



**KENYATTA UNIVERSITY**  
**EXAMINATION FOR THE DEGREE OF BACHELOR OF LIBRARY AND**  
**INFORMATION SCIENCE**

**ISC 208: FUNDAMENTALS OF NETWORKING**

**2<sup>ND</sup> SEMESTER 2021/2022**

**TIME: 2 HOURS**

**INSTRUCTIONS: ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS**

1. (a) Explain SIX (6) applications of Artificial Intelligence (AI) in networking. [ 10 Marks]  
(b) AI will eventually replace human element in networking. Discuss [10 Marks]  
(c) Explain SIX (6) advantages of artificial intelligence in networking. [10 Marks]
2. Explain SIX (6) factors to consider in designing a network for an information centre. [20 Marks]
3. What is the disadvantage of having the network management system operate at the application layer? [20 Marks]
4. Compare and contrast the following set of networking devices.  
(i) Bridge and a router. [ 10 Marks]  
(ii) Switch and hub. [ 10 Marks]
5. Explain FIVE (5) network management requirements. [ 20 Marks]