This question paper contains **2** printed pages]

PA—316—2024

FACULTY OF SCIENCE

B.Sc. (First Year) (First Semester) EXAMINATION

APRIL/MAY, 2024

(New Pattern)

COMPUTER SCIENCE

Paper–I

(Programming Logic Concepts)

(Friday, 03-05-2024)   **Time : 10.00 a.m. to 12.00 noon**

Time—2 Hours   *Maximum Marks—40*

N.B. :— (*i*) Assume suitable data, if necessary.

(*ii*) Figures to the right indicate full marks.

1.   Explain in detail Binary search technique with its algorithm.   15

Or

(*a*)   Write an algorithm to exchange the values of two variables.   8

(*b*)   What is flow chart ? Explain symbols used in flow chart.   7

P.T.O.

2. Draw and explain architecture of computer with brief description about ALU, CU and I/O devices. 15

Or

(*a*) Write an algorithm to find smallest divisor of an integer. 8

(*b*) Explain the concept of top down design. 7

3. Write short notes on the following (any *two*) : 10

(*a*) Main memory

(*b*) Efficiency of algorithm

(*c*) Applications of computer

(*d*) Array.