

ANABOLISM

8

TIME : 2 hrs.

MARK : 50

- Instruction :** 1) Solve Any **THREE** questions from Q.1 to Q.6
2) Solve Any **ONE** question from Q.7 & Q.8
3) Bracketed figures to the right indicate marks.

- Q.1** a) Explain any two Internal DOS Commands with an example. 04
- b) Give the output of following BASIC statements. 04
- i) 10 LET A = 0
20 WHILE A <= 10
30 PRINT " * * * "
40 A = A + Z
50 WEND
- ii) 10 PRINT USING "/bbb/"; "SACHIN", "TENDULKAR"
- iii) 50 FOR I = 100 TO 300
60 IF I MOD 2 = 0 THEN SUM = SUM + I
70 NEXT I
80 PRINT SUM
- iv) 150 PRINT USING "#.#"; 33.88
160 PRINT USING "\$####.#"; 35.258
- C)** Write BASIC statement / statements for each of the following. 04
- i) IF $1 \leq x < 2$ Transfer control to statement No.150
IF $2 \leq x < 3$ Transfer control to statement No.200
IF $3 \leq x < 4$ Transfer control to statement No.250
- ii) If the given year Y is divisible by 4, then display "LEAP YEAR" otherwise display "NOTLEAPYEAR"
- iii) Keep on adding 10 repeatedly to X until X exceeds 100
- iv) If end of file is detected for sequential file numbered 2 transfer the control to line no.200
- Q.2** a) What are the functions of an operating system?
Explain the characteristics of Unix operating System. 04
- b) Differentiate between FOR-TO-NEXT and WHILE-WEND statement with example 04
- c) Point out the error in given BASIC statements, if any, correct them and rewrite the correct BASIC statement. (Any Two) 04
- i) 10 LET N = 10
20 FOR I = 1 TO N
30 IF I = 5 GOSUB 200, 300
40 PRINT I * 10
50 NEXT I
200 I = I + 2
250 RETURN
300 I = I + 5
350 RETURN
400 END
- ii) 10 Prog. to input 5 observations in array A (5)
20 FOR I = 0 TO 4

iii) 10 CIRCLE (10, 20), 15, 2

20 PAINT (40, 40), 3, 2

30 END

iv) 50 LET A = 20 ; B = 30

60 PRINT C = A + B

70 END

Q.3 a) Write DOS Commands for each of the following

04

i) List out all the files in directory "C : \ data"

ii) Change the directory from "C : \ office" to "C : \ home"

iii) Remove the file "MYFIRST.DOC" from directory "A : \ office"

iv) Remove directory "A : \ office"

b) Write a program in BASIC to print all integer numbers from 1000 to 2000 that are divisible by 3 or 5 or both.

04

c) Give the output of following BASIC statements.

04

i) 10 FOR N = 4 TO 6

20 ON (N - 3) GOSUB 50, 70, 90

30 NEXT I

40 END

50 PRINT "GOOD MORNING !"

60 RETURN

70 PRINT "GOOD AFTERNOON !"

80 RETURN

90 PRINT "GOOD EVENING !"

100 RETURN

ii) 10 LET A\$ = "26th JANUARY A REPUBLIC DAY"

20 LET K = 0

30 LET N = LEN (A\$)

40 FOR I = 1 TO N

50 LET X\$ = MID\$ (A\$, I, 1)

60 IF X\$ <> "A" THEN 80

70 LET K = K + 1

80 NEXT I

90 PRINT "THE STRING"; A\$

100 PRINT "Contains A";

110 PRINT K, "TIMES"

120 END

Q.4 a) What are the methods of Eliminating virus?

04

b) Write a programme in BASIC to input the positive integer number N and print its factorial (eg. factorial of 6 ! = 1 x 2 x 3 x 4 x 5 x 6)

04

c) Write down the BASIC statements for following.

04

i) To close files numbered as # 1 and # 2

ii) To draw a circle at center point (40, 40) using border colour 2 and fill it with colour 3

- Q.5** a) Define 04
- Batch Processing
 - ON Line (Real Time) Processing.
- b) Write a programme in BASIC to Print the sum of series - 04
- $$\text{Sum} = \frac{1}{2} + \frac{2}{3} + \frac{3}{4} + \dots + \frac{N-1}{N}$$
- Where N is the positive integer input during the programme execution.
- c) Explain ON - GOSUB - RETURN statement with illustration. 04
- Q.6** a) i) What are the types of virus? and 02
- What are the dangers of virus? 02
- b) Explain the following BASIC Commands with illustration (Any Two) 04
- LOAD
 - RUN
 - KILL
 - NAME
- c) Write a prog. in BASIC to print the squares, cubes and 4th powers of integer numbers from 1 to 25 04
- Q.7** a) Explain the use of following DOS commands with example (Any Two) 04
- FORMAT
 - DISKCOPY
 - SCANDISK
 - CHKDSK
- b) Write a programme to input 10 observations in A(10) and arrange them in ascending order. Print the observation in ascending order 06
- c) Explain the use of CVI, CVS and CVD functions. 04
- Q.8** a) Write a short note on windows operating system. 04
- Explain its features.
- b) State True or False. 04
- Execution of END, NEW or RUN Command with option R for open files and devices automatically close such open files and devices.
 - In Random Access file record length can be from 1 to 32767 characters.
 - Array variables can hold upto 50 elements.
 - A kill command can not be used for a file that is in OPEN condition
- c) Write a programme to input name of 5 employees, their code no. and BASIC salary. Calculate DA at 60% of Basic salary and HRA at 40% of Basic salary, if Basic salary is greater than 12000. Otherwise calculate DA at 50% and HRA at 30% of Basic salary. Also calculate Gross salary as
Gross salary = Basic salary + DA + HRA.
Print Name, Code no, Basic Salary, DA, HRA & Gross salary for all 5 employees 04

