**Asian School of Management and Technology**

(Affiliated to Tribhuvan University)

Gongabu, Kathmandu

**Full Marks: 60**

**Time: 3 Hrs.**

**SET A**

**Preboard Examination 2081**

**BIM / Fourth Semester / IT 240: Business Data Communication and Networking**

***Candidates are required to answer the question in their own words as far as practicable.***

**Group “A”**

**1. Brief Answer questions: [1 x 10 = 10]**

1. Define Gaussian Noise
2. List out the function of session layer.
3. Is it possible to represent a digital data with fixed voltage level in NRZ-I?
4. Mention the working of HTTP and HTTPS.
5. Define Router.
6. What are the PDUs of Transport layer.
7. What is ARP, how it works?
8. What is the role of DNS?
9. What is TDM and FDM?
10. Mention about BYOD?

**Group “B”**

**Short Answer Question (Any Five): [3 x 5 = 15]**

1. If a given binary data is 101101 encoding using FSK, PSK and ASK.
2. Explain CSMA Access Control Protocol with its types.
3. Mention the advantage of Distance vector routing algorithm.
4. Illustrate IPV4 header Format with supportive diagram.
5. Differentiate between SMTP and POP.
6. What is ALOHA. Describe about Slotted Aloha?

**Group “C”**

**Long Answer Question (Any Three): [5 x 3 = 15]**

1. Define Client Server Architecture. Describe 2-tier, 3-tier and N-tier Architecture.
2. Describe the Checksum method of error detection with suitable example.
3. What is WLAN. Describe three types of network devices.
4. Write shorts note on:
5. DHCP
6. MIME (Multipurpose Internet Mail Extension)

**Group “D”**

**Comprehensive Answer Question (Any Two): [2 x 10 = 20]**

1. List the services of Transport layer. Differentiate between TCP and UDP
2. Suppose you are appointed as a network administrator at ABC organization where there are “Three” department X, Y and Z, each department has 45 computers, if the network ID is 212.148.118.0 then perform subnetting and identify subnet mask, number of possible subnets, network id, broadcast id, usable host id, ID wastage in each subnet and total number of ID wastages.

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