

Seat No. : _____

XV-108

Five Years M.Sc. (CA & IT) Integrated (K.S.)

T.Y. M.Sc.

April-2013

Data Communications

Time : 3 Hours]

[Max. Marks : 100

1. (A) Fill the following blanks : **11**
- (1) _____ is minimum Hamming Distance for correction of five errors.
 - (2) _____ number of Subnet for Subnet masks 255.255.255.64
 - (3) _____ venerable time in Slotted Aloha.
 - (4) In classful IP address 170.10.10.45. _____ network id _____ Host id.
 - (5) Telnet is listen on port number _____.
 - (6) Cookies is always used by _____.
 - (7) Java Applet is example of _____.
 - (8) In Transparent Bridge problem is _____
 - (9) Privacy and Anti jamming is goal of _____.
 - (10) Congestion prevention Technique is known as _____.
 - (11) If Digital signal has 4 level than it send _____ bits per level.
- (B) Write the difference between following : (any **three**) **9**
- (1) Aloha-Slotted Aloha
 - (2) Classful IP-Classless IP
 - (3) Repeater-Bridge
 - (4) POP3-IMAP4
2. (A) Write the answer of following questions : (any **three**) **18**
- (1) Discuss OSI model in detail.
 - (2) What is Transmission Impairment ? Discuss in detail.
 - (3) What is sliding window Protocol ? Explain Go Back N Sliding Window Protocol with ARQ ?
 - (4) What is error Correction ? Explain Hamming Code in detail.
- (B) Explain Piggybacking. **2**

3. (A) Write the answer of following questions : (any **three**) **18**
- (1) What is Multiplexing ? Explain FDMA.
 - (2) What is Spreading Technique ? Explain FHSS.
 - (3) Explain Circuit Switching.
 - (4) What is Guided Transmission media ? Discuss FIBER OPTIC cable.
- (B) Transparent Bridge. **2**
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4. (A) Discuss following Protocol : (any **two**) **12**
- (1) CDMA/CA
 - (2) TELNET
 - (3) FTP
- (B) A service provider has given you the Class C network range 210.50.1.0. Your company must break the network into 25 separate subnets. List all subnet. **6**
- (C) MIME **2**
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5. (A) Write the answer of following questions : (any **three**) **18**
- (1) What is Domain name ? Explain RESOLUTION.
 - (2) What is Dynamic Routing algorithm ? Explain Link State routing algorithm.
 - (3) What is DSL ? Discuss in detail.
 - (4) Discuss Cable TV network in detail.
- (B) Local loop. **2**
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