- N.B. 1) Solve ANY THREE questions from Q.1 to Q.6.
 - 2) Solve ANY ONE question from Q.7 & Q.8.
 - 3) Bracked figures to the right indicate marks.
- Q.1 a) Give the outputs of following BASIC statements (Any Two)
 - 1) 10 A = 10:B = 25

20 S = INT ((SQR(B) * A) / 100 + 8)

- 30 PRINT S
- 2) 10 PRINT "NUMBER", "SQUARE", "CUBE".
 - 20 FOR N = 2 TO 4 STEP 1
 - 30 PRINT N, N^2, N^3
 - 40 NEXT N
 - 50 END
- 3) 10 READ A, B
 - 20 DATA 20,5
 - 30 GOSUB 60
 - 40 PRINT A, B
 - 50 END
 - 60 A = A + B
 - 70 B = A B
 - 80 RETURN
- 4) 100 A = 123456
 - 110 B\$ = STR (A)
 - 120 B = LEN (B\$)
 - 130 C = SGN (A)
 - 140 PRINT A, B, C
- 5) 50 X\$ = "SAURAV GANGULI"
 - 60 A\$ = LEFT\$(X\$, 1)
 - 70 B\$ = MID\$(X\$, 5, 1)
 - 80 C\$ = A\$ + " \bullet " + B\$ + " \bullet " + RIGHT\$ (X\$, 7)
 - 90 PRINT C\$
- B) Write DOS Commands for following
 - 1) Change directory from c: to c:\ GWBASIC
 - 2) Create new directory 'office' in 'A' drive.
 - 3) Delete directory 'Products' from 'c:\ '
 - 4) List all files and directories in 'c\: Data'

- C) Write BASIC statements for any two of following.
 - i) To assign the value $\sqrt{x^2 + 3x + 2}$ to M
 - ii) IF A has value 1, goto statement no. 100 IF A has value 2, goto statement no. 150. IF A is equal to 3 goto statement no. 200.
 - iii) Draw a line from pt(10, 20) to point (100, 140).
 - iv) Close a file 'Stddata' which is assigned to data channel 1.
- Q.2 A) Name any two external DOS commands Explain it briefly.
 - B) Write a program in BASIC to input any two positive integers. Compare them and print the maximum no.
 - C) Mention the output of following piece of program. In case of error mention clearly the error with the line number.
 - 1) 10 READ A, B\$
 - 20 DATA 20,30
 - 30 PRINT A + VAL(B\$), VAL(A\$ + B\$)
 - 2) 10 CIRCLE (40, 50), 20, 2
 - 20 PAINT (30, 45), 3, 2
 - 30 END
 - 3) 10 FOR I = I To 5
 - 20 S = S + I
 - 30 IFS > 100 THEN 50
 - 40 NEXT I
 - 50 END

Q.3 A) Write dos commands for each of the following:

- Change the name of the file from 'First.doc; to 'Second.doc'.
- 2) To copy file 'sales.doc' on A: drive to 'stock.doc; on 'c;' drive.
- To display the contents of file'Report.Txt; on the screen page by page
- 4) To display the list of files & directories on drive c:\

- B) Give the output for following print using statement.
 - 1) 10 PRINT USING"!.!.&"; "SUNIL",

"MANOHAR", "GAVASKAR"

- 2) 20 PRINT USING " \bbb\"; "BATSMAN"
- 3) 10 PRINT USING " * *####"; 54
- 4) 10 PRINT USING "##-#"; 15,20.387, 2.213; 450.
- C) Write a program in BASIC to input any positive integer N and check whether it is even or odd. Accordingly print the remark -

IT IS AN ODD INTEGER of

IT IS AN EVEN INTEGER

- Q.4 A) State whether following BASIC statements are correct or incorrect. If incorrect specify the error and correct the statement. If statements are correct mention the output. (any two)
 - 1) 10 A = 10: B = 5
 - 20 A = B + 10 : B = A + 20
 - 30 END
 - 40 PRINT A, B
 - 2) 50 N(5)
 - 60 FOR I = 1 TO 3
 - 70 INPUT N (I)
 - 80 NEXT I
 - 90 FOR I = 1 TO 3
 - 100 PRINT N (I)
 - 110 **NEXT** I
 - 3) 100 INPUT X
 - 110 ON X GOTO 150, 170
 - 120 PRINT "VALUE IN X is other than 1 & 2
 - 130 GOTO 180
 - 150 PRINT "VALUE OF X is one"
 - 160 GOTO 180
 - 170 PRINT "VALUE OF X is two"
 - 180 END
 - B) State whether following statements are True or false.
 - 1) Dos is a multi-programming operating system.

		Managing computers memory is one of the important function of operating system.			
		system. 3) Batch processing is useful in rail or air ticket reservation.			
й		 Batch processing is useful in rail or air ticket reservation. Learning windows based application is easier than Dos based application. 			
		4) Leaning windows based application is caster than best based application.			
	C)	Explain the use of CVI & CVS functions.			
Q.5	A)	Explain the use of 'LINE INPUT# statement.			
	B)	What are wild cards & Literals? Give their uses in Dos.			
	C)	Write a program in BASIC to print the title in following format.			
	,	* * * * * * * * *			
		RESULT SHEET			
		* * * * * * * * *			
		SEAT NO: NAME:			
		CLASS: EXAMINATION:			
Q.6	A)	What is Unix? Explain characteristics of unix.			
	B)	Explain the use of WHILE-WEND statement with format and one illustration			
	C)	Write statements in BASIC for following			
		1) Declare a variable 'ROLL' of the type of integer array, of size 10			
		2) To transfer a control to subroutine at line no. 200			
		3) To print the ASCII value for character 'A'			
		4) To interchange the contents of variables A & B.			
Q.7	A)	What precautions should one take to ensure some measures of safety form			
		viruses.			
	B)	Give the output in each of the following cases			
		1) Sate the output if $x = 7 \& x = 13$			
		10 INPUT X			
		20 IF X < = 10 THEN A\$ = "LOOK" ELSE A\$ = "BOOK"			
		30 ON LEN(A\$) GOTO 40 50 60 70			
		40 PRINT "WHAT IS YOUR NAME"			
		50 PRINT "ARE YOU AN INDIAN"			
		60 PRINT "2 + 3 = 6"			
		70 FOR I = 1 TO 4			
		80 PRINT MID\$ (A\$, 5 ~ 1, 1),			
		90 NEXT I			

C) Explain the following BASIC commands. 1) NEW 2) AUTO 3) LOAD

3

D) Write a program in BASIC to store ROLL NO & marks of five students in integer array type variables and print them in following format.

Roll No	Marks	
1		60
2		50
•		
		*
5		70

Q.8 A) Write a short note on windows operating system

- B) Write a program in BASIC to input employee no., Name, and BASIC Salary. Calculate DA = 80%, HRA = 40% & CCA = 10% of basic salary. Accordingly print the gross salary where
 - Gross Salary = Basic salary + DA + HRA + CCA
- C) Identify error if any in the following BASIC statements (Any 4) Rem = Program to print factorial

- 30 PRINTA = B + C * 10
- 2)
- 40 X\$ = A\$ + C3)
- 4) 100 B\$ = CHR\$ (LEN ("THANE"))
- 5) 35 INPUTA

1)

150 PRINT USING TAB (20); "Welcome"