

P.G.D.C.S.A. (Sem.-1) Examination

Fundamental of Programming

July 2019

Time : 3-00 Hours]

[Max. Marks : 50

SECTION – I

- Q-1** Attempt the following: (Any **THREE**) **[09]**
- i) Summarize and explain the standard input and output functions used in C.
 - ii) Explain the purpose of **while** statement. Differentiate entry controlled loop and exit controlled loop.
 - iii) Explain switch statement with example. Also write rules for using switch statement
 - iv) How can array be declared and defined of any datatype? Differentiate single dimension array and multidimensional array?
- Q-2** Write a program to find out the largest element value from an array of 10 elements. **[08]**
- OR**
- Q-2** Write a program to reverse the word read by user. **[08]**
- Q-3** Define and explain from the followings: **[08]**
- i) Sizeof operator
 - ii) Format specifier
 - iii) Formal Parameters
 - iv) Pointer

SECTION – II

- Q-4** Attempt the following: (Any **THREE**) **[09]**
- i) Describe various storage classes for variables.
 - ii) Explain Dynamic memory allocation and its various functions to manipulate memory.
 - iii) What is user defined Data type? Explain UDD using structure.
 - iv) What is Binary File? Explain working with Binary Files, also compare binary file with text file.
- Q-5** Compare the followings. (Any **TWO**) **[08]**
- i) break and Continue
 - ii) Structure and Union
 - iii) Sequential File Access and Random File Access
- Q-6** Answer the following: **[08]**
- i) What is an algorithm?
 - ii) What is the use of Header files in C language?
 - iii) Explain conditional operator used in C program.
 - iv) What is NULL pointer?

SECTION - 1

Q1. What is printer? What are different types of printers?
How Impact printer is differ from Non-Impact printer? [9]

Q2. 1) $(11100010101)_2 - (100001)_2$
2) Draw a logic circuit and truth table for given
Boolean function $X + XYZ + Y$? [8]

OR

Q2. 1) Explain AND, OR and NOR gate with their circuits
and truth tables?
2) Define Von Neumann Model with the help of flow
chart? [8]

Q3. 1) How many number of bits in 2.48 MB memory of
disk? what is the 2's complement of $(1111011011101)_2$?
2) $(11001101)_2 = (\quad)_8$. [8]

OR

Q3. Solve the following:

1) $(1CCA E)_{16} = (\quad)_8$?
2) What are various types of operating systems?
what is the difference between [8]

SECTION - 2 E 208 - 2

Q4. Draw a diagram to explain the computer level hierarchy? [9]
Explain each level of computer hierarchy in detail?

Q5. 1) what is quotient and remainder of following binary [8]
division problem $(110001100011)_2 / (1101)_2$
2) What is Moore's Law? Give an example of third
generation computers?

OR

Q5. Explain the following? [8]

1) Minimize the following problems using the Karnaugh
maps method.

a) $Z = f(A,B,C) = \bar{B} \bar{C} + B + A\bar{C}$

b) $Z = f(P,Q,R) = P + Q + R$

2) What do you understand by SR flip flop? Explain with
the help of circuit and truth table?

Q6. 1) Explain LRC (Longitudinal Redundancy Check) with [8]
example?

2) Explain ROM and types of ROM?

OR

Q6. 1) Explain analog computers in details? How analog [8]
computers are different from digital computers?

2) What is the full form of ENIAC? ENIAC lies in which
generation of computers? Describe the features of ENIAC in
detail? What are the drawbacks of ENIAC?

P.G.D.C.S.A. (Sem.-1) Examination
Internet Technology & Web Designing
July 2019

Time : 3-00 Hours]

[Max. Marks : 50

SECTION – I

- Q-1** Attempt the following: (Any **THREE**) [09]
- (i) Define network. Also elaborate types of Networks.
 - (ii) Explain TCP / IP Protocol suite with appropriate diagram.
 - (iii) List down and elaborate various types of Internet connection and describe different levels of Internet connectivity.
 - (iv) Define Web Browsers. Also explain Web Browsers and its types in detail.
- Q-2** What is an attribute in HTML? Explain the following Attributes with suitable example: [08]
- i) href (ii) class (iii) style (iv) src
- OR**
- Q-2** Explain HTML frame tag in detail with example. [08]
- Q-3** Write short note: (Any **TWO**). [08]
- (i) List used with HTML
 - (ii) Table tag
 - (iii) ISP

SECTION – II

- Q-4** Write short notes: (Any **THREE**) [09]
- (i) What is Style Sheet? Explain CSS in brief with its syntax and also explain the different ways of inserting a CSS in HTML document.
 - (ii) List down and explain advantages of Java Script. Also explain external Java Script.
 - (iii) Explain the "Id" & "Class" selector of CSS with suitable example.
 - (iv) What is an event? List and explain any 3 events along with the respective event handler.
- Q-5** Answer the followings. (Any **TWO**) [08]
- i) Explain User defined function in JavaScript with suitable examples.
 - ii) Explain alert box, confirm box, prompt box with example.
 - iii) Explain Document object and also explain document.write() and document.writeln().
- Q-6** Answer the following: (Any **TWO**) [08]
- i) Explain branching (conditional statements) used with JavaScript.
 - ii) Explain the Date object with its methods and example.
 - iii) Explain String object with all its methods giving example.

P.G.D.C.S.A. (Sem.-1) Examination
Relational Database Management System

Time : 3-00 Hours]

July 2019

[Max. Marks : 50

SECTION – I

- Q-1** Attempt the following: (Any **THREE**) **[09]**
- (i) Define Data abstraction. Explain data abstraction in 3-tier architecture of DBMS.
 - (ii) Define Database. Explain various types of Database models used with respective examples.
 - (iii) Define Attributes. Explain various types of attributes used in ERD.
 - (iv) Define entity and relationships between entities. Also explain mapping cardinality represented in crow's foot notation in ERD.

- Q-2**
- i) Explain ERD and its representation in chen's notations used in designing database. **[08]**
 - ii) Explain following keys used in DBMS with suitable examples.

| | |
|---------------|-------------------|
| (a) Relation | (c) Tuple |
| (b) Super Key | (d) Candidate Key |

OR

- Q-2**
- (i) Describe terms: Generalization, Specialization and Aggregation, with examples. **[08]**
 - (ii) Define RDBMS. List down Codd's rules.
- Q-3** Draw an ER diagram for any **ONE** of the following system. **[08]**
- (i) Online Library Management System
 - (ii) Inventory Management System

SECTION – II

- Q-4** Write short notes: (Any **TWO**) **[09]**
- i) Relational Set Operators
 - ii) Joins used in DBMS
 - iii) Normalization
- Q-5** Compare the followings. (Any **TWO**) **[08]**
- i) DDL and DML
 - ii) Group by clause and Order by clause
 - iii) Primary Key and Foreign Key
- Q-6** Answer the following: (Any **TWO**) **[08]**
- i) What is SQL? List down various types functions used in SQL. Explain the aggregated functions used in SQL using suitable examples.
 - ii) Define Canonical cover. Explain it with suitable example. Also show difference between canonical cover and minimal cover.
 - iii) Define Metadata. Define and describe Data Dictionary. What is Active Data dictionary?

