

EES1161710045



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COLLEGE OF ENGINEERING AND ENVIRONMENTAL STUDIES, IBOGUN
FACULTY OF ENGINEERING
DEPARTMENT OF COMPUTER ENGINEERING
2020/2021 HARMATTAN SEMESTER CONTINUOUS ASSESSMENT TEST

COURSE CODE: CPE 505

COURSE TITLE: DATA COMMUNICATION & NETWORKING

TIME ALLOWED: 1 Hour

COURSE UNIT: 2

INSTRUCTION: Answer All Questions

1. List four (4) fundamental characteristics used in measuring the effectiveness of a data communication system
2. With the aid of well annotated diagrams, describe the three (3) modes of data flow in data communication
3. What is a Network? List three (3) Network Criteria
4. Briefly describe the two classes of Transmission media?
5. Using a table, describe three classes of coaxial cable under the following headings: Category, Impedance and Application
6. With the aid of diagrams *only*, describe the Multimode Step index, Multimode Graded index and the Single Modes of Data transmission
7. List three (3) differences between Radiowaves and Microwaves
8. One of these is Odd: (A) Infrared (B) Optical fibre (C) Microwave (D) Transmitter
9. The higher the SNR the less capacity is available for transmission due to the broadcast nature of the channel. TRUE or FALSE?
10. The bandwidth of a composite signal is the summation of the highest and the lowest frequencies contained in that signal. TRUE or FALSE?
11. If the composite signal is nonperiodic, the decomposition gives a combination of sine waves with continuous (A) amplitudes (B) frequencies (C) phases (D) harmonics
12. A sine wave is offset $\frac{1}{6}$ cycle with respect to time 0, its phase in radians is
(A) π (B) $\frac{\pi}{2}$ (C) $\frac{\pi}{3}$ (D) $\frac{\pi}{4}$
13. In data transmission, a gain of 3 dB is equivalent to gaining one-half the transmitted power. TRUE or FALSE?
14. Mention three (3) causes of signal impairment during transmission of data
15. Distortion is said to occur when the transmitted signals have different phases at the receiver than they did at the source. TRUE or FALSE?

1.57

(1.047)

0.786