

[A-10]

SARDAR PATEL UNIVERSITY
POST GRADUATE DIPLOMA IN COMPUTER APPLICATIONS (PGDCA) :
SEMESTER - I
PS01CDCA21 : PC SOFTWARE
1st November-2017, Wednesday

Time: 10:00 am to 01:00 pm

Total Marks: 70

Q-1 Choose the most suitable option:

[08]

- i. The extension of the Microsoft Word 2007 file is _____.
a. doc b. docx c. dosx d. None of given
- ii. The number of rows in Excel 2007 is _____.
a. 1048576 b. 10488567 c. 1047576 d. None of given
- iii. SORT EMP TO NEMP creates _____ file.
a. EMP.fpt b. NEMP.mem c. NEMP.dbf d. None of given
- iv. =CEILING(124.56,2) returns _____ as a output
a. 124 b. 126 c. 125 d. None of these
- v. CREATE STUDENT command in FoxPro creates _____ file.
a. student.frx b. student.dbf c. MEM d. None of given
- vi. =UPPER("FoxPro") gives _____ output in FoxPro.
a. foxpro b. FOXPRO c. FOXpRO d. None of given
- vii. Extension of Report file in FoxPro is _____.
a. .FPT b. .FRX c. .DBF d. None of given
- viii. _____ command is used to open database file.
a. CREATE b. APPEND c. USE d. None of given

Q-2 Answer the following: [Any 7]

[14]

- i. Differentiate clearly Auto filter and Advanced filter in Excel 2007.
- ii. Write commands to open two database file named DCA.DBF and MCA.DBF in different work area.
- iii. List out at least four the most common features of any presentation package.
- iv. What will be the output of =TRUNC(154.456,-2) and = Round(154.456,-2) in Excel 2007?
- v. Explain briefly with example REPLACE command.
- vi. What you mean by DBMS? Write the name of 2 well known DBMS.
- vii. Explain briefly @ SAY...GET command
- viii. Write the steps to create and execute a command file with example.
- ix. Explain IF statement with example(s) in Foxpro.

Q-3 Answer the following long questions:

[A] Write short note on types of computers.

[06]

[B] Draw and explain block diagram of computer.

[06]

OR

[B] Write at least SIX features of Word 2007.

[06]

Q-4 Answer the following long questions:

- [A] Write short note on types of cell addresses in Excel2007 with example(s). [06]
[B] Explain with example(s) the following Excel functions:[Any TWO] [06]
i. =WEEKDAY() ii. IF() iii. =PROPER()

OR

- [B] Write the steps to create and execute macro in Excel 2007. [06]

Q-5 Answer the following long questions:

- [A] Differentiate clearly [06]
(i) INPUT and ACCEPT command
(ii) LIST and DISPLAY ALL command

- [B] Explain following FoxPro built-in functions: [06]
a. SUBSTR() b. FLOOR() c. ABS()

OR

- [B] Explain Do...ENDCASE command with examples. [06]

Q-6 Answer the following long questions:

- [A] Explain briefly the following commands in FoxPro: [06]
i. USE ii. APPEND iii. DELETE.

- [B] How to create and execute report in FoxPro? [06]

OR

- [B] What is procedure in Foxpro? Explain creation and execution of procedure by taking an example of your choice. [06]

[A-12]

SARDAR PATEL UNIVERSITY

POST GRADUATE DIPLOMA IN COMPUTER APPLICATIONS (PGDCA)

SEMESTER – I

PS01CDCA22 (C AND DATA STRUCTURE)

3RD NOVEMBER, 2017

Time : 10:00 a.m. to 1:00 p.m.

Marks : 70

Note : Answers of all the questions (including multiple choice questions) should be written in the provided answer book only.

Q-1 Pick up the most appropriate answer from the given alternatives and write in your answer book. (8)

- (i) Step by step written instructions for a process is called _____.
 [A] Algorithm [B] Flow Chart [C] Program [D] none of these
- (ii) The value of a _____ can be changed during the execution of a program.
 [A] variable [B] constant [C] operator [D] none of these
- (iii) In scanf(), _____ format specifier is used for integer data type.
 [A] %f [B] %d [C] %c [D] none of these
- (iv) void main()
 {
 int P=7,Q=8,R=1;
 R=(P++) + (Q++);
 }

What will be the value of R after the execution of above code?

