HS/XI/V/CT/Paper-I/23

2023

COMPUTER FUNDAMENTALS, OPERATING SYSTEMS AND UTILITIES

COMPUTER TECHNIQUE (Paper – I)

(Vocational Stream)

(Theory)

Full Marks : 100

Time : 3 hours

The figures in the margin indicate full marks for the questions

General Instructions :

(i) Write all the answers in the Answer Script

(ii) Attempt Part — A Objective Questions serially

(iii) Attempt all parts of a question together at one place

(PART : A — OBJECTIVE)

(*Marks* : 48)

SECTION– I

(*Marks :* 30)

1. Fill in the blanks from the list of words/phrases given below: $1 \times 10 = 10$

(a) M. I. C. R. stands for _____.

(PART : B - DESCRIPTIVE)

(*Marks* : 52)

GROUP - I

(*Marks* : 36)

Answer *ANY SIX* questions: $6 \times 6 = 36$

5. Write short note on Impact and Non-Impact printers? Give one example of each type.

6. How do you differentiate an Interpreter from a Compiler? How do they differ from Assembler?

7. Write the steps for inserting and deleting slides in PowerPoint?

8. What are Bullets and Numbering and why are they used in a document?

9. Write short note on the characteristics of computers?

10. Give the syntax and explain the purpose of the following commands.

(i) ATTRIB

(ii) XCOPY

11. What is a recycle bin? How will you recover and remove deleted files/folders from recycle bin? What is the default size of the recycle bin?

12. Explain multiprogramming and time sharing systems?

2. State whether the following statements are *True* or *False*: $1 \times 10 = 10$

(a) Information stored in secondary memory is volatile.

(b) A daisy-wheel printer gives better quality print than a dot matrix printer.

(c) A plotter is a light sensitive device that converts drawings, printed text or other images into digital form.

(d) Micro computer are called micro because they contain a microprocessor.

(e) A red wavy line signifies that the word or phrase over it are either grammatically incorrect or has some formatting problem.

(f) Piechart show the relationship of parts as applied to the total values.

(g) Xcopy is an external command.

(h) The command for listing the files in specified directory and all sub-directories is DIR/S.

(i) To cancel the last editing, we can use the undo button.

(j) A high level language is machine dependent.

(d) The term active window means

(i) The window that is currently open

(ii) The active window is designated by a different color toolbar than other open windows.

(iii) Both (i) and (ii) are correct

(iv) None of the above

(e) CHKDSK command is used to

(i) Analyze the hard disk error.

(ii) Diagnose the hard disk error

(iii) Report the status of files on disk.

(iv) All of the above

(f) Copy and Xcopy are same in the sense

(i) Both are internal command fo DOS

(ii) Both are external command of DOS

(iii) Both can be used to copy file or group of files.

(iv) Both (i) and (ii)

(g) Which shortcut key is used to close an active application in windows?

(i) Alt+F1

(ii) Alt+F2

(iii) Alt+F4

(iv) Alt+F5.

(h) Default extension of file saved in PowerPoint is

(i) .DOC

(ii) .XLS

(iii) .PPT

(iv) .TXT

(i) The basic operations performed by a computer are

(i) Arithmetic Operation

(ii) Logical Operation

(iii) Storage

(iv) All of the above

3. Multiple Choice Questions: $1 \times 10 = 10$

(a) A button is

(i) A graphical representation of an option.

(ii) A command that activates an option.

(iii) Like one on a household appliance that activates an action.

(iv) All of the above.

(b) Which of the following is a non-impact printer?

(i) Daisy wheel printer

(ii) Drum printer

(iii) Laser printer

(iv) None of the above

(c) Which of the following is not hardware

(i) Magnetic tape

(ii) VDU terminal

(iii) Printer

(iv) Assembler

(j) The REN command

(i) is used to change the name of the file or files you specify.

(ii) Cannot be used to rename files across drives.

(iii) Cannot be used to move files to a different location.

(iv) All of the above.

SECTION – II

(*Marks* : 18)

4. Write short notes in not more than three sentences each *(Any six).* $3 \times 6 = 18$

a. Differentiate between Internal and External commands in MS-DOS?

b. What is Operating System?

c. Distinguish between RAM and ROM?

d. What are High Level Languages?

e. What is the purpose of Diskcopy? Give its Syntax?

f. What is the usefulness of PowerPoint?

g. How is NOW ( ) function different from TODAY ( ) in Excel?

h. Differentiate between Save and Save As?

