

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE
End Semester Examination – Winter 2018

Course: B. Tech

Subject Name: Basic Computer Programming

Max Marks: 60

Date:14/12/2018

Semester: I

Subject Code: ICT106/ICT206

Duration: 3 Hr.

Instructions to the Students:

1. All the questions are compulsory.
2. The level question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in () in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

| | (Level/CO) | Marks |
|--|-----------------------|-------|
| Q. 1 Solve the following. | | |
| A) Write Algorithm & draw Flowchart to find sum of series $1+3+5+\dots+N$, Where N is positive odd Integer | (Understand) | (6) |
| B) Explain the program development process. | (Understand) | (6) |
| Q.2 Solve Any Two of the following. | | |
| A) What are different types of operators give its description? | (Remember) | (6) |
| B) What is variable? What are the rules for defining variables? Differentiate between local variable and global variable? | (Remember) | (6) |
| C) Write a program in C by using switch statement to display Monday to Sunday. | | (6) |
| Q. 3 Solve Any Two of the following. | | |
| A) Write a C program to show table of a number using functions. | (Synthesis) | (6) |
| B) What is the purpose of main() function? What is an argument? Differentiate between formal arguments and actual arguments? | Remember, Analysis | (6) |
| C) Write a C program to swap two integer numbers by using different methods The methods are: i) Using third variable ii) Without using third variable iii) Using X-OR operator | (Synthesis) | (6) |

Q.4 Solve Any Two of the following.

- A) i) Can the “if” function be used in comparing strings? Justify your answer. **(Evaluation) (6)**
ii) What is wrong with this statement? myName = “Robin”;
iii) How do you determine the length of a string value that was stored in a variable?
- B) Write a program in C by using two dimensional array to store temperature of two cities for a week and display it. **(Synthesis) (6)**
- C) Write a program in C to sort the numbers in descending order by taking input from the user. **(Synthesis) (6)**

Q.5 Solve the following.

- A) Write a program in C to create a structure of student with student name and rollno and marks of two subjects as its members. Calculate average of two subjects. Read the details of n students from user and then display the data in this format. **(Synthesis) (6)**

Roll No. Name Sub1 Sub2 Total Average

- B) i) What will be the output of the C program(assume size of int as 2 bytes)? **(Evaluation) (6)**

```
#include<stdio.h>
int main()
{
struct employee
{
int empid[5];
int salary;
employee *s;
}emp;
printf("%d %d", sizeof(employee), sizeof(emp.empid));
return 0;
}
```

- A. 6 2
- B. 14 10
- C. 8 2
- D. 12 10

- ii) What will be the output of the C program?

```
#include<stdio.h>
```

```

#include<string.h>
struct player
{
char pname[20];
}pl;
char* play(struct player *temp_pl)
{
strcpy(temp_pl->pname, "kohli");
return temp_pl->pname;
}
int main()
{
strcpy(pl.pname, "dhoni");
printf("%s %s", pl.pname, play(&pl));
return 0;
}

```

A. dhoni kohli

B. dhoni dhoni

C. None

D. kohli kohli

iii) What will be the output of the C program?

```

#include<stdio.h>
struct decl
{
int n = 100;
}d1;
int main()
{
printf("%d",d1.n);
return 0;
}

```

A. 100

B. Compilation Error

C. 0

D. Garbage value

***** End *****