

WRAP Exams · wrapexams.com

Prelims PYQ, Mains model answers, and copy evaluation. Write to the desk for this paper, a doubt, or the AI waitlist.

ask@wrapexams.com · +91 85951 84903 · wrapexams.com

Q6(a)

What is science? Do you think that the methods used in natural sciences can be applied to sociology? Give reasons for your answer

UPSC Civil Services Mains 2025 · Sociology GS 1 · 20 marks · Sociology

Sociology - The Discipline: Modernity and social changes in Europe and emergence of sociology; Scope of the subject and comparison with other social sciences; Sociology and common sense.

Core demand of the question

- Define science as systematic, public, testable knowledge
- **State the positivist yes:** methods of natural science can be applied
- **State the no or qualified no:** meaning, experiment, reflexivity, values
- Give reasons on both sides and a judged conclusion

Revision summary

Science means systematic, public, criticisable knowledge, not only lab hardware.

Positivists apply observation, measurement and comparison to social regularities.

Limits include meaning, ethics of experiment, values and the **double hermeneutic**.

Kuhn and feminists complicate even the natural-science side of the contrast.

- **The judged answer is qualified yes:** use the tools, drop the closed-system fantasy.

Sociology remains a science of an open, interpreted world.

Introduction

Science is a public method of producing knowledge that is systematic, open to criticism, and in principle testable against the world. It is not a pile of laboratory instruments. The question is whether the methods that worked for physics and biology-controlled observation, measurement, comparison, law-seeking-can be applied to sociology. Auguste Comte and **Emile Durkheim** answered largely yes. **Max Weber** and later interpretive and critical traditions answered: only in part, and never as a copy of the natural-science laboratory.

Body

Why the methods can be applied

Society shows regularities. Birth, death, crime, voting and prices can be counted. Comparison across groups, as in **Durkheim's** Suicide or in contemporary NFHS tables, is a cousin of Mill's methods. Hypotheses, sampling, reliability and replication are not the property of chemistry. Karl Popper's demand that claims be criticisable travels well. Without some natural-science discipline, sociology collapses into essayistic common sense. Demographic transition, network models and survey experiments in political sociology show that controlled reasoning is possible even when a full laboratory is not.

Why they cannot be copied wholesale

Human beings interpret the investigation, change their behaviour, and live inside values and power. The **double hermeneutic**, in Anthony Giddens's phrase, has no analogue in the study of stones. Experiments on people raise ethics and artificiality; the classic laboratory of physics is rarely available. Meanings require Verstehen. Standpoint feminists and phenomenologists add that the knower is socially located. Thomas Kuhn reminded even natural science that paradigms are historical, so the contrast is not between a perfect physics and a failed sociology.

The reasoned conclusion is **qualified applicability**. Measurement, comparison, models and public criticism should be used wherever the object allows. Participant observation, historical interpretation and critique of categories are still scientific in a broad Weberian sense if they are systematic and honest. What cannot be applied is the fantasy of value-free prediction of a closed system. A village study that names its method and its limits is more scientific than a questionnaire that pretends to be physics. Sociology is a science of an open, meaningful world, not an inferior laboratory discipline.

Flow diagram

Science as public testable method -> Apply counts comparison hypotheses

Science as public testable method -> Cannot copy closed laboratory

Apply counts comparison hypotheses -> Durkheim surveys

Cannot copy closed laboratory -> Verstehen reflexivity

Qualified science of society -> Apply counts comparison hypotheses

Qualified science of society -> Cannot copy closed laboratory

Conclusion

Natural-science methods of comparison, measurement and public testing can and should be used in sociology. They cannot be the whole method, because social objects interpret back and are value-laden. Science here means disciplined inquiry, not a borrowed laboratory coat.

Facts & figures

Comte and Durkheim

Founding claim that society can be studied with a scientific spirit of observation and comparison.

Double hermeneutic

Giddens: sociologists interpret actors who already interpret themselves and the research.

Survey as partial analogue

Sampling and measurement supply public tests without claiming a physics-style closed experiment.