(b) All printers are _____ devices.

(c) A byte consists of _____ bits.

(d) A picture image or graphic element that one can place on a desktop is called an _____.

(e) _____ is an icon on the desktop that represents a temporary holding place for files that have been deleted.

(f) _____ Orietation is the default page Orientation.

(g) Shortcut key combination to specify the character style to Italics is _____.

(h) The intersection of a column and row is known as_____.

(i) Keyboard shortcut for print operation is _____.

(j) The _____ function key to display full screen in M.S. PowerPoint.

List of words/phrases:

Output	Cell	F5	Ctrl+P
Landscape	icon	Magnetic Ink character Recognition	Folder
16	Ctrl+s	My brief case	Ctrl+u
Recycle Bin	Impact	Merge	8
F2	portrait	Ctrl+I	Magnetic Ink character reader

GROUP – II

(*Marks* : 16)

Answer *any two* questions: $2 \times 8 = 16$

13. What are the steps to add columns and rows to a table? Explain how cells in a table can be merged?

14. What do the term Desktop and Icons mean? Explain what are check boxes and radio button in windows.

15. Write down a steps to carry out a search and replace in MS-Word?

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HS/XI/V/CT/Paper-II/23

2023

COMPUTER PROGRAMMING IN C

COMPUTER TECHNIQUE (Paper - II)

(Vocational Stream : Theory)

Full Marks : 100

Time : 3 hours

The figures in the margin indicate full marks for the questions

General Instructions :

(i) Write all the answers in the Answer Script

(ii) Attempt Part — A Objective Questions serially

(iii) Attempt all parts of a question together at one place

(PART : A — OBJECTIVE)

(*Marks* : 50)

SECTION – I

1. Fill in the blanks from the list of words/phrases given at the end: $1 \times 20 = 20$

(a) The specification %[ ] is used for reading strings that contain _____ .

(b) By default, the real numbers are printed with a precision of _____ decimal places.

9. *(a)* What is the process to create increment and decrement in C? 3

(b) What is the explanation for prototype function in C? 3

10. *(a)* What is a nested loop? Explain. 3

(b) Describe the header file and its usage in C programming. 3

UNIT– III

11. *(a)* What is the general form of function in C? 4

(b) What is a pointer on a pointer in a C programming language? 3

12. What is a structure? Explain with the help of suitable example. 3 + 4 = 7

13. Explain the use of function toupper( ) with an example code? 7

UNIT – IV

14. Write short note on the following : 3 + 3 = 6

(a) 'fprintf ( )' function

(b) 'fscanf( ) function

(l) The function strcat( ) has _____ parameters.

(m) To use the function atoi in a program, we must use the header file _____ .

(n) The function _____ is used to determine the length of a string.

(o) 'printf 'may be replaced by _____ functions for printing strings.

(p) A variable declared inside a 'function call' are called _____ variable.

(q) By default _____ is the return type of a C function.

(r) In passing by pointers the variable of the formal parameter must be prefixed with _____ to their declaration.

(s) A function that calls itself is known as a _____ function.

(t) A variable declared inside a function by default assumes _____ storage class.

List of Phrases/words/commands :

Global	n+1	subscripted	recursive	2(two)	Static
Run-time	Local	&	int	2D	Or
char	Auto	*	infinite	n-1	Multidimensional
default	Six	conditional	S	ctype.h	White space Character
scanf	stdlib.h	and	Break	3D	Continue
array	Realtime	Puts	strlen	printf	

3. Choose and write the correct option: $1 \times 5 = 5$

(a) Which of the following is not a valid C variable declaration?

(i) int number;

(ii) float rate;

(iii) int variable_count;

(iv) int $main;

(b) Who is the father of C language?

(i) Steve Jobs

(ii) James Gosling

(iii) Dennis Ritchie

(iv) Rasmus Lerdorf

(c) All keyword in C are in ____

(i) Lowercase letter

(ii) Uppercase letter

(iii) Sentence case letter

(iv) None of the above

(d) What is an example of iteration in C?

(i) 'for'

(ii) 'while'

(iii) 'do-while'

(iv) All of the above

(e) What is #include<stdio.h>?

