

**UNIVERSITY OF SWAZILAND
FACULTY OF EDUCATION
RE-SIT/SUPPLEMENTARY EXAMINATION PAPER 2018**

TITLE OF PAPER: CURRICULUM STUDIES IN MATHEMATICS

COURSE CODE: CTE532/CTE332/EDC381

PROGRAMME: PGCE/B.Ed. 3

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS: ANSWER ANY **FOUR** QUESTIONS. EACH QUESTION IS WORTH 25 MARKS.

This paper contains 3 pages including this one

**DO NOT OPEN THIS PAPER UNTIL INSTRUCTED
TO DO SO BY THE INVIGILATOR**

Question 1

You have been appointed HOD for mathematics at a private school. Discuss each of your duties and responsibilities as an HOD at this school. [25]

Question 2

- a) Construct 5 test items for the topic: "solving quadratic equations." Your items should exclude solving equations graphically and each item should require different solving approaches. [15]
- b) Prepare a marking guide for the test in (a) [10]

Question 3

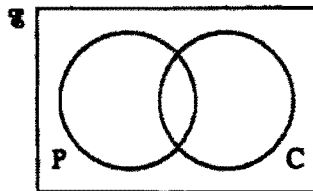
- a) Discuss five purposes of assessment in mathematics. [10]
- b) Discuss five advantages of objective testing in mathematics. [15]

Question 4

You gave question 5 to a Form 4 class and 1 of your learners' response is shown in appendix 1.

- a) Answer the question [5]
- b) Analyse the student's response in each section. [10]
- c) Comment on how you would help this learner to correct her mistakes. [10]

- 5 **There are 30 students in a class.
20 study Physics, 15 study Chemistry and 3 study neither Physics nor Chemistry.**



- (i) Complete the Venn diagram to show this information. [2]
- (ii) Find the number of students who study both Physics and Chemistry. [1]
- (iii) A student is chosen at random. Find the probability that the student studies Physics but not Chemistry. [2]
- (iv) A student who studies Physics is chosen at random. Find the probability that this student does not study Chemistry. [2]

Question 5

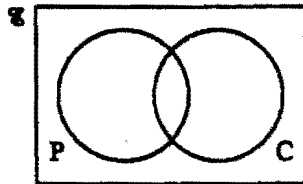
Write an essay discussing issues of language in the teaching and learning of school mathematics. [25]

Appendix 1

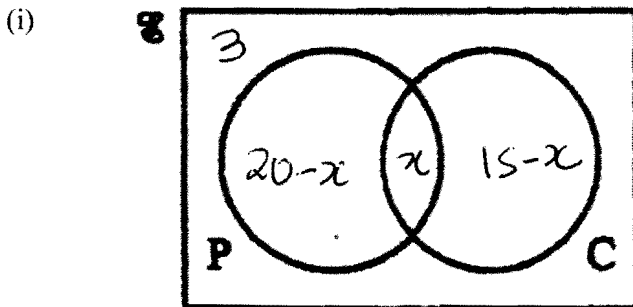
Name: Muki Form 4B

Answer the question on the question paper.

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(ii) 8

(iii) $\frac{4}{9}$

(iv) $\frac{4}{5}$

$$20 - x + x + 15 - x = 27$$

$$35 - x = 27$$

$$8 = x$$

$$\frac{20 - 8}{27} = \frac{12}{27} = \frac{4}{9}$$

$$\frac{20 - 8}{15} = \frac{12}{15} = \frac{4}{5}$$