

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA.

SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION.

DEPARTMENT OF SCIENCE EDUCATION.

COURSE TITLE: HISTORY AND PHILOSOPHY OF SCIENCE, TECHNOLOGY AND MATHEMATICS
(STM)

COURSE CODE: EDU 211

SESSION: 2015/2016 FIRST SEMESTER EXAMINATION

INSTRUCTION: Answer all the Questions

TIME ALLOWED: 1Hour 30Minutes

1. Rejection of the classical Inductivist views on the scientific method, in favour of empirical Falsification is the popular view of (a) Karl Popper (b) Thomas Kuhn (c) Albert Einstein (d) Ibn Haytham
2. The type of reasoning in which we go from some particular statements to a general conclusion is referred to as: (a) Deductive Logic (b) Inductive logic (c) Theory (d) Scientific Reasoning
3. The method of discovery which emphasizes observation, experimentation, verification and theory construction is: (a) The Deductive Method (b) Scientific discovery (c) The inductive method (d) Inductive and Deductive Method
4. Science is said to be formal if its contents, arguments and procedures
(a) Produce a theory (b) Cannot be falsified (c) Produce formal result (d) obey certain rules
5. The laws of optics was discovered by (a) Ibn al-Haytham (Alhazeen): (b) Ibn Zakariya Al-Razi (Rhases) (c) Albeit Einstein (d) Roger Bacon
6. The earliest historical period of human history in which tools and weapons were made of stone rather than metal is divided into. (a) Rivers and Renaissance periods (b) Paleolithic, Mesolithic, and Neolithic periods. (c) The Dark and Stone ages (d) The Stone, Bronze and Iron Age.
7. Since it is the function of every experiment to test the validity of a scientific guess, the fourth step of the scientific method is (a) Validation (b) Hypothesis formulation (c) experimentation (d) Theory formulation
8. A statement, based on previous observations, that can be tested scientifically is referred to as (a) Scientific Fact (b) A scientific statement (c) A Theory (d) A hypothesis
9. Broadly based concepts that make sense of a large body of observations and experimentation are called (a) Scientific theories (b) Scientific Discoveries (c) Scientific Fact (d) Scientific Method
10. An observations that are deliberately looked out for are called (a) Spontaneous observation (b) Induced observations (c) Direct Observation (d) Scientific observation
11. If you are interpreting observations according to knowledge from past experience, what you are doing is (a) Forming a hypothesis (b) Indirect Observation (c) An inference (d) Theory formulation