INTRODUCTION TO COMPUTING (CSEN 1201)

Time Allotted: 3 hrs Full Marks: 70

Figures out of the right margin indicate full marks.

Candidates are required to answer Group A and <u>any 5 (five)</u> from Group B to E, taking <u>at least one</u> from each group.

Candidates are required to give answer in their own words as far as practicable.

	(Mult	Group – A iple Choice Typ			
Choo	se the correct alterna	ative for the follow	ing:	10 × 1 = 10	
(i)	Which of the following statements is FALSE?(a) Array bound is not checked in C(b) Local variable gets precedence over global variable(c) Garbage collection is not automatic in C(d) Main() is a function with no default return type.				
(ii)	Which of the following (a) int _2a;	ng is not a valid var (b) int \$2a;	iable name declaratio (c) int 2a;	n? (d) int a2;	
(iii)	ROM stands for (a) Read Only Memory (c) Read Once Memory			(b) Random On-board Memory (d) Read Only Module.	
(iv)	In which part of the program compilation pro (a) Assembly (c) Linking		•	(b) Pre-Processing	
(v)	Select the fastest me (a) Register	emory unit (b) Cache	(c) RAM	(d) Hard disk.	
(vi)	How many times is int i; for (i = 0; i < 100; i = printf("i = %d", i; (a) 100	: i + 3)	executed? (c) 34	(d) 33.	
(vii)	Which is FALSE? (a) Constant varial defined later.	oles need not be de	efined as they are de	clared and can be	

CSEN 1201 1

(b) Global constant variables are initialised to zero.(c) Canst keyword s used to define constant values.

1.

B.TECH/AEIE/BT/CE/CHE/CSE/ECE/EE/IT/ME/2ND SEM/CSEN 1201 (BACKLOG)/2021

(d) You cannot reassign a value to a constant variable.

(viii) What will be the value of y after these three lines?

int x = 11, y;

float z = 5.5;

y = z/y;

(a) 0

(b) 1

(c) 2

(d) 5.

(ix) Which of the following statement is true according to C syntax rule?

- (a) All C instruction must be written in Upper case character.
- (b) C is not a case sensitive language.
- (c) All C statement must end with a semicolon.
- (d) All of the above.

(x) Which of the following is not a logical operator?

(a) &

(b) &&

(c) ||

(d)!.

Group - B

- 2. (a) Draw a flowchart to check a number is odd or even. Convert from one number system to the other
 - (b) (i) $(29)_{10} = (?)_2$ (ii) $(54236)_8 = (?)_{16}$
 - (c) Simplify the expression: AB + A(B + C) + B(B + C)

5 + (2 + 2) + 3 = 12

- 3. (a) What will be 32-bit full precision floating representation for 24.75?
 - (b) State two differences between a compiler and an interpreter.
 - (c) What is a universal logic gate?

8 + 2 + 2 = 12

Group - C

- 4. (a) Write a C program to identify the max number using ternary operator.
 - (b) What is the difference between explicit and implicit type cast? Give example.

8 + 4 = 12

- 5. (a) What are the different data types of C explain briefly with examples?
 - (b) Write a C program to print the average of 3 numbers. Input taken from user.

4 + 8 = 12

B.TECH/AEIE/BT/CE/CHE/CSE/ECE/EE/IT/ME/2ND SEM/CSEN 1201 (BACKLOG)/2021

Group - D

- 6. (a) Write a C program to check if the number is palindrome or not.
 - (b) Briefly explain the different types storage classes.

8 + 4 = 12

- 7. (a) Write difference between function declaration and function definition with example?
 - (b) Give an example of conversion of if-else to switch case.
 - (c) Write a C program to print the factorial of a number.

(1.5 + 1.5) + 5 + 4 = 12

Group - E

- 8. (a) Write a C program to print the length of a string.
 - (b) Write a C program to print the addition of two matrix. Before performing the matrix addition.
 - (c) What is the difference in opening a file in r+ and in w+ mode?

4 + 5 + 3 = 12

- 9. (a) Write a program that takes two strings as command line arguments and compares them to see whether they are same or not. Do not use any function from the string library.
 - (b) Write a program taking exactly two inputs from the command line to copy contents of one file and copy it to another file. The command line arguments are the source and the destination file names, respectively.

6 + 6 = 12

Department & Section	Submission Link		
BACKLOG	https://classroom.google.com/c/MzcxODg3NDQwNDgz/a/MzcxODg5MDc2OTk1/details		