

Computer Systems and Applications

Time: 3 Hours

Marks: 100

NB:

1. Attempt either **Part A or Part B. Question no. 1 is compulsory.**
2. In **section I**, attempt **any two** questions from Question Nos. 2 to 5
3. In **section II**, attempt **any two** questions from Question Nos. 6 to 9
4. All answer should be written in the **same** answer-book.
5. Figures to right indicate maximum marks.
6. **All questions carry equal marks**

PART A

Q.1 (a) Answer the following in one sentence: 3

- (i) What is the use of MODEM?
- (ii) Give one advantage of CD-ROM over floppy disk.
- (iii) Give full form of HTML.

(b) Answer the following in C:

- (i) What is the difference between getch () and getche ()? 2
 - (ii) What is the difference between = and == operators? 2
 - (iii) What is the use of break statement? 1
- (c) State whether the following are **true or false**: - 3

- (i) WAN is an operating system.
- (ii) In MS-WORD, PAGE BREAK can be inserted using Edit menu.
- ((iii) In MS-WORD, Save As option allows you to save the file under different file name.

(d) Answer the following in **FoxPro**:

- (i) Explain the use of: 3
 - (i) SUBSTR () (ii) CDOW (iii) MIN ()
- (ii) Explain the following: 2
 - (i) EDIT (ii) MODIFY STRUCTURE.

Section â€”1

Q.2 (a) Explain briefly about the following: 6

- (i) KEYBOARD (ii) LAN (iii) TELNET.

(b) What does the following C program print? 4

- ```
main () {int a=356;
float b = 2121.4656;
char c[] "DIGITAL";
printf("%+6d% + ll.3f\n%-10.4s\n",a,b,c);
printf("%-6d%11.0f%10.5s\n",a,b,c); }
```

(c) Write a C program to input 20 integers and then print these integers in ascending order of magnitude and then in descending order magnitude. 6

Q.3 (a) Answer in one or two lines the uses of: 6

- (i) FLOPPY DISK (ii) OPERATING SYSTEM (iii) TCP/IP protocol.

(b) Rewrite the following sequence of if() statements using switch(). 4

- ```
If (a= 'r' ll a= ='R')) printf (" \nRED\n") ;
else if(a= ='w' a= ='W') printf("\nWHITE\n");
else if (a= ='b' ll a= ='B' ) printf("\nBLUE\n");
else printf("\nNONE OF THEM\n");
```

(c) Write a program in C to input 10 pairs of x and y and then print regression line y on x in the form 6

Q.4 (a) State whether the following are True or False: 6

1. Control Unit of CPU processes the data.
2. Dot Matrix Printer can be used for printing graphs.
3. Mouse is an Input Device.
4. In Windows you can open several applications simultaneously.
5. The opening page of a Website is called Home Page.
6. Search engines are websites, which helps you to search text on Internet.

(b) What is the output of the following C program? 4

- main()
 {int k=0,x=0;
- while(k< 20)
- {if(k%5==0)
 {x +=k;
 printf("%4d", x);}
 ++k;
 printf("\nx=%d", x);
- }

(c) Write a C program to input worker's name, number of hours worked and his category and then print name and wage, where wage is computed on the basis of category as follows:6

Category Rate/hour (Rs.)

A	75/-
B	60/-
C	40/-
D	30/-

Q.5 (a) Explain briefly about the following: 6

- (i) MONITOR (ii) UNIX (iii) BBS.
 (b) Write a C program to find and print the sum of: $1 \times 3 + 4 \times 8 + 7 \times 13 + \dots + 58 \times 98$. 4
- (c) Electricity bill is computed on the basis of units consumed as follows:
6

Units Consumed Rate Per Unit

First 500 units	Rs. 1.40 per unit
Next 1000 units	Rs. 1.60 per unit
Excess	Rs. 1.80 per unit

If the bill amount exceeds Rs. 10,000 surcharge of 5% of bill amount is added to the bill. Write a C program to input consumer no., consumer name, units consumed and then print consumer no., consumer name, and bill amount.

