



**FACULTY OF MANAGEMENT
DECEMBER 2014 SUPPLEMENTARY EXAMINATION**

DEPARTMENT OF APPLIED INFORMATION SYSTEMS

MODULE : NETWORKS 4

CODE : BNW41-3

DATE : DECEMBER 2014

DURATION : 2 HOURS

TIME :

TOTAL MARKS : 100

EXAMINER : TINO MUSEBA

EXTERNAL MODERATOR: DR T. ZUVA

NUMBER OF PAGES : 3 PAGES

INSTRUCTIONS TO CANDIDATES:

- Read the questions carefully
- Answer all questions
- Number your answers clearly
- Write neatly and legibly
- Structure your answers by using appropriate headings and sub-headings
- The general University of Johannesburg policies, procedures and rules

QUESTION ONE

- 1.1.** Discuss five (5) critical success factors for Network Development Life Cycle (NDLC) [5]
- 1.2.** Describe the three phases of the Input-process-output (IPO) Model for Network Design tools [5]
- 1.3.** Discuss the two types of Integrated Services Digital Network (ISDN) [5]
- 1.4.** What is Broadband ISDN? Discuss three [3] services offered by broadband ISDN [5]

QUESTION TWO

- 2.1.** Discuss the concept of packet switched Networks and the services it offers [5]
- 2.2.** X.25 is an oldest packet switched Service developed by ITU-T. Discuss the services offered by X.25 [5]
- 2.3.** Describe the features of Asynchronous Transfer Mode (ATM) [5]
- 2.4** Discuss the merits and demerits of Frame Relay [5]

QUESTION THREE

- 3.1** A customer agrees an SLA with a Frame Relay network provider. The agreed committed information rate is 256kbps and committed burst size is 6144 bytes. If network resources allow, the customer can burst for a further 2048 bytes. Determine the excess information rate [5]

3.2. Describe the types of Virtual Private Networks in use today **[5]**

3.3. Discuss five [5] security threats and their protective measures **[5]**

3.4. Discuss five [5] security design strategies for a network **[5]**

QUESTION FOUR

4.1. Discuss the goals of risk analysis **[5]**

4.2. Describe five (5) intangible resources of the risk analysis process **[5]**

4.3. Differentiate between disaster recovery and business resumption **[5]**

4.4 The process owner assembles and leads cross-functional team in the event of a disaster. Discuss five [5] roles played by the process owner **[5]**

QUESTION FIVE

5.1. What is cloud computing? Discuss three service models of cloud computing **[5]**

5.2. Discuss the two types of virtual circuits offered by packet switched Networks **[5]**

5.3. Discuss the two types of data rates offered by Virtual Circuits **[5]**

5.4. Discuss the advantages and disadvantages of Asynchronous Transfer Mode (ATM) **[5]**

