

This question paper contains 3 printed pages]

V—354—2017

FACULTY OF SCIENCE

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

NOVEMBER/DECEMBER, 2017

COMPUTER SCIENCE

(Foundation of Computer Programming)

(MCQ + Theory)

(Thursday, 14-12-2017)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—40

N.B. :- (i) All questions carry equal marks.

(ii) Assume suitable data if necessary.

MCQ

10

1. Select the *correct* alternative for the following :

(1) symbol is used for input.

- (A)  (B) 
- (C)  (D) 


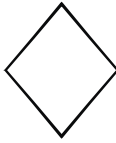

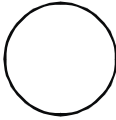
(2) The number which is divisible by one or itself only is number.

- (A) even (B) odd
(C) prime (D) none of these

(3) Collection of elements which are having same data type is called as

- (A) Array (B) GCD
(C) LCM (D) None of these

P.T.O.

- (4) Top down design is also known as
- (A) T design (B) Forward design
(C) Stepwise refinement (D) None of these
- (5) statement usually signal that some modular part of the computation is about to follow.
- (A) get (B) begin
(C) put (D) stop
- (6) The missing number in fibonacci series is :
- 0, 1, 1, 2, 3, 5, 8, 13, 21,, 55
- (A) 34 (B) 76
(C) 8 (D) 36
- (7) 120 is factorial of
- (A) 6 (B) 4
(C) 5 (D) 2
- (8) is an output device.
- (A) Mouse (B) Keyboard
(C) Printer (D) None of these
- (9) symbol is used for if condition in flow chart.
- (A)  (B) 
(C)  (D) 
- (10) is prime number.
- (A) 17 (B) 25
(C) 48 (D) 54

Theory

2. (a) Explain top down design in detail.
(b) Write an algorithm for exchanging values of two variables.

Or

- (c) What is array ? How is array represented in memory ?
(d) Write an algorithm to find smallest element from array.
3. (a) What is flow chart ? Explain principles of flow chart.
(b) Write algorithm to generate fibonacci number.

Or

- (c) Explain linear search technique in detail.
(d) Explain with example how algorithm is converted in flowchart.
4. (a) What do you mean by efficiency of algorithm ?
(b) Write an algorithm to find square root of number.

Or

- (c) Explain selection sort technique in detail.
(d) Write an algorithm for character to number conversion.