



CRAWFORD UNIVERSITY, FAITH CITY IGBESA
COLLEGE OF NATURAL AND APPLIED SCIENCES
DEPARTMENT OF COMPUTER AND MATHEMATICAL SCIENCES
HARMATTAN SEMESTER **SESSION: 2020/2021**

COURSE CODE: ICT 421

TITLE: TELECOMMUNICATION POLICIES AND REGULATIONS

UNITS: 3

DURATION: 3 HOURS

INSTRUCTION: ANSWER QUESTION 1 AND ANY OTHER THREE.

QUESTION 1 (30 marks)

- (a) (i) What is Regulation and why do we regulate telecommunications? (4mrks)
(ii) Differentiate among Policies, Recommendations, Standards and Regulation. (4mrks)
- (b) (i) Describe the phased approach to the process of regulation. (4mrks)
(ii) Briefly explain the 3 basic dimensions of regulatory effectiveness, clearly identifying the impact of each on the process of regulation. (3mrks)
(iii) Briefly discuss five (5) of the specific aspects of telecommunications regulated by the Nigerian Communications Commission (NCC), according to the Nigeria Communications Act of 2003 (5mrks)
- (c) (i) Briefly discuss the following:
- Radio Frequency Spectrum (2mrks)
 - Convergence (2mrks)
- (ii) 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)

QUESTION 2 (10 marks)

- (a) (i) Identify, and briefly discuss the activities involved in the regulatory domains of the International Telecommunications Union (ITU). (3mrks)
(ii) Identify the key success factors for effectiveness in regulation? (3mks)
- (b) Discuss the categories of Interconnection issues in telecommunications, citing two examples for each category. (4mrks)

QUESTION 3 (10 marks)

- (a) (i) Explain the concept of Spectrum management and justify the need for regulating RF spectrum access and use (3mrks)
(ii) Discuss the basic approaches to Spectrum management (3mrks)
- (b) Briefly discuss Spectrum Allocation and Authorization. (4mrks)

QUESTION 4 (10 marks)

- (a) (i) Identify, and briefly discuss the specific roles of the regulatory authorities in charge of telecommunications regulation locally (in Nigeria) and Internationally (globally) (6mrks).
- (b) (i) Compare and contrast the single regulator and multi-sector regulator approaches to regulation in telecommunications. (3mrks)
(ii) Which of the approaches identified in b (i) do you think is more suitable for the Nigeria now and why? (1mrk)

QUESTION 5 (10 marks)

- (a) (i) Explain clearly the term 'Interconnection' (2mrks)
(ii) Identify any 6 (six) of the widely accepted Interconnection principles (3mrks)
- (b) (ii) Briefly discuss the various contexts of Convergence. (5mrks)

QUESTION 6 (10 marks)

- (a) (i) Discuss the objectives of the telecommunications equipment type approval for Telecommunications. (4mrks)
(ii) Discuss the concept of Regulatory Capture, showing how it is different from corruption in the process of regulation. (3mrks)
- (b) Discuss the concept of 'access' as it relates to Interconnection (3mrks)