70].

1. For Sales Order processing system for small scale industry draw
a) ER diagram
b) Database Design.
2. Describe role played by analyst in every phase of SDLC.
3. Explain various steps of system development life cycle.
4. Draw the decision tree and decision table for the following :

Global Computer Institute admits the students by following the procedure given below. A student having more than or equal to $60 \%$ of marks in graduation exam is accepted for special batches, students having marks between 45 to $60 \%$ marks are accepted for Regular batches and remaining students are rejected. 20\% additional fees are taken from students who opt for prime time batches. 5\% discount is given to students, if the fees are paid on or before $15^{\text {th }}$ August.
5. Draw context level diagram for Payroll Processing System and design format of payslip and paysheet.
6. Write short notes on (any two) :
i) Prototyping model
ii) Characteristics of systems
iii) Fact finding techniques.

# P.G.D.C.A. (Semester - IV) Examination, 2011 402 : BUSINESS APPLICATION (Old) (2005 Pattern) 

Time : 3 Hours Max. Marks : 80Instructions : 1) Question No. 1 is compulsory.2) Solve any four from the remaining.

1. Write short notes on (any four) : ..... 20
a) LIFO and FIFO methods
b) Types of Accounts
c) Bin Card
d) e-banking
e) Sales Analysis.
2. What is MRP ? Discuss various problems with MRP systems.
3. Nasik Urban Bank, accepts fixed deposits from its customers and employees. Name of the scheme is called "MONEY-MAKE". Under this scheme he/she can deposit Rs. 25,000 minimum and in multiples of ₹ 1,000 . The deposit can be made for single name or jointly upto 3 persons. The compound interest paid after 2 years @ rate of $10 \%$ p.a. The depositors money is transferred after maturity to their Saving Account.

You are required to design -

a) Normalize File layout

b) Context level DFD

c) Fixed deposit computerized certificate.
4. Design proforma for computerized pay slip of any organization. Explain in detail any three earning and deduction heads. ..... 15
5. What is BOM ? Describe BOM processing with product configuration. ..... 15
6. What is Final Accounts ? Explain structure of Final Account. ..... 15
7. Explain the functions of Call Centers. ..... 15

