

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE- SEMESTER 1<sup>st</sup> / 2<sup>nd</sup> EXAMINATION (NEW SYLLABUS) – SUMMER - 2017**

**Subject Code: 2110003**

**Date:03/06/2017**

**Subject Name: Computer Programming & Utilization**

**Time: 2:30 PM to 05:00 PM**

**Total Marks: 70**

**Instructions:**

1. Question No. 1 is compulsory. Attempt any four out of remaining Six questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

<b>Q.1</b>	<b>Objective Question (MCQ)</b>	<b>Mark</b>
<b>(a)</b>		<b>07</b>
	<ol style="list-style-type: none"><li>1. In flowchart for what purpose <math>\diamond</math> symbol is used?<ol style="list-style-type: none"><li>(a) Processing.</li><li>(b) Condition.</li><li>(c) Data flow.</li><li>(d) input/output.</li></ol></li><li>2. Continue statement<ol style="list-style-type: none"><li>(a) Breaks loop and goes to next statement after loop.</li><li>(b) Does not break loop but starts new iteration.</li><li>(c) Exits the program.</li><li>(d) Starts from beginning of program.</li></ol></li><li>3. Which of the following loop is executed at least once<ol style="list-style-type: none"><li>(a) for loop</li><li>(b) while loop</li><li>(c) do while loop</li><li>(d) None of the above</li></ol></li><li>4. ASCII value of 'a' is<ol style="list-style-type: none"><li>(a)97</li><li>(b)65</li><li>(c)47</li><li>(d) None of the above</li></ol></li><li>5. A float requires _____bytes in memory<ol style="list-style-type: none"><li>(a)2 bytes</li><li>(b)1 byte</li><li>(c)8 bytes</li><li>(d)4 bytes</li></ol></li><li>6. The format string to accept a string is<ol style="list-style-type: none"><li>(a)%c</li><li>(b)%d</li><li>(c)%f</li><li>(d)%s</li></ol></li><li>7. Which header file is necessary for strlen() function?<ol style="list-style-type: none"><li>(a)conio.h</li><li>(b)strings.h</li><li>(c)string.h</li><li>(d)stdio.h</li></ol></li></ol>	

(b)

1. When a key is pressed on keyboard, which standard is used for converting the keystroke into the corresponding bits
  - (a) ANSI
  - (b) ASCII
  - (c) EBCDIC
  - (d) ISO
2. Which of the following is used as a string termination character?
  - (a) 0
  - (b) \0
  - (c) /0
  - (d) None of these
3. Which of the following operator is used to select a member of a structure variable
  - (a) .(dot)
  - (b) ,(comma)
  - (c) : (colon)
  - (d) ;(semicolon)
4. C is a \_\_\_ language
  - (a) Machine Level
  - (b) Low Level
  - (c) Middle Level
  - (d) High Level
5. What is the output of the following code:
 

```
void main()
{
    int i;
    for(i=1;i<=10;i++);
    printf(“%d\n”,i);
}
```

  - (a) 10
  - (b) 1 to 10
  - (c) 11
  - (d) None of the above
6. What is the output of the following code:
 

```
void main()
{
    int i;
    for(i=65;i<70;i++)
    printf(“%c,”,i);
}
```

  - (a) 65,66,67,68,69,70
  - (b) a,b,c,d,e,
  - (c) A,B,C,D,E,
  - (d) A,B,C,D,E
7. What is the output of following code:
 

```
void main()
{
    int i=5;
    switch(i)
    {
        case 3: printf(“three”);
        case 4: printf(“four”);
        case 5: printf(“five”);
        case 6: printf(“six”);break;
        case 7: printf(“seven”);
        default: printf(“default”);
    }
}
```

  - (a) five
  - (b) fivesixsevendefault
  - (c) fivesix
  - (d) None of the above

- Q.2**
- (a) List the data types provided by C programming language. **03**
  - (b) What is bottom tested loop? Give example. **04**
  - (c) Write a program to accept start number and end number from the user and print all the numbers in the range. **07**

- Q.3** (a) Explain switch case in 'C' with the help of an example. **03**  
(b) Write code to find out largest of 2 numbers using ternary operator. **04**  
(c) Write a program in 'C' to print the following pattern **07**  
1  
23  
456  
78910
- Q.4** (a) Explain strcat(),strlen() and strcpy() functions with examples. **03**  
(b) Explain function declaration, function definition and function call. **04**  
(c) Write a function which takes 2 numbers as parameters and returns the gcd of the 2 numbers. Call the function in main(). **07**
- Q.5** (a) What is array? Give example of array. **03**  
(b) What is string? In how many ways can you accept data in a string? **04**  
(c) Write a program to accept a string and count the number of vowels present in a string. **07**
- Q.6** (a) What is a pointer? How and when is it used? **03**  
(b) Write a function to swap 2 numbers. **04**  
(c) Write a program to find out the largest of an array. **07**
- Q.7** (a) What is a structure? Give example. **03**  
(b) Explain malloc(),calloc() with examples. **04**  
(c) Write a 'C' program to which copies the contents of one file to other. **07**

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