

SEMESTER-1(HONOURS)- PHYSICS PRACTICAL EXAMINATION

PAPER-CC-1

TIME:2 Hrs

FULL MARKS:30

ANSWER ANY **SIX** OF THE FOLLOWING QUESTIONS

1.a) What is list? Is a list mutable?

b) Suppose 'a' is a list and is given by

a=[2,3,-5,0], Write appropriate set of commands to interchange first and third element of this list

(2+1)+2

2.a)Write command to unquote the string '123'. Give an example of a tuple.

b) Consider two lists

C=[5,2,3,9], D=[0,1,5,16] . Add these two lists and comment on the result (2+3)

3.a) Write the structure of various types of input commands used in python 3.X

b)Name two types of loops that are used in python language (4+1)

4.a) Write the structure of decision making statemen used in python

b)Write a two dimensional array and explain the elements. (3+2)

5) Write a programme to arrange the following numbers in ascending order

1.0,-3.0,16.0,-25.0,13.0,65.0,17.0,-28.0 5

6)Write a programme to multiply the matrices

$$A = \begin{bmatrix} 2 & 5 & 8 \\ 7 & 10 & 12 \end{bmatrix} \quad \text{and} \quad B = \begin{bmatrix} 1 & 6 \\ 8 & 12 \\ 5 & 9 \end{bmatrix}$$

And write the resulting matrix C=AB 5

7. Write commands on gnuplot plotting software to plot a function $f(x) = \sin(x)$ with title 'sine curve', line width 2, line colour -1,label x axis as 'x-axis' and y axis as 'y-axis'

(1+1+1+1+1)

