[This question paper contains 3 printed pages.] 1257 Your Roll No. B.Sc. (Hons.) / II CHEMISTRY - Paper XII(a) (Computers and their Applications to Chemistry) Maximum Marks: 25 Time: 1 Hour (Write your Roll No. on the top immediately on receipt of this question paper.) Attempt all questions. Write the full form of the following abbreviations: (i) MODEM (ii) CPU (iii) RAM (iv) OCR (v) VDU (5)Give the output of the following statements: 2. LET X\$ = "DELHI UNIVERSITY" A\$ = LEFT\$(X\$,7)B\$ = RIGHT\$(X\$,4)

P.T.O.

C\$ = MID\$(X\$<4,7)

L = LEN(X\$)

PRINT A\$

PRINT B\$

PRINT C\$

PRINT L (4)

- 3. Explain the following functions with the help of an example:
 - (i) LOG
 - (ii) RND

(iii) INT (3)

- 4. Write DOS commands for:
 - (i) Viewing the contents of a directory widthwise
 - (ii) Creating and then removing a directory "NOTES" in drive C (2)
- 5. Evaluate M if

$$M = (2C5)_{16}$$
 (1)

- 6. Indicate the error in the following and write the corrected statement.
 - (i) FOR X = 1 10 STEP 1

(ii)
$$4N = (X^2 + 1)$$
 (2)

7. Draw the output of the following statements and write the coordinates of the VIEW on it.

10 CLS

20 SCREEN 1

30 VIEW (20,20) - (200, 180), , 1

8. Write the BASIC expression for the following:

(i)
$$E_J = \frac{J(J+1)h^2}{8\pi^2I}$$

(ii)
$$JT = \frac{1}{C_p} \left[\frac{2a}{RT} - b \right]$$
 (2)

9. Write a user friendly program to generate the first 'N' terms of the Fibonacci series:

The user should have the choice to select the value of 'N'. (4)