

Assignment of Computer Science

B.Sc. Part-I

Monday to Tuesday

Time 12.30 to 2.10pm

Virendra Tiwari

- 1) Ramesh's basic salary is input through the keyboard. His dearness allowance is 40% of basic salary, and house rent allowance is 20% of basic salary. Write a program to calculate his gross salary.
- 2) Temperature of a city in Fahrenheit degree is input through the keyboard. Write a program to convert this temperature into Centigrade degree.
- 3) Two numbers are input through the keyboard into two locations C and D. Write a program to interchange the contents of C and D.
- 4) If a five-digit number is input through the keyboard, write a program to calculate the sum of its digits. (**Hint: Use the modulus operator '%'**)
- 5) If a five-digit number is input through the keyboard, write a program to reverse the number.
- 6) If a four-digit number is input through the keyboard, write a program to obtain the sum of the first and last digit of this number.
- 7) Any integer is input through the keyboard. Write a program to find out whether it is an odd number or even number.
- 8) Any year is input through the keyboard. Write a program to determine whether the year is a leap year or not. (**Hint: Use the % (modulus) operator**)
- 9) Write a program to calculate the simple interest.
- 10) A five-digit number is entered through the keyboard. Write a program to obtain the reverse number and to determine whether the original and reverse numbers are equal or not.
- 11) Write a program to check whether a triangle is valid or not, when the three angles of the entered through the keyboard. A triangle is valid if the sum of all the three angles is equal to 180 degrees.
- 12) Any year is entered through the keyboard, write a program to determine whether the year is leap or not. Use the logical operator **&&** and **||**.
- 13) Write a program to find the greatest of the three numbers entered through the keyboard using **conditional operators**.
- 14) Write a program to check whether a given number is a **prime number** or not.(Using For loop statement)
- 15) Write a program to check whether a given number is a **prime number** or not.(Using While loop statement)

- 16)** Write a program to print out all Armstrong numbers between 1 and 500. If sum of cube of each digit of the number is equal to the number itself, the number is called an Armstrong number. For example, $153 = (1 \times 1 \times 1) + (5 \times 5 \times 5) + (3 \times 3 \times 3)$.
- 17)** The length & breath of a rectangle and radius of a circle are input through the keyboard. Write a program to calculate the area and perimeter of the rectangle and the area & circumference of the circle.
- 18)** Write a program to calculate the squire of given number.(Using While statement).
- 19)** Write a program to calculate the squire of given number. (Using Do While Loop).
- 20)** If the Length and breath of a rectangle are input through the keyboard, Write a program to find whether the area of the rectangle is greater than its perimeter.
- 21)** If the ages of Ram, Shyam & Ajay are Input through the keyboard. Write a Program to determine the youngest of the three.
- 22)** If the total selling price of 15 items and the total profit earned on them is input through the keyboard, write a program to find the cost price of one item.