

BINDURA UNIVERSITY OF SCIENCE EDUCATION
MASTERS IN MATHEMATICS EDUCATION
PCM502: CURRICULUM & PEDAGOGICAL ISSUES IN
MATHEMATICS EDUCATION

Time: 3 hours

Instructions to candidates

JAN 2025

1. Candidates may attempt any three questions
2. Each question carries 100 marks
3. Each question should start on a fresh page

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1. Compare and contrast the following terms:
 - a. heaps, complexes and scientific concepts,
 - b. structural and operational conceptions of mathematical notions.
 2. Discuss the influence of Fallibilist philosophy of mathematics on designing mathematics curriculum and its implication for school mathematics in Zimbabwe.
 3. Outline the four forms of mathematical knowledge and the related implication for teaching mathematics.
 4. Outline Vygotsky's stages of concept development and its implications for teaching mathematics.
 5. 4. Discuss the steps you would take to in order to create authentic assessments in mathematics

END OF PAPER