

1E2206

Roll No. _____

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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. NIL2. 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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