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JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- September-2018

B.Tech I[st] Semester

COURSE CODE: 10B11CI111 MAX. MARKS: 15

COURSE NAME: Introduction to Computers and Programming

COURSE CREDITS: 3 MAX. TIME: 1 Hour

Note: *All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.*

Q.1 (3 Marks) At a particular company, employees are rated at the end of each year. The rating scale begins at 0.0, with higher values indicating better performance and resulting in larger raises. The value awarded to an employee is 0.0, 0.4, or 0.6 or more. Values between 0.0 and 0.4 and between 0.4 and 0.6 are never used. The meaning associated with each rating is shown in the following table. The amount of an employee's raise is $2400.00 multiplied by their rating.

Rating	Meaning
0.0	Unacceptable performance
0.4	Acceptable performance
0.6	more Meritorious performance

Write a program that reads a rating from the user and indicates whether the performance was unacceptable, acceptable or meritorious. The amount of the employee's raise should also be reported. Your program should display an appropriate error message if an invalid rating is entered.

Q.2 (2 Marks) What is the difference between memory read and memory write operation? List the different steps involved in memory read and memory write operations.

Q.3 (1 mark) Perform the binary subtraction of 48 and 28 using two's complement method.

Q.4 (2 Marks) Draw a flowchart to find all the roots of a quadratic equation ax2+bx+c=0.

Q.5 (3 Marks) Write a short note on the following:

a) Linker b) Loader c) Von Neumann Model

Q.6 (2 Marks) Point out the errors, if any, in the following C statements:

a) k = (a * b) (c + (2.5a + b) (d + e) ;	**b)** int = 314.562 * 150 ;

c) #include<stdio.h>
void Main()
{
int a = 10;
printf("%d", a);
}
	d) #include<stdio.h>
	void main()
	{
	int n = 9, div = 0;
	div = n/0;
	printf("resut = %d", div);
	}

2. 7 (2 Marks) Find Error/Output in following code:

#include<stdio.h>
int main()
{
int x = 7538;
printf("%d %dn", x % 100, x / 10);
}
	#include<stdio.h>
	int main() {
	int i = 2, *j;
	j = &i;
	printf("%d", i**j*i+*j);
	}

#include<stdio.h>
int main ()
{
int x = 24, y = 39, z = 45;
z = x + y;
y = z - y;
x = z - y;
printf ("n%d %d %d", x, y, z);
}
	#include<stdio.h>
	void main()
	{
	int a, b, c;
	a + b = c;
	}