



MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF HUMANITIES & SOCIAL SCIENCES

DEPARTMENT OF SOCIAL SCIENCES

**FOURTH YEAR FIRST SEMESTER EXAMINATION FOR
BACHELOR OF ARTS**

ASC 423: SOCIOLOGY OF SCIENCE AND TECHNOLOGY

DATE: 9/8/2021

TIME: 2:00 – 4:00 PM

INSTRUCTIONS: Answer QUESTION ONE and any other TWO QUESTIONS.

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Define the following terms (4 marks)
 - i. Technology
 - ii. Science
- b) Outline four attributes of a scientifically and technologically literate person. (4 marks)
- c) Explain the importance of Scientific literacy. (6 marks)
- d) Discuss some of the ways science and technology has advanced agricultural development in Kenya. (10 marks)
- e) List four water pollutants. (4 marks)
- f) Highlight two scientific skills that scientists apply. (2 marks)

QUESTION TWO (20 MARKS)

- a) Discuss some of the contributions of science and technology to:
 - i) Health.
 - ii) Communication
 - iii) Transportation
 - iv) Appliances in home

QUESTION THREE (20 MARKS)

- a) Define social change. (2 marks)
- b) Analyze four social revolutions of social change. (8 marks)
- c) Discuss Ogburn`s theory of technology and social change. (10 marks)

QUESTION FOUR (20 MARKS)

- a) Define the following terms (4 marks)
 - i. Politics
 - ii. War
- b) Outline the different ways in which politics affects the development of science . (5 marks)
- c) Explain ways through which development in science is affected by war. (5 marks)
- d) Highlight the six weapons of war. (6 marks)

QUESTION FIVE (20 MARKS)

- a) Discuss emerging issues in Science, Technology and Society. (10 marks)
- b) Debate ethical issues in science, scientific research and technological innovation. (10 marks)