

JK LAKSHMIPAT UNIVERSITY, JAIPUR

INSTITUTE OF ENGINEERING AND TECHNOLOGY

End Term Examination (Regular/Backlog), April-May 2016

B. Tech in Computer Science Engineering, Semester II

Roll No.....

CSE201: COMPUTER PROGRAMMING

Time: 3 hours

Max. Marks: 100

Instructions to students:

1. Do not write anything other than your roll number on question paper.
2. Assume suitable data wherever required and mention it clearly.
3. Writing appropriate units, nomenclature, and drawing neat sketches/schematics/ flow chart wherever, required are an integral part of the answer.

Q.1A Objective type multiple choice questions (10 questions @ 1 mark)

10

- i. Which of the following function is used to display integer; (a) printf (b) display (c) print (d) output
- ii. Which of the following format specifier can be utilized to accept an integer? ; (a) %d (b) %f (c) %g (d) %i
- iii. Which of the following is not a predefined datatype?; (a) void b) enum (c) pointer (d) long double
- iv. The keyword used to transfer control from a function back to the calling function is
a) switch; b) goto; c) go back; d) return
- v. Which of the following is ASCII Representation of Z?
a) 01000001; b) 00000001; c) 11000001; d) 01100001
- vi. Represent $(999)_8$ to HexaDecimal Value.
- vii. What is the binary sum of 11001 and 00101?
- viii. What is stored in a "file handle" that is returned from a successful open() call?
a) All the data from the file is read into memory and stored in the handle
b) The handle is a connection to the file's data
c) The handle contains the first 10 lines of a file
d) The handle has a list of all of the files in a particular folder on the hard drive
- ix. What is the purpose of the newline character in text files?
a) It allows us to open more than one files and read them in a synchronized manner
b) It indicates the end of one line of text and the beginning of another line of



text

- c) It enables random movement throughout the file
 - d) It adds a new network connection to retrieve files from the network
- x. Which of the following format specifier would be used to display ASCII value of a keystroke?

a) %a; b) %c; c) %s; d) %d

Q.2	Short answer type questions (4 questions @ 2.5 marks)	10
a.	What is enum in C used for?	
b.	What is the utility of #define in c?	
c.	Define the role of loader in writing C programs.	
d.	Give memory representation of string defined as char ARRAY[]="Happy Hip Hop";	
Q.3A	What is the difference between #include<stdio.h> and #include<abc.c> ? Explain giving an example.	05
Q.3B	Write a program to display following Fibonacci series. 0 1 1 2 3 5 8.....	05
Q.4A	Read marks of 3 subjects, identify whether a student is pass or fail. A student is passed if he/she has minimum 35 marks in all subjects.	05
Q.4B	Write a program to accept a string and calculate number of characters in a string. Create a function.	05
Q.5A	Convert 4156 to binary, octal and hexa decimal. Write down steps for conversion.	05
Q.5B	What do you understand by ASCII values? Write a program to display alphabets in lower case using their ASCII values.	05
Q.6A	Consider the following declaration. int a; short int b; unsigned int c; What would be the maximum and minimum possible value which can be stored in a, b and c. Explain with calculations.	05
Q.6B	Differentiate between ++a and a++ giving five different examples. OR	05
Q.6B	Write a program to create a structure to store record of a student. Store data of five students and write a function to display name of youngest student of the	05

class.

Q.7A Categorize Errors raised during programming? Explain giving one program for each. 05

Q.7B What do you understand by computer memory? Distinguish between primary memory and secondary memory. 05

OR

Q.7B Calculate the address of the 25th element of a float array. Assume that the base address of the array is 65500 and the memory size required to store float value is 8 bytes. 05

Q.8A Point out Errors in the following C programs. 10

- a. `#include<stdio.h>`
`int main()`
`{`
`int i = 10, j = 20;`
`if(i = 5) && if(j = 10)`
`printf("Have a nice day");`
`return 0;`
`}`
- b. `#include<stdio.h>`
`int main()`
`{`
`int i = 10, j = 15;`
`if(i % 2 = j % 3)`
`printf("CSE\n");`
`return 0;`
`}`
- c. `#include<stdio.h>`
`int main()`
`{`
`int x = 30, y = 40;`
`if(x == y)`
`printf("x is equal to y\n");`

`else if(x > y)`
`printf("x is greater than y\n");`

`else if(x < y)`
`printf("x is less than y\n");`
`return 0;`
`}`
- d. `#include<stdio.h>`
`int main()`



```

{
    int i = 0;
    i++;
    if(i <= 5)
    {
        printf("IndiaBIX\n");
        exit(0);
        main();
    }
    return 0;
}

```

Q.9A, Write the Output of the Following Program.

10

i. #include<stdio.h>

```

main()
{
    int a = 5, b = 3, c = 4;

    printf("a = %d, b = %d\n", a, b, c);
}

```

ii. #include<stdio.h>

```

main()
{
    struct { int x;} var = {5}, *p =
    &var;

    printf("%d %d %d",var.x,
    p->x,(*p).x);
}

```

iii. #include<stdio.h>

```

main()
{
    int a[3] = {2,,1};

    printf("%d", a[a[0]]);
}

```

iv. #include<stdio.h>

```

#define sqr(i) i*i
main()
{
    printf("%d %d", sqr(3),
    sqr(3+1));
}

```

Q.9B Write a program which accepts reads a file named integer, which contains integers and checks whether the number is prime or not. If number is prime, it is to copied in file named prime, else it is to copied to file named nonprime.

10

OR

Q.9B Write a program which includes a function to check whether the name of the string starts with S. if it is return 'Y', else return 'N'.

10