



CRAWFORD UNIVERSITY, FAITH CITY IGBESA
COLLEGE OF NATURAL AND APPLIED SCIENCES
DEPARTMENT OF COMPUTER AND MATHEMATICAL SCIENCES

HARMATTAN SEMESTER

SESSION: 2023/2024

COURSE CODE: ICT 421

TITLE: TELECOMMUNICATIONS POLICIES AND REGULATION

UNITS: 3

DURATION: 2.5 HOURS

INSTRUCTION: ANSWER QUESTION, ONE AND ANY OTHER THREE QUESTIONS ONLY.

QUESTION ONE (30 marks)

- (A) (i) What is Regulation and why is it necessary to regulate telecommunications? (3mrks)
(ii) Discuss the dimensions of regulatory effectiveness (3mrks)
(iii) Describe the phased approach to the process of regulation. (4mrks)
- (B) (i) Describe the three different structures for the international public telecommunication standards according to the ITU-T Recommendation E.164 for:
-International public telecommunication number for geographic areas. (2mrks)
-International public telecommunication number for global services. (2mrks)
-International public telecommunication number for networks. (2mrks)
(ii) Identify the six main areas covered by global telecommunications regulation (3mrks)
- (C) Briefly discuss the following:
• Regulatory Capture (3mrks)
• Convergence (3mrks)
• RF Spectrum (2mrks)
• Collocation (2mrks)

QUESTION TWO (10 marks)

- (A) Briefly discuss the activities involved in the regulatory domains of the ITU (3mrks)
(ii) Identify the key success factors of effectiveness in any regulation (2mrks)
- (B) Discuss the contents of a typical Interconnection Agreement. (5mrks)

QUESTION THREE (10 marks)

- (A) (i) What is Spectrum management and why is it important to regulate RF spectrum access and use? (3mrks)
(ii) Discuss the basic approaches to Spectrum management (3mrks)
- (B) (i) Discuss the various contexts of Convergence (2mrks)
(ii) Discuss the likely consequences of lack of telecommunication standards in telecommunications (2mrks)

QUESTION FOUR (10 marks)

- (A) (i) Identify, and briefly discuss the specific roles of the regulatory authorities in charge of telecommunications regulation:
• locally (in Nigeria) and (3mrks)
• Internationally (globally) (3mrks)
- (B) Compare the single (unified) regulator and multi-sector regulator approaches in telecommunication regulation. Which of the approaches do you think is more suitable for the Nigeria now and why (4mrks)

QUESTION FIVE (10 marks)

- (A) Identify any 6 (six) of the widely accepted Interconnection principles (3mrks)
- (B) (i) Discuss the concept of 'access' as it relates to Interconnection (3mrks)
(ii) Identify the Commercial, Technical and Operational issues in Interconnection. (4mrks)

QUESTION SIX (10 marks)

- (A) Telecommunications firms with market power may try to use their position to reduce competition. Identify some common forms of anti-competitive conducts (5mrks)
- (B) Briefly discuss any four (4) methods of fixing the financial terms of Interconnection (5mrks)