



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY**

(MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

2021 / 2022 ACADEMIC YEAR

SECOND SEMESTER EXAMINATIONS

FOR THE DEGREE

IN

COMPUTER SCIENCE

COURSE CODE: BCS 475

COURSE TITLE: DISASTER RECOVERY

DATE: Tuesday 26th April, 2022

TIME: 8:00-10:00 am

INSTRUCTIONS TO CANDIDATES

Answer **Question ONE (1)** and any other **TWO**

TIME: 2 Hours

MMUST observes **ZERO** tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over.

QUESTION 1: COMPULSORY **{30 MARKS}**

- a) Explain the meaning of disaster recovery within the context of disaster management in IT. **(2 Marks)**
- b) List any three disaster recovery software. **(3 Marks)**
- c) Differentiate between a Differentiate between disaster recovery and backup. **(4 Marks)**
- d) Explain the meaning of a man-made disaster; give one example of such an event. **(2 Marks)**
- e) Justify why disaster recovery is important, you may use a real or hypothetical example. **(5 Marks)**
- f) Discuss three common goals of a disaster recovery plan. **(6 Marks)**
- g) Explain the meaning of the following within the context of disaster management in IT. **(8 Marks)**
 - i. Business continuity
 - ii. Disaster recovery
 - iii. DRaas
 - iv. Disaster recovery site

QUESTION 2: 20 MARKS

a) Expand the acronyms and hence explain the purpose of each within the confines of disaster recovery in an organization. **(8 Marks)**

- i. BCP
- ii. BIA
- iii. DRP
- iv. RTO

b) O-Really company, is a Kenyan company that deals with selling products and services to its customers, across the country. It has two types of clients that is, individual clients and corporate clients. It also offers long term purchase plan to its trusted clients. It relies on technology to manage and synchronise its operations across the country. State and hence discuss four known risks if an IT disaster strikes O-Really company. **(12 Marks)**

QUESTION 3: 20 MARKS

a) The choice of a recovery technologies or systems to be put in place depends on the decision and objective of an individual organization. You have been hired as an expert to advise an organization on the technologies, systems and capabilities to be put in place. Identify and hence discuss four key points you would use to convince the organization to arrive at an appropriate technology for their need. **(10 Marks)**

b) The CEO of Zafaricom has summoned an emergency meeting. He presents some survey reports which reveal that **80% of businesses without a disaster recovery plan closed or never reopened within 18 months. And 70% of companies go out of business after a major data loss.** This causes panic in the organization and the IT manager is directed to adopt a disaster recovery plan from the mother company. Discuss five ways of testing the efficiency of this disaster recovery plan. **(10 Marks)**

QUESTION 4: 20 MARKS

- a) Describe a disaster recovery plan, and hence outline the components of a DR plan. (12 Marks)
- b) Discuss three common backup strategies, in each case site one disadvantage. (9 Marks)

QUESTION 5: 20 MARKS

- a) The CEO of Zafaricom (refer to the case in question 3(b)) has hired you as a consultant to educate the boards on the rationale and importance of having Business Impact Analysis in the organization. Discuss the seven steps process for creating a Business Impact Analysis. (14 Marks)
- b) An external disaster recovery site is owned and operated by a third-party provider; discuss three common types of DR site. (6 Marks)