- [A] 15 [B] 16 [C] 1 [D] None of these
- (v) The operations PUSH and POP are related to -
 [A] Array [B] Stack [C] Queue [D] List
- (vi) A linked list is a _____ data structure.
 [A] Linear [B] Non-linear [C] Both [A] & [B] [D] None of these
- (vii) Which one of the followings is used to accept/read a character from user?
 [A] putchar() [B] getchar() [C] printf() [D] None of these
- (viii) LIFO means _____.
 [A] Last Input First Output [B] Last In First Out
 [C] Lower Input Fast Output [D] Latest Input Fastest Output

Q-2 Attempt the following: (ANY SEVEN) (14)

- I. What do you mean by compiler? Explain in brief.
- II. Define program. Write a C program that prints "Digital India" as output.
- III. Define the term 'Flowchart' with an example.
- IV. Write down any four keywords of a C language.
- V. What is the use of printf() and scanf() functions in C?
- VI. What is a variable? List basic data types of C language.
- VII. Explain ternary operator with an example.
- VIII. List down the main operations that are performed on a data structure.
- IX. Write a few lines on user-defined function.
- X. Explain the use of clrscr() with an example.

- Q-3 (a)** Draw and Explain block diagram of a computer. Also list few application areas of a computer. (6)
- (b)** Explain arithmetic and conditional operators of a C language with an example. (6)

OR

- (b)** Explain High level languages with its advantages and disadvantages. (6)
- Q-4 (a)** Explain : if statement and nested-if statement with its syntax and example. (6)
- (b)** Define the term 'Array'. Explain initialization process of 1-dimensional array with an example. (6)

OR

- (b)** What do you mean by the term 'String'? How can we read and write a string in C language? List any four built-in string functions with its meaning. (6)
- Q-5 (a)** Define the term 'data structure'. Discuss various types of a data structures in brief. (6)
- (b)** Explain STACK with an example. Explain in brief about various operations performed over a stack. (6)

OR

- (b)** Explain QUEUE data structure. Write an algorithm to insert an element in queue in front. (6)
- Q-6 (a)** Explain switch statements with an example. (6)
- (b)** Discuss linked list in detail with appropriate example. (6)

OR

- (b)** Write a C program to read marks of 100 students and then find & display maximum mark, minimum mark and average mark. (6)

— X —

- Q2. Answer the following questions (Any Seven):** [14]
- Make the following conversion: $(1100101.101)_2 = (?)_{10}$
 - Write full form of (i) ASCII (ii) EBCDIC.
 - List any four output devices.
 - Draw only diagram for CPU organization.
 - What is a trap?
 - Draw and give truth table for OR gate with two inputs.
 - Write truth table for: $\bar{A} \cdot B + \bar{B} \cdot C$
 - What is multiplexer?
 - Explain buffer register in brief.

- Q3. Answer the following questions:**
- Draw and explain block diagram of simple computer with its functional units. [6]
 - Explain octal and hexadecimal number systems. Also convert a hexadecimal number $(AC)_{16}$ to octal. [6]

OR

- Define hamming code and construct hamming code for 'A' using parity bit of your choice. [6]

- Q4. Answer the following questions:**
- Write a note on secondary storage devices. [6]
 - Discuss instruction level parallelism in detail. [6]

OR

- Discuss processor level parallelism in detail. [6]

- Q5. Answer the following questions:**
- State different Addressing modes. Explain any two in detail. [6]
 - State and Explain De Morgan's Theorem. [6]

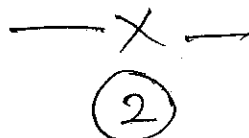
OR

- Explain NAND gate and NOR gate with their circuit diagram and truth table. [6]

- Q6. Answer the following questions:**
- Explain Full Adder with example giving its logic circuit. [6]
 - What is Flip Flop? Explain any one flip flop of your choice in detail. [6]

OR

- Write a note on: Shift Register. [6]



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SEAT No. _____

No. of Printed Pages : 2

SC

SARDAR PATEL UNIVERSITY

PGDCA SEMESTER-I

PS01CDCA24 – Network Fundamentals

Thursday, 09th November 2017

Time: 10:00 A.M. To 01:00 P.M.

Total Marks: 70

Q.1 Give answers of following Multiple choice questions:

[8]

1. _____ is the fastest mode of data communication.
a. UTP b. Coaxial Cable c. Fiber Optics d. None of these
2. Satellite is _____ type of transmission.
a. Guided b. Unguided c. Invalid d. None of these
3. In _____ topology a single long cable connects computer to the network.
a. Bus b. Star c. Mesh d. None of these
4. 10 Base T cabling scheme uses _____ wire.
a. Twisted Pair b. Coaxial Cable c. Fiber Optics d. None of these
5. OSI model have _____ layers.
a. 7 b. 6 c. 5 d. 4
6. Which domain name is used for educational purpose?
a. .com b. .net c. .edu d. .org
7. _____ is an agreement between the communicating parties on how communication is to proceed
a. Protocol b. Interface c. Layers d. None of these
8. _____ not a valid radio station frequency.
a. 98.3 MHz b. 93.5 MHz c. 94.3 MHz d. 91.2 GHz

Q.2 Do as directed (Any Seven)

[14]

1. Define: Analog & Digital Signal
2. Explain point to point network transmission in brief.
3. List any two top level domain names.
4. Full form of WWW.
5. Give two names of email service provider.
6. What is broadcasting in computer networks?
7. Define: Protocol & Satellite
8. List any two uses of WAN.
9. What is the use of CSMA protocol?

