

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA – SEMESTER - I • EXAMINATION – WINTER 2012

Subject code: 2610001

Date: 03/01/2013

Subject Name: Fundamental of Programming (FOP)

Time: 02:30 pm – 05:00 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q-1 (B) Fill the blank from given option **[07]**

1. _____ is not a correct variable type (float, real, int, char)
2. _____ is the correct operator to compare two variables(=, ==, !=, equal)
3. _____ is a correct comment (* / Comments */ , ** Comment ** , /* Comment */ , { Comment })
4. Every function in C are followed by (Parameters, Parenthesis, Curly braces, None of these)
5. _____ is not a valid escape code? (\t, \v, \f, \w)
6. To increase the value of c by one, which of the following statement is incorrect? _____ (c++; , c = c + 1; c + 1 => c; c += 1;)
7. The result of a Relational operation is always _____ (either True or False, is less than or is more than, is equal or less or more, All of these)

(B) Answer in shorts **[07]**

1. How many times is the loop body executed in a do loop?
2. What is principle reason for passing arguments by reference?
3. What function returns the length of a string?
4. What are various storage classes supported by turbo c?
5. What is the difference between compiler and interpreter?
6. What separate the three expressions of a for statement?
7. What delimiters are used to specify the beginning and ending of a literal (character string) in C?

Q-2 (A) What is the general form of do-while statement, while statement and for loop statement with example? **[07]**

(B) What are the different forms of if statement? Explain conditional operator? Explain with example. **[07]**

OR

(B) Explain general form of switch.. case statement and goto statement? Explain with example. **[07]**

Q-3 (A) Explain Basic structure of C programs and explain Desirable Program Characteristics or Programming Aims **[07]**

(B) What does storage class tell us? What are the types of storage class? **[07]**

OR

Q-3 (A) What is an array? How the array declares in c? What are the rules for naming arrays? How Array initialize in c? **[07]**

(B) Write a program to input n elements of one dimension array and sort array in ascending order and output array on screen and find minimum and maximum element and print. **[07]**

Q-4 (A) What is structure? How structures define in c? What is purpose of structure? Explain **[07]**

- (B) difference between array and structure? What is structure tag and what its purpose? [07]
What is pointer variable? How pointer variable declares? What are the various types of pointers? What are the advantages offered by the use of pointers? What are the operations which are permissible and which are not permissible on pointers?

OR

- Q-4 (A) What is bit field? How declare in c? What are the rules to declare bit field? Explain with example. [07]

- (B) What is Enumerated Data type in c? How declare in c? Explain with example. [07]

- Q-5 (A) What is recursion? What advantage is there in its use? Explain with example? [07]

- (B) Write a short notes on string handling function in c (at least seven explain with example) [07]

OR

- Q-5 (A) Explain various file handling mode in c? [07]

- (B) What is preprocessor in c? Explain different types of preprocessor in c? [07]
