



INTI
International College Subang
LAUREATE INTERNATIONAL UNIVERSITIES'

FINAL
Examination Paper

(COVER PAGE)

Session : April 2015

Programme : Diploma In Information And Communication Technology
(DICTN/DICTI)

Course : ICT1105 / CSC2102 : Fundamentals Of Networking

Date of Examination : August 5, 2015

Time : 11:00am – 1:00pm Reading Time: Nil

Duration : 2 Hours

Special Instructions :

Answer any FOUR (4) questions.

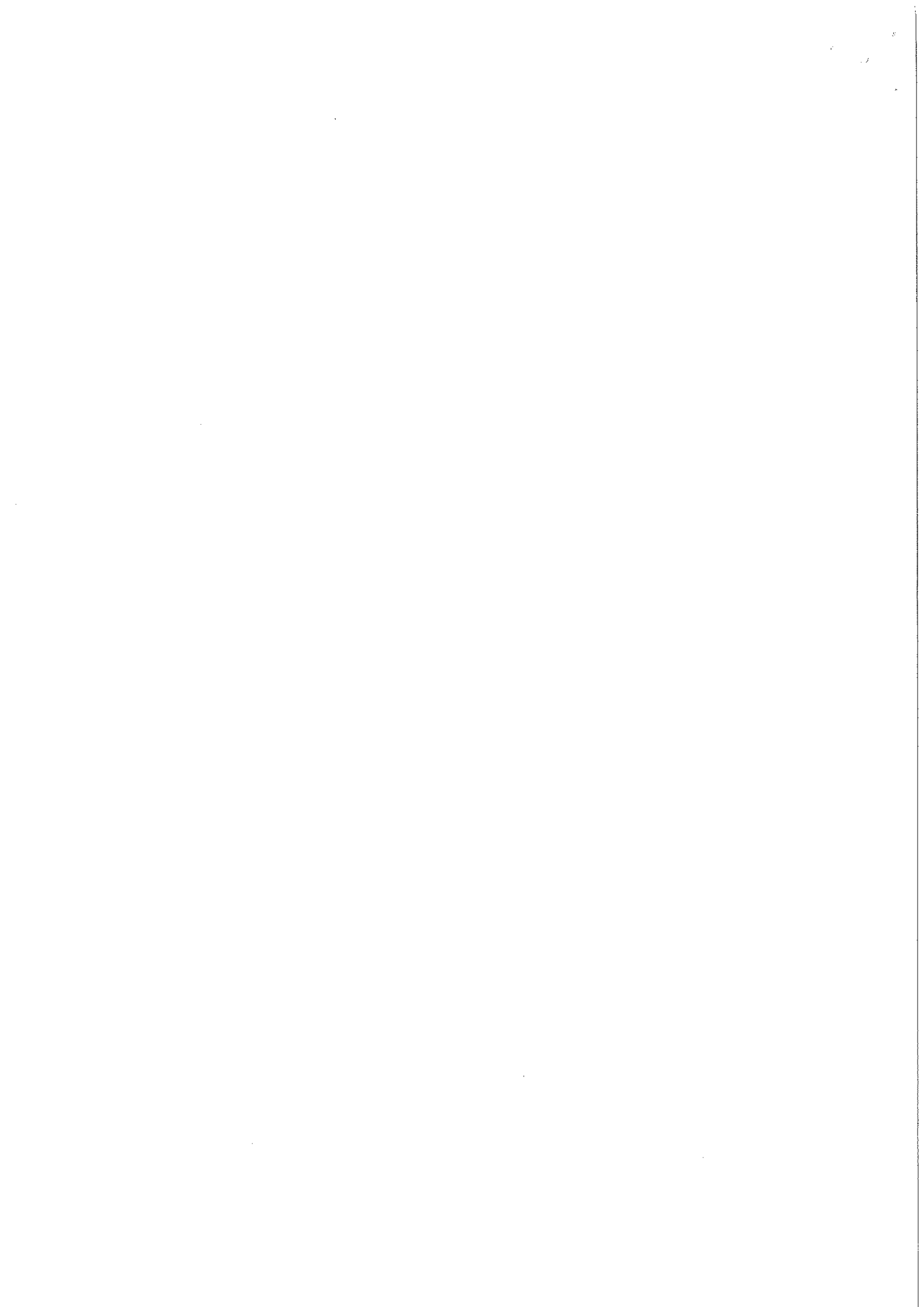
Materials permitted : Nil

Materials provided : Nil

Examiner (s) : Mr. Koh Chong Lin, Victor Raj Kolintiar .

Moderator : Ms. Noor Hasrina

This paper consists of 3 printed pages, including the cover page.



INTI-INTERNATIONAL COLLEGE SUBANG

DIPLOMA IN INFORMATION AND COMMUNICATIONS TECHNOLOGY (DICTN)

ICT 1105: FUNDAMENTALS OF NETWORKING

FINAL EXAMINATION : APRIL 2015 SESSION

Instruction: This paper consists of **SIX (6)** questions. Answer **ANY FOUR (4)** questions in the answer booklet provided. Answer **EACH** question on a new page. All questions carry equal marks.