- Q.3 [A] Discuss advantages and disadvantages of wireless networks [6]
[B] Write a note on local area network. [6]

OR

- [B] Write a note on metropolitan area network. [6]

- Q.4 [A] List different types of network topologies and explain any one of them in detail. [6]
[B] Write a note on Ethernet. [6]

OR

- [B] Explain token bus in detail. [6]

- Q.5 [A] List layers in OSI model and explain the functionality of any two layers. [6]
[B] List types of multiplexing. Explain any one in detail. [6]

OR

- [B] Define: Amplitude, DNS, Flow Control, Frequency and Error Control. [6]

- Q.6 [A] Explain E-mail services. [6]
[B] Write a short note on DNS. [6]

OR

- [B] List types of satellites. Discuss major difference between them. [6]

*****ALL THE BEST*****

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(2)

(A-36)

SEAT No. _____

No. of Printed Pages: 02

SC

Sardar Patel University
Post Graduate Diploma in Computer Applications I Semester Examinations

PGDCA -105/PS01CDCA25: Systems Analysis and Design

Date: 11/11/2017

Time: 10:00 am to 1:00 pm

Marks: 70

Saturday

Q.1 Select an appropriate answer for each the following questions: [08]

- 1) **Major objective of systems analysis and design is _____.**
 - a) Better quality procedures
 - b) Profit
 - c) Change
 - d) Computerization
- 2) **Close systems interacts with _____.**
 - a) Customers
 - b) Environment
 - c) Users
 - d) Nothing
- 3) **_____ is a fact finding technique.**
 - a) Interviewing
 - b) Questionnaire
 - c) Observation
 - d) All of these
- 4) **_____ is a component of data dictionary.**
 - a) Data aliases
 - b) Data elements
 - c) Data Structure
 - d) All of these
- 5) **_____ is an example of an integrated tool.**
 - a) Programming languages
 - b) Screen generator
 - c) CASE tool
 - d) All of these
- 6) **TPS is a type of system that handles _____ operations of a business.**
 - a) Non recurring
 - b) Routine and structured
 - c) Intelligent
 - d) None of these
- 7) **_____ is a type of testing.**
 - a) Unit
 - b) Integrated
 - c) Peak load
 - d) All of these
- 8) **_____ is a centralized component in a typical CASE tool.**
 - a) Data dictionary
 - b) Data Base
 - c) Coding
 - d) None of these

(1)

(P.T.O.)

Q.2 Answer following questions in brief. [ANY SEVEN] [14]

- 1) Define systems analysis.
- 2) Define role of systems analyst in various size of organizations in one line each.
- 3) Differentiate Open and Close systems.
- 4) Explain why requirements anticipation is considered as mixed blessings.
- 5) List various users of a system.
- 6) List any three uses of prototype.
- 7) What are the approaches to reliability? Describe each in one line.
- 8) Give any two back-end tools for systems development.
- 9) What are the elements to be designed while designing an information system?

Q.3 [A] Draw general diagram of a system and describe its elements in detail. [06]

[B] Explain various committees to develop information systems. [06]

OR

[B] What is institutional development approach? In which situation such approach should be used? Explain in detail. [06]

Q.4 [A] Draw and explain diagram of a typical CASE tool in detail. Also give two advantages of it. [06]

[B] Explain various symbols used in DFDs by giving its detail descriptions. [06]

OR

[B] Draw FDD, context level DFD and detailed DFD for a typical library management system. [06]

Q.5 [A] Define prototype. Also describe prototype as a method for system development approach by giving its diagram. [06]

[B] What is use of a decision table? Give structure of a decision table. Also draw a decision table of your choice. [06]

OR

[B] List and explain typical components of a data dictionary. Also list two uses of the data dictionary. [06]

Q.6 [A] List and explain various types of testing methods. [06]

[B] Describe various quality parameters to measure quality of software. [06]

OR

[B] What is conversion? What are the popular methods of conversion? [06]

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