**PPL Question bank Internal**

**Syllabus:** chap1, chap2 , Chapter 3

**Paper pattern:**

Attempt any 5 out of 8 each carry 4 marks.

Total marks: 20

1. Explain two unconventional compilers (Hint: C, C++).
2. Show IEEE floating point standard with precision?
3. Explain the Programming language spectrum.
4. What are the attributes of programming languages?
5. Explain memory allocation / storage allocation (Hint: Explain 3 allocations in detail).
6. What is Stack based allocation?
   Hint:
   (i) sp
   (ii) fp
   (iii) Temporaries
   (iv) Local variables
   (v) Book keeping info
   (vi) Return address
   (vii) Arguments and list
7. Explain the distinction between decisions that are bound statically and those that are bound dynamically.
8. What are internal and external fragmentations? What is solution of it?
9. Trace the output:

```
main()
{
        F(1);
        return 0;
}
F(int n)
{
        printf (n);
        if(n<=100)
        F(3Xn-1);
        printf(n);
}
```

**Hint:** See the Tracing below:

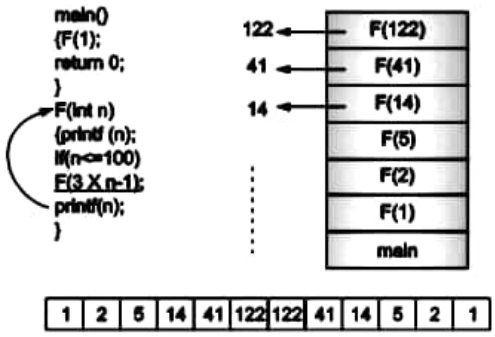


Fig. 2.26

10. Using all 4 types of scope rules try to find output for following code.

10. Using all 4 types of scope rules try to find output for following code,

```
n : integer – – global declaration
procedure first
        n := 14.
procedure second
        n : integer – – local declaration
        first()
        n := 28.
if read integer() > 0
second()
else
first()
write integer(n)
```

11. Explain inheritance and its types .Explain multiple inheritance with implementation.
12. Explain malloc and calloc with example.
13. Write a short note on: (i) Encapsulation, (ii) Polymorphism.
14. What is dangling pointer? What is the solution to dangling pointer problem? Explain in detail.
15. Explain character string length options in details.
16. What is array slice? Explain Design issues of arrays.
17. Explain the different array types.
18. What are the different Primitive data Types?
19. What are the different non-Primitive data Types?

---