

M.A. PHILOSOPHY (MAPY)

Term-End Examination

December, 2015

**MPYE-009 : PHILOSOPHY OF SCIENCE AND
COSMOLOGY**

Time : 3 hours

Maximum Marks : 100

- Note :** (i) *Answer all the questions.*
(ii) *All questions carry equal marks.*
(iii) *Answers to question no.1 and 2 should be in about 500 words each.*

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1. Examine various metaphysical issues which are related to philosophy of science. **20**
OR
Discuss the contributions of A.J. Ayer and Karl Popper to the progress of philosophy of science. **20**
2. 'Quantum mechanics has changed our World-View'. Comment. **20**
OR
Bring out the philosophical significance of the distinction between space and time on the one hand and space-time continuum on the other. **20**
3. Answer **any two** of the following in about **250** words each :
(a) Can philosophy of science exist in the absence of philosophy or science ? Justify your answer. **10**

- (b) Distinguish between history and historicism. 10
- (c) Examine the philosophical implications of uncertainty principle. 10
- (d) 'Aristarchus of Samos is the precursor of copernicus'. Justify this statement against the backdrop of geocentric theory of the universe. 10
4. Answer **any four** of the following in about **150** words each :
- (a) Give a brief account of the feminist's criticism of science. 5
- (b) Describe Kepler's principal contribution to astronomy. 5
- (c) Characterize normal science and non-normal science. 5
- (d) How does heat death result in the annihilation of the universe ? 5
- (e) Is there any element common to science and religion ? 5
- (f) What do you understand by infinity of space and time ? 5
5. Write short notes on **any five** of the following in about **100** words each :
- (a) Dark matter 4
- (b) Milky way 4
- (c) Paradigm Shift 4
- (d) Structure of Theory 4
- (e) Time Dilation 4
- (f) Schrodinger's Cat 4
- (g) Bubble universe 4
- (h) Reason and faith 4
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