

M.A. PHILOSOPHY (MAPY)

Term-End Examination

December, 2012

00662

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

Time : 3 hours

Maximum Marks : 100

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- Note :* (i) *Answer all the five 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. Define philosophy of Science. Write an essay on the relation between metaphysics and philosophy of science. **20**

OR

Write an essay on quantum mechanics, differentiating it from classical physics. Explain the practical value of quantum mechanics. **20**

2. Is the universe infinite or finite ? Give a detailed overview of the expanding Universe. **20**

OR

Explain and differentiate scientific and religious outlooks regarding ultimate truth. Does scientific perspective of truth differ from religious perspective of truth? Explain. **20**

3. Answer *any two* of the following in about **250 words** each :
- (a) Bring out the Special and General theory of Relativity in detail. **10**
 - (b) Explain various methodological problems in social science. **10**
 - (c) Discuss the three broad areas of inquiry of philosophy of science. **10**
 - (d) Define historicism. Explain briefly historicist's challenges to logical positivism. **10**
4. Answer *any four* of the following in about **150 words** each :
- (a) Give an account of the puranic view of the universe. **5**
 - (b) Explain the relevance of "the context of observation". **5**
 - (c) Make clear the notion of heat death. **5**
 - (d) Explain verification theory. **5**
 - (e) Provide a simple definition of uncertainty principle. **5**
 - (f) Describe the steady state theory. **5**

5. Write short notes on **any five** of the following in about **100 words** each :

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| (a) Brahmanda or "cosmic egg". | 4 |
| (b) Generalization | 4 |
| (c) Hypotheses | 4 |
| (d) Relativity of simultaneity | 4 |
| (e) Quantum | 4 |
| (f) Big crunch | 4 |
| (g) Momentum | 4 |
| (h) False vacuum | 4 |
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