PABSON KATHMANDU
PRE-QUALIFYING EXAMINATION - 2081

GROUP - C (4 × 4 = 16)

10. Write a program in C language to check whether the supplied number is divisible by 5 or not. [4]

```
#include <stdio.h>

int main()
{
	int num;

	printf("Enter an integer number: ");
	scanf("%d", &num);

	if(num % 5 == 0)
	{
		printf("\n%d is divisible by 5", num);
	}
	else
	{
		printf("\n%d is not divisible by 5", num);
	}

	getch();
	return 0;
}
```

OR

10. Write a program in C language to find the sum of the first 10 natural numbers. [4]

```
#include <stdio.h>

int main()
{
	int i, sum=0;

	for(i=1; i <= 10; i++)
	{
		sum = sum + i;
	}

	printf("\nSum of first ten natural numbers = %d \n", sum);

	getch();
	return 0;
}
```

9. a) Write a program in QBASIC that allows the user to enter the radius of a circle. Create user defined FUNCTION … END FUNCTION to find the area of circle and SUB .. END SUB to find the volume of a cylinder. [4]

```
DECLARE FUNCTION AREA(r)
DECLARE SUB VOLUME(radius, h)


CLS

        CONST PI = 3.14

        INPUT "Enter the radius of circle: "; r

        INPUT "Enter the radius and height of cylinder: "; radius, h

        PRINT "The area of circle is: "; Area(r)

        CALL VOLUME(radius, h)

END



FUNCTION Area (r)

        Area = PI * r ^ 2

END FUNCTION



SUB VOLUME (radius, h)

            V = PI * radius ^ 2 * h

            PRINT "The volume of the cylinder is: "; V

END SUB
```

9. b) Write a program to open data file new.dat which may contain name, address, phone no. and salary. The program should allow the user to add few records on it. [4]

```
OPEN "new.dat" FOR APPEND AS #1

CLS

DO
   INPUT "Enter the name: "; name$
   INPUT "Enter the address: "; address$
   INPUT "Enter the phone no.: "; phone$
   INPUT "Enter the salary: "; salary
   WRITE #1, name$, address$, phone$, salary
   INPUT "Do you want to add more records? If Yes, press Y, else press N "; choice$
LOOP WHILE UCASE$(choice$) = "Y"

CLOSE #1
PRINT "Records have been added successfully !"
END
```