

Register Number:

Date:

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| **ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27** |
| **BSC-VI SEMESTER** |
| **SEMESTER EXAMINATION: APRIL 2022****(Examination to be conducted in July 2022)****CS 6115 :Computer Networks** |
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|  |  |  |  |  |  |
| **Time- 2 1/2 hrs** |  |  **Max Marks-70** |

This question paper contains two printed pages and three parts

**PART A**

 **Answer all the following questions (10\*2=20)**

1. What is computer Networks and Name any two advantages?
2. Mention any three goals of computer Networks?
3. What is topology? Mention any three types.
4. What are the services provided by Session layer?
5. What is an Error? Generate parity bit for the given data a)11001100 b)10101011
6. What is Sliding window protocol?
7. Write short note on WDM.

 8. What is Transmission media? List its types.

1. Mention any two methods for congestion control.

 10. What is TELNET ? What for it is used?

**PART B**

**Answer any Five of the following (5\*6=30)**

11. Explain the working of Mesh topology with a neat diagram. If the number of devices to be connected are 5, then how many links and ports are required in mesh topology?

12. .What is Switching? Compare Circuit switching with packet switching.
13. Explain Go back n and Selective repeat ARQ.

14. Explain in detail about ALOHA protocol with a diagram.

15. Apply CRC method to the message 1101011011 where G(x)=1001.

16. Explain Hierarchal routing with an example.

17. Differentiate TDM and FDM.

**PART C**

**Answer any two of the following questions (2\*10=20)**

18.a.Generate the Two dimensional parity check for the following data segments 10110011,10101011,10110100,11010101. (5)

 b. write a short note on FTP. (5)

19a.What is CSMA? Explain its advantages over ALOHA protocols. (6)

 b. Explain the frame format IEEE 802.11 standard. (4)

20.a) Define Routing. Explain Distance vector routing algorithm. (6)

 b)What is Congestion control ? Explain Leaky Bucket Congestion Control mechanism. (4)