Question 1

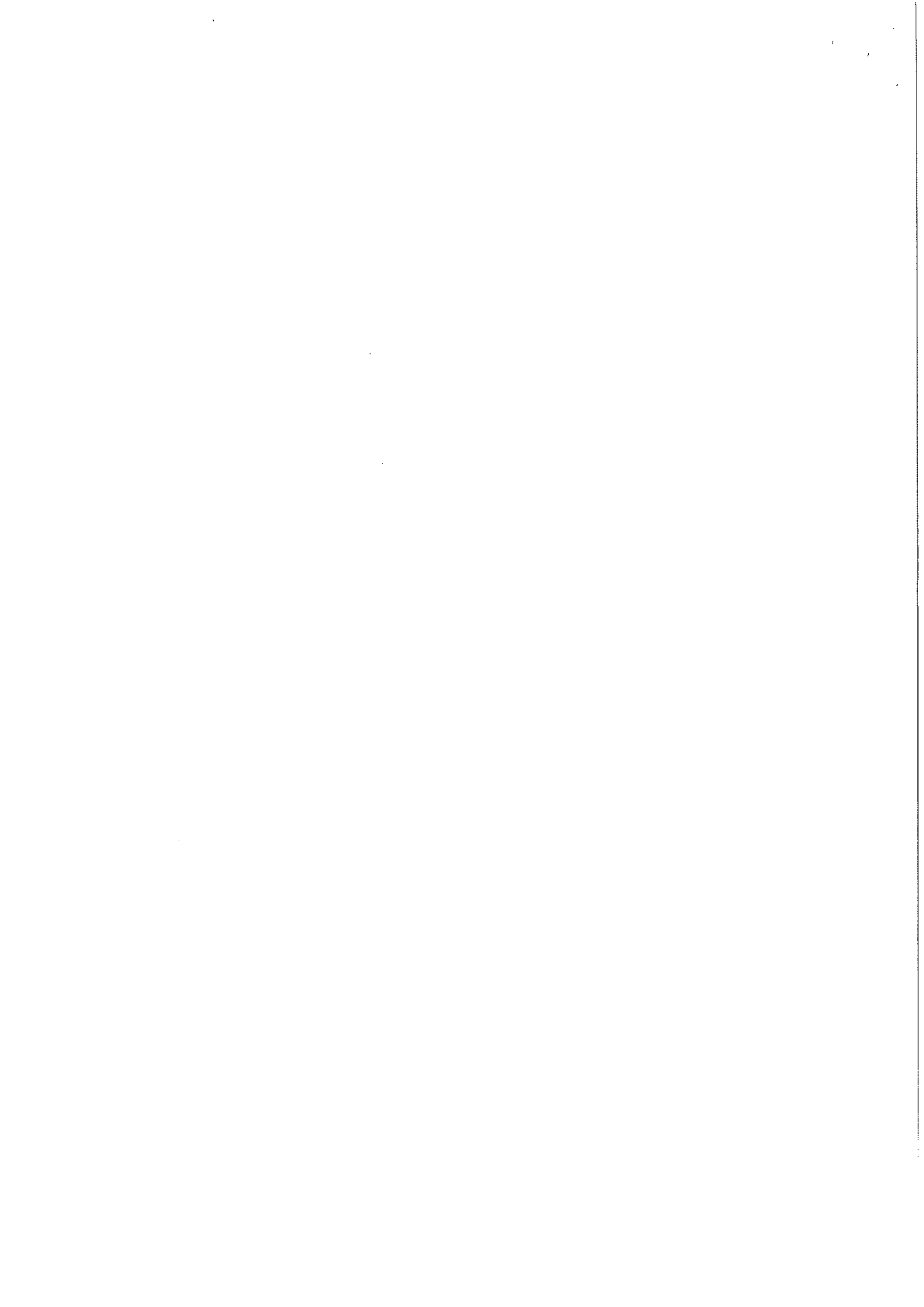
- (a) Identify and discuss **FIVE (5)** networking standard organizations. (15 marks)
- (b) Explain with diagram the **FIVE (5)** basic network topologies. (10 marks)

Question 2

- (a) Identify and explain **THREE (3)** TCP/IP core protocols. (6 marks)
- (b) Explain the **THREE (3)** directions of data transmission. (9 marks)
- (c) Compare analog and digital signals. (10 marks)

Question 3

- (a) Discuss the **THREE (3)** categories of disaster recovery contingencies. (9 marks)
- (b) Differentiate Local Area Network (LAN) and Wide Area Network (WAN). Provide diagram to aid your answers. (6 marks)
- (c) Identify and explain **FIVE (5)** interconnection devices. (10 marks)



