

VVM's  
**Shree Damodar College of Commerce and Economics, Margao-Goa**

S.Y.B.C.A, Semester- IV, End Semester Examination, *May 2016 (Supplementary)*  
**COMPUTER NETWORKS ( BCA-402)**

**Duration: 2 hours**

**Marks-50**

**Instructions :**

1. All questions are compulsory
2. Start each new question on fresh page
3. Figures to the right indicate maximum marks

**Q.1 Answer the following in one or two lines**

**2 X 5=10 marks**

1. Why modulation is necessary while transmitting a signal from sender to the receiver?
2. Why Switch is preferred over Hub?
3. Write two advantages of connection oriented network.
4. Define half duplex mode of communication
5. What is cryptography?

**Q.2 Answer the Following**

**10 Marks**

- a) List four points of differences between fibre optics and coaxial cable. ( 2 Marks )
- b) What do you understand by transmission impairment? What are the different types of impairment? ( 3 Marks )
- c) What do you mean by network topology .Explain star topology and also list its advantages ( 5 Marks )

**Q.3 Answer the Following**

**10 Marks**

- a) Give two reasons as to why flow control mechanism needs to be implemented. ( 2 Marks )
- b) Given data: 11101010 11011101 . Use checksum method , to send and verify data at both ends. ( 3 Marks )
- c) Given data: 1100110 Generator polynomial:  $x^4+x^3+1$  ( 5 Marks )  
Use CRC method to send and verify data at both ends.



**Q.4 Answer the Following**

**10 Marks**

- a) Describe the Ethernet frame format
- b) Explain 1-persistent CSMA
- c) Write a short note on ICMP.

( 2 Marks )

( 3 Marks )

( 5 Marks )

**Q.5 Answer the Following**

**10 Marks**

- a) What are the main functions of transport layer ?
- b) What are the key functions of Presentation and application layer
- c) Write a short note on ARP

( 2 Marks )

( 3 Marks )

( 5 Marks )

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