(i) Inclusion directive

(ii) Preprocessor directive

(iii) File inclusion directive

(iv) None of the above

4. Write the following in not more than 4 to 5 sentences each *(Any five)* : $3 \times 5 = 15$

(a) Algorithm

(b) Type casting

(c) System software

(d) Interpreter

(e) Bitwise opreator

(f) String variables

(g) Flow chart

(h) Constant

(i) What is 'member' in structure?

2. State whether the following statements are *True* or *False:* $1 \times 10 = 10$

(a) C programs are converted into machine language with the help of a program called editor.

(b) #define is known as preprocessor compiler directive.

(c) A data file in c language open in writing already exists its contents would be overwritten.

(d) A 'switch' statement can not always be replace by a series of 'if...else' statements.

(e) The type of all elements in an array must be the same.

(f) A 'char' type variable can not be used as a subscript in an array.

(g) In C language by default the first subscript is zero.

(h) A program stops its execution when a 'break' statement is encountered.

(i) The 'default' case is required in the 'switch' statements.

(j) One if can have more than one 'else' clause.

SECTION – II

(PART : B – DESCRIPTIVE)

(*Marks* : 50)

Answer ANY TWO questions from *each* UNIT

UNIT– I

5. What are the basic datatype in C language? Explain with example. 6

6. Write short notes on the following : 3 + 3 = 6

(a) The comma operator

(b) The 'sizeof' operator

7. What are the 'entry controlled loop' and 'exit controlled loop'? Explain with its syntax. 6

UNIT– II

8. *(a)* What is an escape sequence? 3

(b) What is a 'scanf' function in C language? Explain with example. 3

(c) The _____ operator is true only when both the operands are true.

(d) The _____ statement when executed in a switch statement causes immediate exit from the structure.

(e) The ternary conditional expression using the operator?: could be easily coded using _____ statement.

(f) In an exit-controlled loop, if the body is executed n times, the test condition is evaluated _____ times.

(g) The _____ statement is used to skip a part of statements in a loop.

(h) A 'for' loop with the no test condition is known as _____ loop.

(i) The variable used as a subscript in an array is popularly known as _____ variable.

(j) An array can be initialized either at compile time or at _____ .

(k) An array that uses more than two subscript is referred to as _____ array.

15. *(a)* What is the purpose of Sqrt( ) function? 3

(b) Write the purpose of feof( ) function. 3

16. *(a)* What are function prototype? What are their purpose? 3

(b) What are arguments? Give example. 3

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Based on the above File, write the commands to perform the following task : 4×4=16

(i) Display the names of the students who are getting a grade 'C' in either GAME or SUPW.

(ii) Display the different game offered in the school.

(iii) Display the SUPW taken up by the students, whose name starts with 'A'.

(iv) Display the name of those 'SUPW' student who has not taken 'Photography'.

10. What is a Macro in Foxpro? Explain. 4

11. Explain the usage of '@' command. 4

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HS/XI/V/CT/Paper-III/23

2023

DATABASE MANAGEMENT SYSTEM (Using Foxpro)

COMPUTER TECHNIQUE (Paper – III)

(Vocational Stream)

(Theory)

Full Marks : 100

Time : 3 hours

The figures in the margin indicate full marks for the questions

General Instructions :

(i) Write all the answers in the Answer Script

(ii) Attempt Part — A Objective Questions serially

(iii) Attempt all parts of a question together at one place

(PART : A — OBJECTIVE)

(*Marks* : 50)

1. Fill in the blanks from the list of **words**/**phrases** given below : 1×10 = 10

(a) The list, command list ——— records on the screen.

DESCRIPTIVE

(*Marks* : 50)

PART – A

(*Marks* : 30)

Answer *ANY THREE* questions from the following

5. *(a)* Explain the difference between the following : 3 + 3 = 6

(i) EDIT and CHANGE

(ii) DELETE and PACK

(b) Explain sorting with example. 4

6. *(a)* What are the advantages of Relational Database? Explain. 5

(b) Explain IF-ENDIF and DO-CASE, -END CASE. 5

7. *(a)* Explain the feature of Foxpro report. 5

(b) Write the difference between APPEND and APPEND BLANK with example. 5

8. *(a)* What is 'GATHER' and 'SCATTER' commands? Explain. 6

(b) What is '??' command in Foxpro? Explain. 4

2. State whether the following statements are *True* or *False* : $1 \times 10 = 10$

(a) By default, the menu bar is displayed in row 0.

