Part C

Question 1: Write a shell script that prints "Hello, World!" to the terminal.

Ans=

```
#!bash/sh
echo “Hello, World!”
```

←---------->

Question 2: Declare a variable named "name" and assign the value "CDAC Mumbai" to it. Print the value of the variable.

Ans =

```
#!/bash/sh
name=”CDAC Mumbai”
echo $name
```

←----------→

Question 3: Write a shell script that takes a number as input from the user and prints it.

Ans=

```
#!/bash/sh
read a
echo $a
```

←----------→

Question 4: Write a shell script that performs addition of two numbers (e.g., 5 and 3 and prints the result.

Ans=

```
#!/bash/sh
read a
```

read b

sum=$((a+b))

echo $sum

←----------→

Question 5: Write a shell script that takes a number as input and prints "Even" if it is even, otherwise prints "Odd".

Ans=

#!/bash/sh

read a

if [[$a %2 -eq 0]]

do

echo “Even”

else

echo “Odd”

fi

←----------→

Question 6: Write a shell script that uses a for loop to print numbers from 1 to 5.

Ans=>

#!/bash/sh

for i in 1 2 3 4 5

do

echo $i

done

←----------→

Question 7: Write a shell script that uses a while loop to print numbers from 1 to 5.

Ans=

```
a=0
while  [ $a -lt 5 ]
do
echo $a
done
```

←----------→

Question 8: Write a shell script that checks if a file named "file.txt" exists in the current directory. If it does, print "File exists", otherwise, print "File does not exist".

Ans=#used concept is - –f: It returns True if the file exists as a common (regular) file.

```
#!/bash/sh
If [ -f file.txt ]
echo “File Exist”
else
echo “File does not Exist”
fi
```

←----------→

Question 9: Write a shell script that uses the if statement to check if a number is greater than 10 and prints a message accordingly.

Ans=

```
#!/bash/bin
a = 10
If [ $a -gt 10 ]
echo “Number is greater than 10”
else
echo “Number is less than 10”
fi
```

←----------→

Question 10: Write a shell script that uses nested for loops to print a multiplication table for numbers from 1 to 5. The output should be formatted nicely, with each row representing a number and each column representing the multiplication result for that number.

Ans =

```
#!/bash/sh
for i in 1 2 3 4 5
do
    for  j in 1 2 3 4 5 6 7 8 9 10
    do
        echo “ $i x $j = $ (( i*j )) ”
    done
echo “\n”
done
```

←----------→

Question 11: Write a shell script that uses a while loop to read numbers from the user until the user enters a negative number. For each positive number entered, print its square. Use the break statement to exit the loop when a negative number is entered.

Ans=

```
read=a
while [[ $a gt 0 ]];
do
echo “The square of positive no is $ (( a*a ))”
let a+= 1
done
```

←----------→