KLXABZ

TIME : 2 Hrs.   **MARKS : 60**

Instructions :-

1) Solve any 3 question from Q. 1 to Q.5.
2) Solve any 1 question from Q. 6. to Q. 7.
3) Bracketed figures to the right indicate marks.

Q.1 a) Distinguish between Micro, Mini and Main fram Computers. [4]

b) Explain the following functions with giving example. [4]

   i) RIGHT $ (X$, M)

   ii) FIX (X)

   iii) ABS (X)

   iv) CHR$ (X)

c) Write a program in BASIC to print all odd numbers between 1 To 100. [4]

Q. 2. a) What is scanner ? How Scanners differ from one another ? [4]

b) For each of the following algebric expression, Write down the corresponding expression in BASIC. [4]

   i) $A + BX + CX^4 \neq 15^3$

   ii) $\dfrac{XY}{4A} - (X + Y) 3^A$

   iii) $\dfrac{A^B + C^P}{E^F}$

   iv) $\sqrt{\dfrac{AB}{C}}$

c) Explain the difference between following statements. [4]

   a) PRINT and LPRINT

   b) END and STOP

Q. 3. a) i) What is Computer word ? [2]

   ii) Distinguish between RAM and ROM ? [2]

b) State the output of the following. [4]

1) 10 PRINT USING " ###"; 12.8

2) 40 PRINT USING "## . ## " ; 103 . 482

3) 50 PRINT USING "$### " ; 58

4) 60 PRINT USING " ! " ; "INDIAN"

c) Explain READ, DATA and RESTORE Statement. [4]

Q. 4. a) Distinguish between compiler and Interpreter. [4]

b) State the output for each of the following set of instructions in BASIC. [2]

1) 10 A$ = " FLLOWER"

   20 B $ = LEFT$ (A$, 4)

   30 C$ = MIO$ (B$, 4, 1) + MID$ (B$, 3, 1) + MID$ (B$, 2, 1)

   + MIO$ (B$,1, 1)

   40 PRINT B$

   50 PRINT C$

2) 10 DATA " 1 " , " 2 " , " 3 " , " 4 "   [2]
   20 READ A$, B$, C$, D$
   30 X$ = A$ + B$ + C$
   40 A = VAL (X$)
   50 B = VAL (D$)
   60 P = A + B
   70 PRINT P
   80 END

C) What are FOR - TO and NEXT Statement ? Give their Format and two examples.   [4]

Q. 5. a) Write Short Notes on.   [4]
   1) Arithmetic and logic Unit
   2) Control Unit

b) Identify errors if any in each of the following BASIC Statements.   [4]
1) 10 N$ = MID (X$, 2)
2) 20 REM * FINDING AVERAGE * : AVG = (A + B + C) / 3
3) 10 READ A, B, C
   20 DATA 5, 15, " ABC "
4) 30 RESTORE TO 100

c) Write a Program in BASIC to find Area of triangles. Height and Base of triangle will be given at time program execution.   [4]

Q. 6. a) What are the Generation of Computer ?   [4]

b) Write instructions in BASIC for each of the following.   [5]
1) Multiply value of A by 3, add 7 to the product and assign this value to X.
2) To print first two characters of A$
3) Construct word READ and assign it as a value to X$ by selecting letters from A$ = "DEAR"
4) Print value of numeric variable X accurate upto three decimal places where X = 26.51274
5) Declare a matrix of 40 elements with 8 rows and 5 columns.

c) Write a program to calculate and print sum of sequares of first N natural numbers where N will be input at the time of program execution.   [5]

Q. 7. a) Write Short Notes on Input Devices.   [4]

b) 1) State for what values of X, each of the following BASIC expression will holds.   [3]
i)   X < 10 XOR X < 6
ii) X < 7 AND X < 5 OR X < 10
iii) X < 3 AND X < 5

P.T.O.

2) Evaluate the following BASIC expression showing the sequence of operations. [2]

X = 2 $\wedge$ 3 - 3 $\wedge$ 2 + + 4* 12 / 5 - (3 + 7) / (4 + 1) * 2

c) What is a variable in BASIC ? Specify different types of variables. Give two examples of each kind. [5]

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