



MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF SOCIAL SCIENCES

THIRD YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF EDUCATION (ARTS)

BACHELOR OF ARTS

AGE 300: AERIAL PHOTOGRAPHY AND FIELD COURSE

DATE:

TIME:

INSTRUCTIONS: Answer QUESTION ONE and any other TWO QUESTIONS

QUESTION ONE (30 MARKS)

- a) Distinguish between:
- i. Photogrammetry and stereoscope (4 marks)
 - ii. Principal point and nadir (4 marks)
 - iii. High and low oblique air photography (4 marks)
 - iv. Panchromatic film and infrared film (4 marks)
- b) Describe three factors considered in a flight mission (6 marks)
- c) Explain any two methods used in calculating photo scale (4 marks)
- d) Briefly describe different areas where aerial photographs can be applied (4 marks)

QUESTION TWO (20 MARKS)

- a) Assess how the principles of air photo interpretation can be used to classify the major land use in the city of Nairobi (12 marks)
- b) Discuss four probability sampling techniques applied during field course (8 marks)

QUESTION THREE (20 MARKS)

- a) What are the properties of aerial photographs? (6 marks)
- b) Highlight the reasons for a photo mission (6 marks)
- c) Assess the significance of aerial photographs (8 marks)

QUESTION FOUR (20 MARKS)

- a) Assuming that you are required to undertake an aerial mapping of Kathiani hills region, explain the major considerations you have to make in the preparation for the exercise (14 marks)
- b) Describe the type of errors that might occur during the air photo flight mission (6 marks)

QUESTION FIVE (20 MARKS)

- a) Describe the requirements of stereoscopic viewing (8 marks)
- b) Explain how aerial photographs are used in geological mapping and interpretation (12 marks)