

**Fourth Semester FYUGP Degree (Reg) Examination April  
2026**

**KU4DSCISH203 - HISTORY OF SCIENCE AND  
TECHNOLOGY IN ISLAM**

2024 Admission onwards

Time : 2 hours

Maximum Marks : 70

**Section A**

**Answer any 6 questions. Each carry 3 marks.**

1. Explain Al-Biruni's contribution to the measurement of specific gravity in mineralogy.
2. What was the significance of the "Tusi Couple" in medieval Islamic cosmology?
3. What was the impact of Arabic numerals on European mathematics?
4. Mention the contribution of Michael Scot to the transmission of science.
5. Who was Gerard of Crémone and why is he famous?
6. Identify two religious requirements that influenced scientific development within Islamic civilization
7. Define the Qanat System and its importance in agriculture development of early Islamic period
8. Identify the role of libraries in the Islamic scientific tradition.

**Section B**

**Answer any 4 questions. Each carry 6 marks.**

9. Explain the specific contributions of Adelard of Bath to transmission of Arabic Science to Europe
10. Analyze the historical background of introducing Arabic Science to Europe in Spain
11. Explain the contribution of Alfred of Sereshel to translation of Arabic Science
12. Discuss the various needs of the society which drove the scientific advancement in Islamic civilization
13. Examine the role of academies in the development of the science and technology

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14. Explain how the Islamic state's policies fostered an environment for scientific growth

**Section C**

**Answer any 2 questions. Each carry 14 marks.**

15. Discuss the scientific culture of Sicily under Frederick II and its role in the preservation and translation of Islamic knowledge.
16. Critically examine the development of Optics in Islamic science and its subsequent influence on Western scientific theories.
17. Discuss the development of Zoology and Botany in the medieval Arab world. Explain how these sciences were not merely academic but were driven by the practical "needs of society," including medicine and industry.