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Y—455—2019

FACULTY OF SCIENCE AND TECHNOLOGY

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

NOVEMBER/DECEMBER, 2019

(CBCS Pattern)

COMPUTER SCIENCE

(Problem Solving Using Computer—I)

(MCQ + Theory)

(Thursday, 12-12-2019)

Time : 10.00 a.m. to 12.00 noon

Time— Two Hours

Maximum Marks—10+30=40

N.B. :— (i) Attempt All questions.

(ii) Assume suitable data, if necessary.

(MCQ)

1. Attempt the following MCQs : 10

(i) CPU stands for.....

- (a) centrilined processing unit
- (b) central processing unit
- (c) control processing unit
- (d) none of the above

(ii)is an output unit.

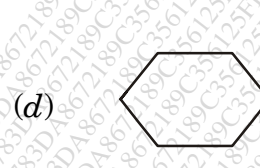
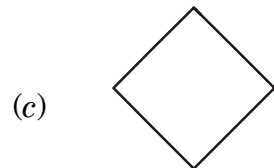
- (a) Printer
- (b) Keyboard
- (c) CPU
- (d) None of these

(iii) Symbolic representation of algorithm is called

- (a) program
- (b) flow chart
- (c) graph
- (d) none of these

P.T.O.

(iv)is an input/output symbol.



(v) The factorial of 0 is.....

(a) 0

(b) ∞

(c) 1

(d) None of these

(vi) Complete the following series :

0, 1, 1, 2, 3, 5.....13, 21.

(a) 4

(b) 7

(c) 8

(d) 9

(vii) In array order reversal algorithm, 1st element will be exchanged with.....element.

(a) $n + i - 1$

(b) $n - 1 + i$

(c) $n - i - 1$

(d) $n - i + 1$

(viii) Factorial of 7 is

(a) 5040

(b) 4050

(c) 4000

(d) 5400

(ix) The preliminary investigation may be thought of as the.....

(a) Problem decomposition phase

(b) Creating started on a problem

(c) Use of specific example

(d) Similarity among problem

- (x)is a set of explicit and unambiguous instruction expressed in programming language.
- (a) Problem (b) Algorithm
(c) Program (d) Flow chart
- (Theory)**
2. (a) Draw and explain block diagram of computer. 5
(b) Write an algorithm to exchange the value of two variables. 5
Or
(c) Explain any *two* output devices. 5
(d) Discuss the analysis of algorithm. 5
3. (a) What is flow-chart ? Explain different symbols used in flow-chart. 5
(b) Write an algorithm to print N terms of Fibonacci series. 5
Or
(c) Write an algorithm to check if a given number is prime or not. 5
(d) Write an algorithm for Array counting. 5
4. (a) Explain with suitable example Linear search method. 10
Or
(b) Explain Bubble sort in detail. 10