National Open University of Nigeria
Plot 91, Cadastral Zone, Nnamdi Azikwe Express Way, Jabi – Abuja
Faculty of Sciences
2023_1 POP EXAMINATION.

Course Code: CIT305
Course Title: Networking and Communication Technology
Credit Unit: 3
Time Allowed: 3 Hours
Instruction: Answer question 1 and any other 3

Q1. (a) Briefly Explain the meaning of video-conference **(4 marks)**

   (b) Distinguish between Analog and Digital Signal **(6 marks)**

   (c) List five (5) uses of a video-conference **(10 marks)**

   (d) Mention and explain 2 types of wireless technologies **(5 marks)**

TOTAL: 25 Marks

Q2. (a) Explain what you understand by DSL **(5 marks)**

   (b) Mention three features of DLS **(3 marks)**

   (c) List five (5) advantages of using DLS **(5 marks)**

   (d) List two techniques of packet switching **(2marks)**

TOTAL: 15 Marks

Q3. (a) Define the following terminologies

      (i) SONETS **(1 marks)**

      (ii) Modem **(1marks)**

      (iii) Packet switching **(1marks)**

   (b) Explain in detail the full meaning of a Computer Networks **(4 marks)**

   (c) List and briefly explain four (4) uses of Computer Networks **(8 marks)**

Total: 15 Marks

Q4 (a) Mention seven (7) layers of OSI Model **(7 Marks)**

   (b) What do you understand by the term Data Link? **(3 Marks)**

   (c) State Five (5) protocols that are defined by Data Link Layer **(5 Marks)**

TOTAL: 15 Marks

Q5 (a) (i) Define the term Wi-Fi **(3 Marks)**

(ii) What are the advantages of Phase-Shift Keying (PSK) **(2 Marks)**

(b) List and explain the *TCP/IP* Model **(5 Marks)**

(c) States the differences between Class *A*, *B* & Class *C IP* addresses? **(5 Marks)**

TOTAL: 15 Marks

Q6 (a) Explain how fiber optic medium is better than coaxial cable **(5 marks)**

(b) Write short note on the different types of impairment listed below:

  i.   Attenuation **(2 marks)**

  ii.   Delay distortion **(2 marks)**

  iii. Noise **(2 marks)**

(c) Explain Time-Division Multiplexing (TDM). **(4 marks)**