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B—472—2019

FACULTY OF SCIENCE AND TECHNOLOGY

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

APRIL/MAY, 2019

(CGPA Pattern)

COMPUTER SCIENCE

(Foundation of Computer Programming)

Paper-II

(MCQ & Theory)

(Friday, 03-5-2019)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—40

N.B. :— (i) Attempt All questions.

(ii) Assume suitable data, if necessary.

MCQ

1. Select *correct* answer the for following : 10

(i) A set of program it called as.....

(a) Hardware

(b) Software

(c) Window

(d) Computer

(ii) A technique for algorithm design that tries to accomodate human limitation is called.....

(a) Bottom-up design

(b) Top-down design

(c) Middle design

(d) End design

(iii) How many types of flowlines are there :


(a) 2

(b) 3

(c) 4

(d) 1

P.T.O.

- (iv) The valid Fibonacci series is.....
- (a) 0, 1, 2, 3, 4, 5 (b) 0 1 1 1 3 2 4
- (c) 0, 1, 1, 2, 3, 5 (d) 0 1, 0 1, 2, 3, 5
- (v) $0! =$ ___
- (a) 0 (b) 2
- (c) 1 (d) 00
- (vi)is a looping statement :
- (a) if (b) ifelse
- (c) Switch (d) For
- (vii)is a collection of same data type elements.
- (a) Variable (b) Array
- (c) Keyword (d) Constant
- (viii) 120 is a factorial of.....
- (a) 4 (b) 3
- (c) 5 (d) 6
- (ix) In flowchart  symbol is used for.....
- (a) O/P (b) Decision
- (c) D/O (d) I/P
- (x)is the smallest divisor of 25 and 35.
- (a) 10 (b) 20
- (c) 5 (d) 15

Theory

2. (a) Explain Top-Down design. 5
- (b) Write down algorithms for exchanging the values of two variables. 5

Or

- (a) Explain algorithm development for character to number conversion. 5
 (b) Explain implementation of algorithm. 5
3. (a) How to develop algorithm steps for smallest divisor of an integer.
 (b) Explain concept of array.

Or

- (c) Explain algorithm development steps for finding square root of numbers. 5
 (d) Explain algorithm steps of counting a number. 5
4. (a) Explain Bubble sort ? 5
 (b) Explain text line length adjustment. 5

Or

- (a) Explain algorithm development steps for linear search. 5
 (b) Explain algorithm development steps for keyword searching in text. 5