HFCL Sample Paper Questions

- Q1. State Shannons Law.
- Q2. Difference between TCP/IP and OSI model.
- **Q3.** How many flip-flops in MOD-33 counter?
- Q4. Difference between fork() & execve().
- **Q5.** 16k memory, ending address of the address space is FFFFH. Find the starting address.

```
Q6. Multiplexer 1 to 3 inputs:- A,B,C; control lines - S1,S2; Output - Y. Write Y in terms of S1,S2.
```

Q7. What does this piece of code does?

```
call main()
main()
{
toupper(Hello);
main();
}
```

- **Q8.** State bandwidth minimum sampling theorem.
- **Q9.** What data structure is used to transform infix to postfix?
- **Q10.** Macro is given as follows: $SQR(x) x^*x$ find the value of SQR(i-j), when i and j were given.
- **Q11.** Explain Bankers algorithm.
- Q12. Difference between TCP and UDP.

- Q13. Difference between bridge and router.
- **Q14.** A graph was given: a quadrilateral with 1 diagonal. Find the number of trees in the graph.
- Q15. Windows 95, X-Windows what are they?
- **Q16.** Explain the address of RST 6.5.
- **Q17.** What is meant by Preorder Traversal?