

CENTRAL UNIVERSITY
SCHOOL OF APPLIED SCIENCES
DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

Course Code: ITEC 401 **Credit Hour(s):**3 **Course Title:** Emerging Technologies

Mid-Semester Exams Jan 2025

Q1. Answer the following 3G – 5G Questions (10 marks)

- a. What are the features of 5G technology
- b. Differentiate 3G from 4G Technologies

Q2. Answer the following Big Data Questions (10 marks)

- a. Explain Big Data in terms of the three (3) Vs.
- b. Give two examples each.
- c. State five (5) opportunities of Big Data.
- d. Explain how these five (5) opportunities will affect Ghanaian organizations.
- e. State Five Disadvantages of Big Data to Organizations in Ghana

Q3. Answer the following Big Data Analytics Questions (10 marks)

Business Analytics is a broad category of applications, technologies, and processes for:

- gathering, •storing, •accessing, and •analyzing data •
- a. Explain the terms
gathering,
storing,
accessing, and
analyzing data
 - b. State some Analytics Models you know.

Q4. Answer the following Cloud Computing Questions (10 marks)

- a. With the aid of a diagram, explain cloud computing.
- b. Explain the deployment model in cloud computing.
- c. Explain the service model in cloud computing.
- d. List the advantages of cloud computing
- e. How can organizations in Ghana Benefit from cloud computing

Q5. Answer the following Internet of Things Questions (10 marks)

- a. List and Explain the Key features of IoTs
- b. How does the Internet of Things (IoT) affect our everyday lives?
- c. How does IOT work?
- d. Explain some examples in the Ghanaian industries using IoT.

Q6. Answer the following Optical Computing Questions (10 marks)

- a. What are the features of Optical Computers?
- b. List five (5) benefits of Optical Computers
- c. List some key optical components for computing
- d. State the types of optical computers you know.

The mid-semester exam must be uploaded to vCampus before noon on Monday, January 20th, 2025.

Make sure you receive a confirmation of your submission and acceptance.
Any other time after noon will be rejected since it will be deactivated by default.

Thank you