

1E2206	Roll No. _____	Total No of Pages: 2
	1E2206 B. Tech. I Sem. (Main) Exam., Dec. - 2017 CS-101 Computer Programming - I	

Time: 3 Hours

Maximum Marks: 80
Min. Passing Marks: 28

Instructions to Candidates:

Attempt any five questions, including Question No.1 which is Compulsory. All questions carry equal marks. Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly.

Units of quantities used/calculated must be stated clearly.

Use of following supporting material is permitted during examination. (Mentioned in form No. 205)

1. NIL

2. NIL

Q.1 Compulsory, Answer for each sub-question be given in about 25 words- [8×2=16]

- (a) Write application areas of Computer.
- (b) What is Memory? Differentiate SRAM and DRAM.
- (c) Explain Von Neumann Architecture.
- (d) What do you mean by programming languages? Why we learn programming.
- (e) Differentiate between flowchart and pseudo code.
- (f) What is Keyword? Write names of Keywords available in C.
- (g) List arithmetic, relational, logical and assignment operators.
- (h) What is function? Explain its two categories.

Q.2 What is Computer? Explain its characteristics, working & block diagram of Computer System. [16]

Q.3 Discuss various types of memory. Explain primary and secondary memory in detail. [16]

Q.4 Draw a flow chart to check whether the given number is EVEN or ODD. [16]

Q.5 Convert the following numbers- [8×2=16]

(a) $(1111001.1101)_2 = (?)_{10}$

(b) $(1010101)_2 = (?)_{10}$

(c) $(45)_8 = (?)_{10}$

(d) $(35)_{10} = (?)_8$

(e) $(70)_{16} = (?)_2$

(f) $(11101101)_2 = (?)_{16}$

(g) $(1010)_2 + (1010)_2$

(h) $(1111)_2 - (1010)_2$

Q.6 Write a program to read Marks of five subjects and print division. [16]

Percentage	Division
≥ 60	First
$\geq 48 \ \& \ \leq 59$	Second
$\geq 36 \ \& \ \leq 47$	Third
< 36	Fail

Q.7 Write program to print: - [16]

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*  *
*  *  *
*  *  *  *
*  *  *  *  *
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