PART " B

Q.1 (a) Answer the following in one sentence: 3

- (i) What is the use of MODEM?
 - (ii) Give one advantage of CD-ROM over floppy disk.
 - (iii) give full form of HTML.
- (b) Answer the following in MS-EXCEL:

- (i) Explain the use of the following functions. 2
- (i) ROUND() (ii) LOWER()
- (ii) Describe the EXCEL application window. 2
- (iii) How to exit from EXCEL to Windows? 1
- (c) State whether the following are True or False: 3
- (i) WAN is an operating system.
- (ii) In MS-WORD, PAGE BREAK can be inserted using Edit menu.
- (iii) In MS-WORD, Save As option allows you to save the file under different file name.
- (d) Answer the following in Fox-Pro: 3
- (i) Explain the use of: 3
- (i) SUBSTR (ii) CDOW (iii) MIN ()
- (ii) Explain the following: 2
- (i) EDIT (ii) MODIFY STRUCTURE.

Section " I

Q.2 (a) Explain briefly about the following: 6

- (i) KEYBORAD (ii) LAN (Ili) TELNET.
- (b) Answer the following in MS-EXCEL 4

Roll no. and marks out of 100 scored in two subjects by 25 students are entered in a worksheet in columns A, B, C respectively in first 26 rows. In

first row headings are entered and in remaining rows data has been entered. Write steps with suitable formulae to find:

(i) Average marks in column D. (ii) To assign a remark (PASS or FAIL) in column E by using the following policy. Remark is "PASS" if mark is 40 or more in both the subjects and average is 50 or more otherwise "FAIL".

(c) Answer the following in MS-EXCEL: 6

Weights(in Kgs) of 50 children are entered in a worksheet in cells A3 to A52. By taking the class interval as 20-25, 25-30, 30-35, 35 and above. Explain the procedure to prepare frequency table.

Q.3 (a) Answer in one or two lines the uses of : - 6

(i) FLOPPY DISK (ii) OPERATING SYSTEM (iii) TCP/IP protocol.

(b) Answer the following in MS-EXCEL : - 4

What is an Autofill List? Explain the steps to prepare the custom list (Custom Autofill) with the values Delhi, Mumbai, Bangalore, Chennai, Kolkata and display it in cells F1 to F5.

(c) Answer the following in MS-EXCEL 6

Consider the following worksheet showing the cost of machinery, scrap value and its life. Using straight-line method, explain the procedure to display Year-wise depreciation and depreciated value for each year till the life of machinery. Use your own cell addresses.

	A	B	C
1	COST	SCRAP VALUE	LIFE IN YEARS
2	200000	10000	10
3			
4			

Q.4 (a) State whether the following are **true** or **false** : - 6

- (i) Control Unit of CPU processes the data.
- (ii) Dot Matrix Printer can be used for printing graphs.
- (iii) Mouse is an Input Device.
- (i) In Windows you can open several applications simultaneously.
- (v) The opening page of a Website is called Home Page.
- (vi) Search engines are websites, which helps you to search text on Internet.

(b) Answer the following in MS-EXCEL: 4

Describe the three different ways of referencing a cell in a formula

(c) Answer the following in MS-EXCEL 6

In a Worksheet data about Name and Marks (out of hundred) in six subjects has been entered in columns A, B, C, D, E, F, G respectively in first 26 rows. In first row headings are entered, in remaining 25 rows data of 25 students has been entered. Explain the step to perform the following:

- (i) To find the total marks of each student in column H.
- (ii) To arrange the worksheet in descending order of total marks and further in the alphabetical order of names.
- (iii) Display those rows where the total marks are above 450.

Q.5 (a) Explain briefly about the following: 6

- (i) MONITOR (ii) UNIX (iii) BBS.
- (b) Answer the following in MS-EXCEL. 4
State whether the following are True or False:
 - (i) A macro can be created using Insert menu.
 - (ii) INT() is used to round off a given number.
 - (iii) It is necessary to sort the list before using Subtotal command.
 - (iv) Paste special can be used with Cut option.
- (c) Answer the following in MS-EXCEL6

worksheet contains the following information. Item Name, Opening Stock, Purchase and sales are entered for 7 items in columns A, B, C and D respectively in first 8 rows. In first row headings are entered and in remaining rows data has been entered. Explain steps to perform the following:

- (i) To find closing stock in Column E.
- (ii) To draw bar chart of opening stock and sales.
- (iii) To draw Pie Chart of closing stock.

