K15U 0576

Reg. No. : .....

Name : .....

First Semester B.Sc. Degree (CCSS – Reg./Supple./Improv.) Examination, November 2015
COMPLEMENTARY COURSE IN COMPUTER SCIENCE
1C01 CSC : Fundamentals of Computers and Programming Languages
(2014 Admn. Onwards)

Time : 3 Hours Max. Marks : 32

SECTION – A

1. **One** word answer : **(6×0.5=3)**
   a) The language that the computer can understand and execute is called
   b) What will be the decimal equivalent of the binary number 10000 ?
   c) _____ topology is the simplest and cheapest topology to implement in small networks.
   d) The gray code equivalent of $(1011)_2$ is
   e) _____ is used to convert high level to machine level.
   f) In _____ mode, the communication is unidirectional.

SECTION – B

Write short notes on **any five** of the following questions : **(5×2=10)**

2. Explain top-down analysis.
3. Write any two characteristics of structured programming.
4. Explain the secondary memory.
5. What is twisted pair cable ?
6. What is Cache Memory ?

P.T.O.

7. What is System Software ?

8. Mention different network services.

9. Define Algorithm.

SECTION – C

Answer **any three** of the following questions : **(3×3=9)**

10. Convert the hexadecimal numbers to equivalent decimal numbers :
    a) 5C
    b) 76
    c) F9

11. Explain any three network topologies.

12. Discuss three basic program control structures with suitable examples.

13. Explain multiprogramming techniques.

14. Explain the characteristics of a good program.

SECTION – D

Write an essay on **any two** of the following questions. **(2×5=10)**

15. Discuss various types of networks topologies in computer network. Also discuss various advantages and disadvantages of each topology.

16. With a neat diagram explain the cache memory in detail.

17. With a suitable illustration, explain
    a) BCD
    b) ASCII
    c) Gray Code

18. Write a short note on various types of Operating Systems.
