COURSE CODE: CSS 331
COURSE TITLE: METHODS IN SOCIAL RESEARCH
CREDIT UNIT: 3
TIME ALLOWED: 3 HOURS
MARK ALLOCATION: 70%

Instruction: Answer Any Four Questions. Each question carries 17.5 marks

1. Identify and discuss four types of probability sampling techniques in social research.

2. Examine the word "validity" and enumerate the different types of validity test in social research.

3. Define reliability and mention its basic types.

4. Identify sources of data for questionnaires and list the characteristics of questionnaires.

5. List broad items desirable in a research questionnaire.

3a. Identify the predefined enterprise networks that may be created upon installation. **(2 marks)**

3b. Outline and discuss the four types of threat with respect to enterprise network. **(10 marks)**

3c Give a brief explanation of the following

    i.   Space Division Multiplexing   **(1 mark)**

    ii.   **Time Division Multiplexing**   **(1 mark)**

    iii.   **Code Division Multiplexing**   **(1 mark)**

4a Briefly describe Infrared communication as used in wireless technologies   *(3 marks)*

    ii. Differentiate between Intranets and extranets   *(3 marks)*

4b State four most common network protocols in data communication   *(2 marks)*

    iii.   State any eight (8) *typical project business requirements* used for effective network planning and design   *(4 marks)*

4c Write a short note on the concept of "Packet Switching"   *(3 marks)*

5a. Give a short description of the concept of 'network protocol'   **(4 Marks)**

b. Generally, the **Integrated Services Digital Network' (ISDN)** Standards define three basic types of channels. Identify and give a brief explanation of these channels.   **(3 marks)**

c. Complete the content of Table, stating the cable type and topology of the listed protocols:

Table 1: Cabling

S/N	Protocol	Cable	Topology
i.	ATM		
ii.	Ethernet		
iii.	LocalTalk		
iv.	Token Ring		

(8 marks)

6a. Write short note on OSI model   **(2 marks)**

6b. The OSI reference model has seven layers. Identify all and describe the functions of any four of them.   **(7.5 marks)**

6c. State most common network protocols in data communication   **(2.5 marks)**

6d Demonstrate the application of multiplexing within the following contexts:

    i.   Telephony   **(1marks)**

    II.   Video processing   **(1 marks)**

    iii.   Digital broadcasting   **(1 marks)**