(b) The browse window can be divided in two horizontal windows.

(c) One can use Foxpro function with SORT and INDEX.

(d) To preview a report while designing it, Press ^P .

(e) The 'WAIT' command displays "wait" on the screen.

(f) DO WHILE .T. and DO WHILE .NOT. EOF( ) are similar.

(g) The use of 'ELSE' with IF-ENDIF is optional.

(h) ALLTRIM ( ) IS NOT supported in Foxpro.

(i) CLEAR command clears texts only from the active window.

(j) A scope cannot be used with SCAN-ENDSCAN.

(d) A DO WHILE programming structure ends with _____

(i) END

(ii) ELSE

(iii) ENDDO

(iv) ENDIF

(e) After we define an alternate file with SET ALTERNATIVE TO, we have use the _____ command to initiate storage of screen activity in the file.

(i) SET TALK ON

(ii) SET ALTERNATE ON

(iii) SET STATUS ON

(iv) None of the above

(f) The _____ command disables the debug and trace windows

(i) SET DEBUG OFF

(ii) SET BUG ON

(iii) SET DEFAULT OFF

(iv) None of the above

(g) The command to modify a report format file is _____

(i) Edit

(ii) Modify

(iii) Next

(iv) None of the above

(h) The _____ command clears all data from the screen

(i) Release

(ii) Clear

(iii) Restore

(iv) None of the above

(i) CTOD ( ) is the reverse of the _____ function

(i) STAR ( )

(ii) DTOC ( )

(iii) String ( )

(iv) None of the above

3. Choose and write the correct option: $1 \times 10 = 10$

(a) The default file extension name used with program files is _____

(i) .DBF

(ii) .PRG

(iii) .PR

(iv) None of the above

(b) ACCEPT creates a _____ type variable.

(i) Integer

(ii) Decimal

(iii) Character

(iv) All of the above

(c) To add a comment an executable command, prefix the comment with _____

(i) &&

(ii) *

(iii) ##

(iv) None of the above

(j) To resize the command window press _____ keys.

(i) Ctrl + F2

(ii) Ctrl + F8

(iii) Ctrl + F5

(iv) None of the above

4. Write short notes on the following in not more than three or four sentences each: (*Any Five*) $4 \times 5 = 20$

(a) SAY command

(b) LOCATE command

(c) LUPDATE ( ) command

(d) APPEND command

(e) The OR operator

(f) ASCII command

(g) ABS ( ) command

(h) INSERT command

(b) To add more record at the end of any database file use the command _____.

(c) ? MOD (1965, 100) returns _____.

(d) To modify the structure of a database file _____ command is used.

(e) The _____ converts a numeric data to a character string.

(f) ? Round (1234.6,-2) returns _____.

(g) The _____ function returns the name of years from a date expression.

(h) The _____ removes blank space at the end of a character expression.

(i) _____ removes all records from the current database file.

(j) The _____ function returns the current record number.

Lists of Words/Phrases/Commands:

STR ( )	ZAP	RECNO ( )	YEAR ( )	PACK
TIME ( )	ALLTRIM	1200	TRIM ( )	ALL
CHAR ( )	1234	65	APPEND	MODI STRU

PART – B

(*Marks* : 20)

Answer Question No. 9 and ANY ONE from the rest

9. Consider the following table STUDENT.DBF with the structure details:

Field Name	**Type**	**Width**
Student _No	Numeric	2
Class	Numeric	1
Name	Character	10
Game	Character	12
Grade 1	Character	1
SUPW	Character	15
Grade 2	Character	1

STUDENT.DBF RECORDS :

Student_No.	**Class**	**Name**	**Game**	**Grade1**	**SUPW**	**Grade2**
10	7	Sameer	Cricket	B	Photography	A
11	8	Sujit	Tennis	A	Gardening	C
12	7	Kamal	Swimming	B	Photography	B
13	7	Veena	Tennis	C	Cooking	A
14	9	Archana	Basket Ball	A	Literature	A
15	10	Arpit	Cricket	A	Gardening	C