

(v) Fill in the value of PEACH

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    enum {ORANGE = 5, MANGO, BANANA =  
    4, PEACH};
```

```
    printf ("PEACH = %d\n", PEACH);
```

```
}
```

(vi) `char *str = "Engineering";` is a _____ declaration.

(vii) Keyword used to prevent any changes in the variable within a C program is _____.

(viii) Type of the assignment expression $y = x + y$ if x is of type float, y is of type int is _____.

(ix) `for(;;)` represents an infinite loop which can be terminated by _____ statement.

(x) `return-type function-name (argument type);` format for declaration of a function is correct. (True or False?) _____.

Answer any four questions :

(4 × 15 = 60)

2. (a) Write down the common standard output stream and standard input stream functions that can be used with any data types in C. Give example with all basic data types. (7)

- (b) Mention the format specifiers for character, unsigned character, signed integer, unsigned integer, short integer, floating point, double and long double. (8)
3. (a) Write down the ASCII code for character digits 0-9, A-Z, a-z. (9)
- (b) Mention all the logical operators with specifying example to illustrate each operator. (6)
4. (a) Find and explain the output of the following function if n=10. (8)

```
A(n)
{
    if(n>=1)
    {
        A(n-1);
        printf("%d",n);
        A(n-1);
    }
}
```

- (b) Explain the compilation process of a c code with diagram. (7)
5. (a) Explain the c code of the following program: (8)

```
#include<stdio.h>
int main()
{
    float d,q,n,e;
    scanf("%f",&n);
```

```

    e=1.0;
    while(e > 0.000001 || e < -0.000001) .
    {
        q=n/d;
        e=d-q;
        d=(d+q)/q;
    }
    printf("\n %d" ,q);
    return 0;
}

```

(b) Write a c program to reverse a given no. (7)

6. (a) Correct the syntax and logical errors of the following program: (6)

```

#include<stdio.h>
int main()
{
    int a[15],i,p;
    for(i=0;i <15,i++)
    {
        scanf("%d",&a);
    }
    p=0;
    i=1;
    while(i<15)
    {
        if(a[p]<a[i]
        {
            p=i;
        }
        print ("result : %d",);
    }
    return
}

```

(b) Write a c program with user defined function using pass by reference to find smallest divisor of a number. (9)

7. (a) Write the output of the following program: (5)

```
#include<stdio.h>
int main()
{
    int a,b,c,i=0;
    a=0;
    b=1;
    while(i<20)
    {
        c=a+b;
        printf("%d \t",c);
        a=b;
        b=c;
    }
    return 0;
}
```

- (b) Write the output of the following program: (5)

```
#include<stdio.h>
int main()
{
    int i,j;
    for (i=1;i<=8;i++)
    {
        for(j=0;j<i;j++)
        {
            printf(" * \t");
        }
    }
}
```

```
    }  
    printf("\n");  
}  
return 0;  
}
```

- (c) Correct the errors in the following program: (5)

```
#include<stdio.h>  
int main  
{  
    int a,b,c  
    scanf("%d%d%d", &a);  
    c=a+b;  
    printf("\n %d %d %d", a,b,c)  
    return 1  
}
```
