



Scott Christian UNIVERSITY

SCHOOL OF PROFESSIONAL STUDIES

BACHELOR OF BUSINESS INFORMATION TECHNOLOGY

UNIT CODE/NAME: BBIT 415: COMPUTER NETWORKS

January – April 2018/2019 End Semester Exam

- Time: 2 Hours

Instructions: Answer Question ONE (Compulsory) and any other TWO questions.
QUESTION ONE

- a) Differentiate the following terms: (10 Marks)
- LAN and WAN
 - Public Network and Private Network
 - Peer-to-peer vs Client-server network
 - Intranet vs Extranet
 - Guided vs unguided networks
- b) List and explain any three advantages of a computer network in an office set up. (6 Marks)
- c) Explain the use of the following network devices. (8 Marks)
- Switch
 - Hub
 - Router
 - Gateway
- d) Define the term protocol and explain any two protocols used to transfer files on a network (6 Marks)

QUESTION TWO

- a) Explain the meaning of ISDN technology. (3 Marks)
- b) Explain the three services provided by ISDN (6 Marks)
- c) Highlight the six principles of ISDN (6 Marks)

QUESTION THREE

- a) Explain the three types of networks citing their unique characteristics. (6 Marks)
- b) With an aid of a diagram, explain the following network topologies: (9 Marks)
- Bus topology
 - Mesh topology
 - Ring topology

QUESTION FOUR

- a) With an aid of a diagram, explain the OSI model (9 Marks)
- b) Explain the protocols found in each layer (6 Marks)

QUESTION FIVE

- a) Explain the following types of multimedia and how they are transmitted on the network.
- Text (3 Marks)
 - Audio (3 Marks)
 - Video (3 Marks)
- b) Explain any three challenges of networked systems. (6 Marks)