COST PRACTICALS 6 to 10

Q. 6 Find the mean for Discrete Data..

```
print("Find the mean for Discrete Data")
num1 = int(input("Enter the no. of elements in your list: "))
xvalue = []
frequency = []

try:
    print("Enter the data of x : ")
    for i in range(0,num1):
        element = int(input())
        xvalue.append(element)
    print("Enter the correspondence frequency : ")
    for i in range(0,num1):
        freq = int(input())
        frequency.append(freq)

except:
    print("Invalid input")
else:
    print("List of xvalues: ",end=" ")
    print(xvalue)
    print("List of its frequency : ",end=" ")
    print(frequency)

    sums=0
```

```
for i in range(0,num1):
    mul = xvalue[i]*frequency[i]
    sums = sums+mul
average2 = sums/sum(frequency)
print("Sum of f is :",end=" ")
print(sum(frequency))
print("sum of fx is: ",end=" ")
print(sums)
print("Arithmatic mean of discrete data is : ",end=" ")
print("{: .5}".format(average2))
```

Q.7 Find the combined mean for given data.

```
print("Enter the given values")
# Observations given
numn1 = int(input("Enter the value of n1: "))
numn2 = int(input("Enter the value of n2: "))
numn3 = int(input("Enter the value of n3: "))

# Averages given for observations
numx1 = int(input("Enter the value of x1: "))
numx2 = int(input("Enter the value of x2: "))
numx3 = int(input("Enter the value of x3: "))

a=int(numn1*numx1)
b=int(numn2*numx2)
c=int(numn3*numx3)

d=int(numn1+numn2+numn3)
X=int(a+b+c)

combinedmean = int(X//d)
print("Combined mean of the given data", combinedmean )
```

Q. 8 Matrix Multiplication in python

```
rows = int(input("Enter the Number of rows : " ))
column = int(input("Enter the Number of Columns: "))

print("Enter the elements of First Matrix:")
matrix_a= [[int(input()) for i in range(column)] for i in range(rows)]
print("First Matrix is: ")
for n in matrix_a:
   print(n)

print("Enter the elements of Second Matrix:")
matrix_b= [[int(input()) for i in range(column)] for i in range(rows)]
for n in matrix_b:
   print(n)

result=[[0 for i in range(column)] for i in range(rows)]

for i in range(rows):
   for j in range(column):
      result[i][j] = matrix_a[i][j]*matrix_b[i][j]

print("The Multiplication of Above two Matrices is : ")
for r in result:
   print(r)
```

Q. 9 Matrix Addition in python

```
rows = int(input("Enter the Number of rows : " ))
column = int(input("Enter the Number of Columns: "))

print("Enter the elements of First Matrix:")
matrix_a= [[int(input()) for i in range(column)] for i in range(rows)]
print("First Matrix is: ")
for n in matrix_a:
   print(n)

print("Enter the elements of Second Matrix:")
matrix_b= [[int(input()) for i in range(column)] for i in range(rows)]
for n in matrix_b:
   print(n)

result=[[0 for i in range(column)] for i in range(rows)]

for i in range(rows):
   for j in range(column):
      result[i][j] = matrix_a[i][j]+matrix_b[i][j]

print("The Addition of Above two Matrices is : ")
for r in result:
   print(r)
```

Q. 10