SECTION II

- Q.6 (a) What are the options available on the start menu of Windows 95? 2
(b) What is the use of Edit menu in MS WORD? Mention any three options. 4
(c) Write FoxPro commands for the following: 10

- (i) To cancel the marking of deletion of all records.
- (ii) To display all the records where a string "EN" appears as part of a field called NAME.
- (iii) To execute a FoxPro program called as PRM1.prg.
- (iv) To find the number of records where field BASIC is less than 2000.
- (v) To find the remainder after dividing numeric memory variables A by B and store it in R.
- (vi) To calculate DA as 2 times the BASIC for all records.
- (vii) To move the record pointer to the first record.
- (viii) To sort the table in use according to the field CITY and in city according to NAME to another table called CNM.dbf.
- (ix) To display content of a memory variable A using 10 columns and correct up to 2 digits after decimals.
- (x) To accept the value of a field called "LOAN" which should be in between 0 and 99999 only from 4" row and 10 column onwards,

- Q.7 (a) What is use of My Computer facility in Windows-95? 2
(b) Explain the use of Insert menu in MS WORD. Mention any three options. 4

(c) There is a FoxPro table called PASS.dbf containing fields Roll no. (RNO, N, 4, 0), Name (NAME, C, 20), Marks in 2 tests (T1, T2, N, 3, 0) of only those who are passing. Write a FoxPro program to print a report showing roll no., Name and their grade in the alphabetical order of name.

Grade is A if average mark is 80 or more, it is B if average is below 80 but not below 60. Otherwise it is Grade is C. 4

(d) Explain the difference between the following in FoxPro: 6

(i) Single INDEX and Compound INDEX (ii) ? & TEXT/ENDTEXT (iii) SET EXACT ON & SET EXACT OFF.

Q.8 (a) What is an Icon in Windows-95? 2

(b) How to perform the following operations with reference to MSâ€“WORD? 4

- o (i) To insert date and time.
- o (ii) To insert row in a table,
- o (iii) To find a word.
- o (iv) To make the cursor reach page 10.

(c) There are 2 FoxPro tables first one called "CSDEPO.dbf" containing fields Account no. (ACNO, C, 10), Customer name (CUâ€“NAME, C, 40), amount deposited (DEPO, N, 10, 2), No. of days of deposit (NDYS, N, 3, 0) and Data of deposit (DDATE, D, 8). Another table called "MAT.dbf." containing fields, Account no. (ACNO, C, 10), Date of maturity (DMAT, D, 8). Write command in FoxPro to perform the following.

(i) To index the two tables according to account no. 2

(ii) To update the field date of maturity in MAT.dbf by adding no. of days of deposit to date of deposit which are in CSDEPO.dbf. 2

(d) There is a FoxPro table called PHLIST.dbf containing fields Customer code, (CCODE, C, 5), Customer name (CNAME, C, 40), Office phone numbers (OFFNO, C, 30), Mobile no. (MOBNO, C, 30) and Residence number (RES_NO, C, 30). Write an interactive program requesting the user to enter customer code and if he record is not found, allow the user to add it as a new record otherwise display "Record Already Entered". This program should allow the user to continue as long as he wants. 6

Q.9 (a) What is the use of Recycle Bin in Windows -95? 2

(b) Currently you are editing a document using MS-WORD. Explain how to add a 5 x 4 table at the current cursor position and then organize the table according to column 2 in the descending order. 4

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- (i) To search for a given word in the selected text.
- (ii) To cancel the last editing.
- (iii) To open an existing file.
- (iv) To add bullets to the selected text.

(c) Explain the following commands or functions in FoxPro: 4

- (i) SET DEFAULT TO (ii) VAL() (iii) DAY() (iv) SUM.

(d) There is a FoxPro table called DETAILS.dbf containing fields Account no. (ACNO, C, 10), Customer name (NAME, C, 30), his Date of birth (DOB, D, 8) and Account balance (ACBAL, N, 15, 2). Write an interactive program. requesting the user to enter Account no. and the program must search whether the Account no, is found in the file or not if so display Customer name, Data of birth and Account balance otherwise display "Account no. does not exist". This program must allow the user to continue as long as he wants.