Question 4

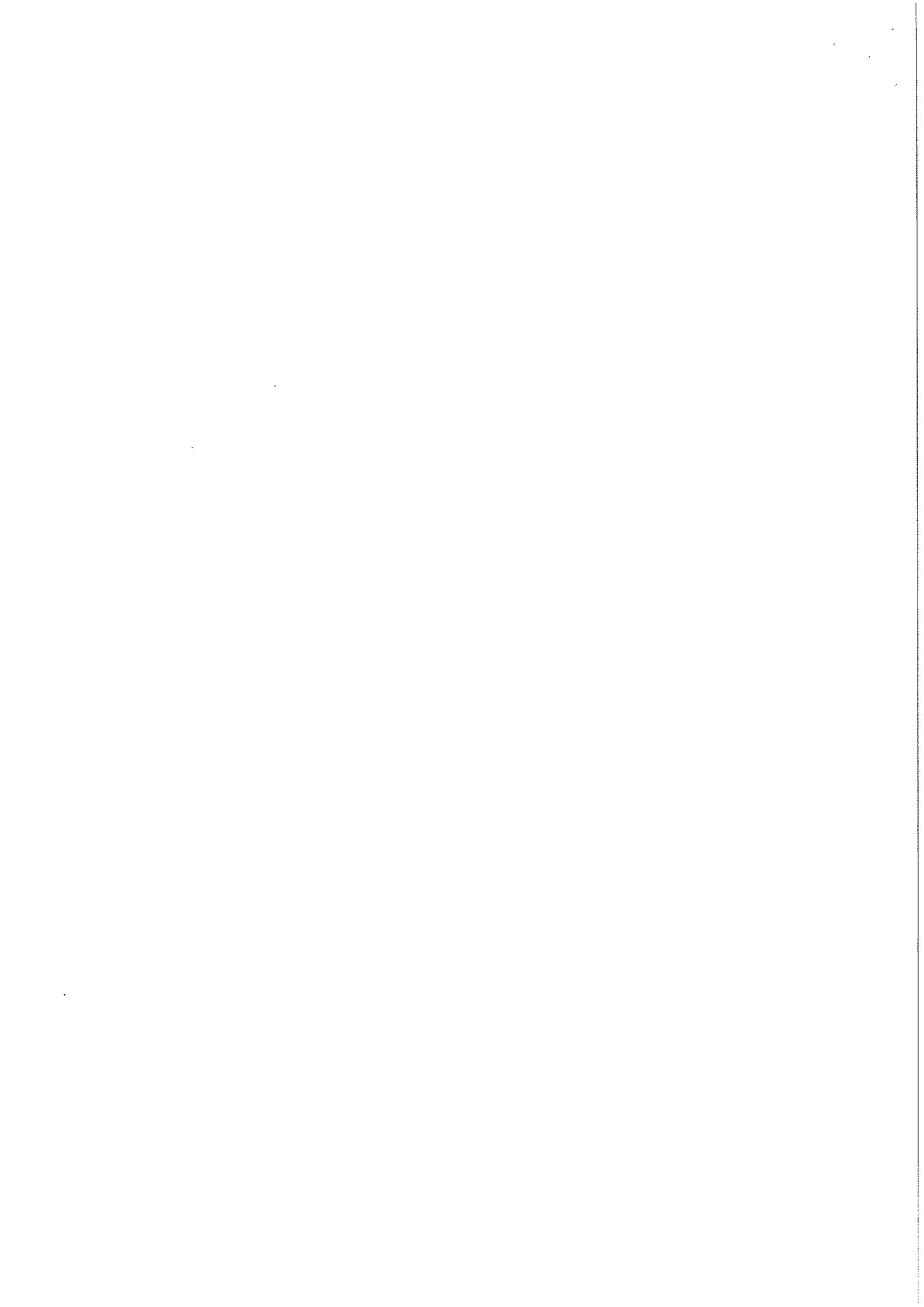
- (a) List **FIVE (5)** reasons why TCP/IP gains popularity protocol in communications? (5 marks)
- (b) Explain why DHCP is better than BOOTP in automatically assigning IPs? (5 marks)
- (c) Give **THREE (3)** reasons why DHCP is popularly use? (3 marks)
- (d) (i) What is a network backbone? (2 marks)
 (ii) What are the **FOUR (4)** types of network backbones? (4 marks)
 (iii) For each of the network identified in Question (ii), provide explanation, (6 marks)

Question 5

- (a) Referring to the diagram below:



- (i) Name the Device X. (1 mark)
- (ii) What is the subnet mask for IP (A) and IP (B)? (2 marks)
- (iii) In which classes of IP address does IP (A) and IP (B) belongs to? Justify your answer. (5 marks)
- (b) Identify and briefly explain **FOUR (4)** methods of remote connectivity. (8 marks)
- (c) Name and explain **THREE (3)** types of WAN Topologies. (6 marks)
- (d) Briefly explain the following TCP/IP utilities.
- (i) Ping (1 mark)
- (ii) IPconfig (1 mark)
- (iii) Tracert (1 mark)



Question 6

- (a) Discuss any **SIX (6)** advantages of client-server network over peer-to-peer network. (9 marks)
- (b) Identify and explain overall functions of the first **FOUR (4)** layers of OSI model. (8 marks)
- (c) (i) Define data modulation. (2 marks)
(ii) Explain how data modulation technology works. (6 marks)

-The End-

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