



UNIVERSITY OF JOHANNESBURG
FACULTY OF EDUCATION
SUPPLEMENTARY EXAMINATION
JULY 2014

PROGRAMME: BED FOUNDATION PHASE
MODULE: MATHEMATICS FOR FOUNDATION PHASE 2A
CODE: MFP10A2
TIME: 3 HOURS
MARKS: 100
EXAMINERS: DR. K. LUNETA
MODERATORS: DR. P. J. MAKONYE

(This paper consists of 3 pages)

INSTRUCTIONS:

Read each question carefully before answering it. Answer all the questions.
Questions can be answered in any sequence but ensure that you clearly number your answers. Calculators are not allowed.

QUESTION 1

Define the following terms

- i. Draw circle and all its parts (3)
- ii. Draw any shape and show its line of symmetry (3)
- iii. Draw any shape and show its plane symmetry (3)
- iv. Draw a net a rectangular pyramid and a rectangular prism (4)
- v. Other than a kite name and draw 5 different quadrilateral shapes (5)

[18]

QUESTION 2

- i. What is a polygon? (1)
- ii. Name 10 different types of polygons other than a kite. (10)
- iii. What is a polyhedron? (1)
- iv. Name 10 different types of polyhedrons (10)
- v. State 5 properties of a kite (5)

[27]

QUESTION 3

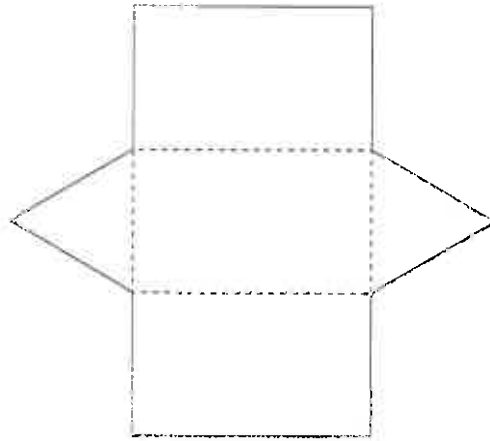
- i. Find the total surface area of a cylinder whose radius is 14 cm and the height is 40 cm and it is closed on both sides. (5)
- ii. Find the total surface area of regular octagonal prism with dimensions 10 cm by 200 cm if it is open on both sides. (8)

[13]

QUESTION 4

1. The shape below is a net of what polyhedron? (1)
- I. How many edges has it got? (1)
- II. How many faces has it got? (1)
- III. How many vertices has it got? (1)
- IV. Find its total surface area if the dimentions of one of the of the rectangles is 20cm by 10cm and the width of the cm. (10)

[14]

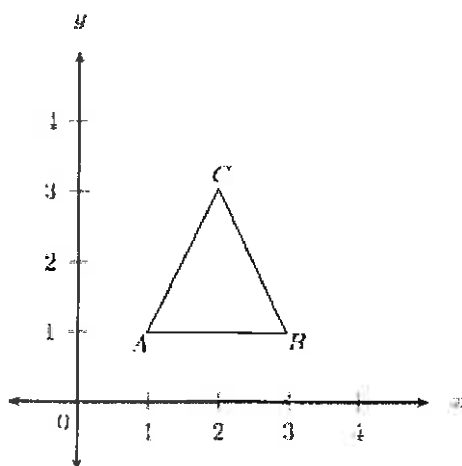
**QUESTION 5**

- I. What is a tessalation? (2)
- II. Draw a tessalation made up of a parallelogram (3)
- III. What do you understand by the terms rigid and non rigid transformations, provide an example of each? (5)

[10]**QUESTION 6**

Given the figure ABC

- i. Draw its image when translated 2 units to the right and 4 unit down (5)
- ii. Draw its image when reflected in the x-axis (5)
- iii. Draw its image when rotated about the origin through 180° clockwise (8)

**[18]**