



NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF SCIENCE AND TECHNOLOGY EDUCATION
DEPARTMENT OF SCIENCE, MATHEMATICS AND TECHNOLOGY
EDUCATION

PST6603 TRENDS IN PHYSICS EDUCATION

Main Examination Paper

NOVEMBER 2024

This Examination Paper consists of two printed pages

Time Allowed: 3 hours
Total Marks: 100
Special Requirements: None
Internal Examiner: MR K. NYATHI
External Examiner: DR N. ZEZEKWA

INSTRUCTIONS

1. This paper consists of 6 questions
2. Answer question ONE and any other THREE questions from this paper.
3. Begin each full on a new page

MARKS ALLOCATION

QUESTION	MARKS
First question	25
Second question	25
Third question	25
Forth question	25
Total	100

1. Physics is a science that is actively involved in research on issues of the present day. Discuss any five contemporary research themes in Physics' [25]

2. (a) Outline the procedure of analysing research reports. [10]
(b) Describe the cycle of scientific research and improvement. [15]

3. Describe how the use of information communication and technology tools (ICT) enhances teaching and learning of physics at high school level. [25]

4. (a) Discuss the impact of research in physics. [15]
(b) How is Physics Education a foundation for improving education? Discuss. [10]

5. Educators should take note of innovative teaching methods that have been shown to be effective. Name and discuss such methods. [25]

6. (a) What is a model, why are models useful and important in physics education. [10]
(b) In the light of Covid pandemic, describe how best you can teach physics practical online at secondary school level. [15]

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