NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF SCIENCE AND TECHNOLOGY EDUCATION

DEPARTMENT OF TECHNICAL AND ENGINEERING EDUCATION AND TRAINING

Post Graduate Diploma in Higher and Tertiary Education

E-Learning in Higher Education

PTE 5113

Main Examination

November 2024

This examination paper consists of 2printed pages

Time allowed	:	3 hours
Total marks	:	100
Special Requirements	:	None
Examiner	:	Mr. S. Ndlovu

INSTRUCTIONS

1. Answer any **FOUR** questions
2. Sub-division marks are shown in brackets
3. Begin each question on a fresh page and clearly number it.

MARK ALLOCATION

QUESTION	MARKS
1	25 marks
2	25 marks
3	25 marks
4	25 marks
5	25 marks
6	25 marks

Question 1.   [25 marks]

Explain the following terms:

   a) Smart classroom
   b) Blended learning
   c) Cloud computing
   d) Flipped classroom
   e) Machine learning

Question 2.   [25 marks]

Evaluate the role of Artificial Intelligence (AI) in enhancing accessibility and inclusivity in education. Discuss specific AI technologies that support learners with disabilities and how these technologies can be integrated into online education platforms.

Question 3.   [25 marks]

Evaluate the effectiveness of digital collaboration tools in fostering teamwork and communication among students. Provide examples of specific tools and discuss their impact on student engagement and learning outcomes.

Question 4.   [25 marks]

Critically assess the role of mobile technology in modern education. Discuss how mobile devices and applications can enhance learning experiences, and the potential challenges and solutions associated with their use in the classroom?

Question 5.   [25 marks]

Examine the effectiveness of virtual classrooms in higher education. Discuss the benefits and challenges of virtual learning environments, and propose strategies to enhance student engagement and learning outcomes.

Question 6.   [25 marks]

Evaluate the impact of Massive Open Online Courses (MOOCs) on higher education. Discuss how MOOCs have transformed access to education, their effectiveness in delivering quality learning experiences, and the challenges they pose for traditional educational institutions.