

Government College of Engineering, Aurangabad

(An Autonomous Institute of Government of Maharashtra)

S.E. (Computer Science and Engineering) Examination

End Semester Examination Nov 2016

CS 244: Programming Language

Time : Three Hours

Date : 21 NOV 2016 Max Marks : 60

"Verify the course code and check whether you have got the correct question paper"

N. B.

1. All the questions are compulsory
2. Figure to the right indicate full marks
3. Assume suitable data if necessary and state it clearly

Q. 1) Solve any two (Each carry 6 marks)

12

- A) Compare between primary and secondary memory.
- B) Describe the CPU organization and its components.
- C) Discuss type casting and type conversion.

Q. 2) Solve any two (Each carry 6 marks)

12

A) Write a program to print all Armstrong numbers between 1 and 500. If the sum of cubes of each digit of the number is equal to number itself, then the number is called an Armstrong number.

B) Find the output of the following segment when executed.

```
i) int x=10, y=20;
```

```
if ((x<y) || (x+5) > 10)
```

```
printf("%d", x);
```

```
else
```

```
printf( "%d", y);
```

ii) Assume the data x=2, y=1 and z=0 Find the output of the following segment when executed

```
switch(x)
```

```
{case 2: x=1; y=x+1;
```

```
case 1: x=0; break;
```

```
Default: x=1; y=0;}
```

[P.T.O]

C) Differentiate between 1) while and do while loop

2) for loop and while loop

Q. 3) Solve any two (Each carry 6 marks)

12

A) Develop a program to read a string from keyboard, count and display numbers of vowels present in the string.

B) Implement a program for matrix multiplication.

C) Describe any four string handling functions with example.

Q.4) Solve any two (Each carry 6 marks)

12

A) Define Function. Write a program to find prime numbers using function.

B) Illustrate with example call by reference and call by value.

C) Briefly describe i) Nested structures ii) array of structures with example.

Q. 5) Solve any two (Each carry 6 marks)

12

A) Develop a program to append the contents of two different files into third file.

B) Discuss the concept of EOF, rewind(),fseek().

C) Design a program to concatenate the strings using pointers.

***** Best Luck *****