

**M.A. PHILOSOPHY (MAPY)**

**Term-End Examination**

**December, 2016**

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

*Time : 3 hours*

*Maximum Marks : 100*

- Note :** (i) *Answer all 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. Discuss elaborately the big bang theory and give your philosophical reflections on it. 20

**OR**

What is uncertainty principle ? Discuss its philosophical implications. 20

2. Who are the logical positivists ? Give their interpretation of science. How do you respond to their criticism ? 20

**OR**

Critically discuss the Indian Cosmology. Give your philosophical appraisal of it in comparison to scientific cosmology. 20

3. Answer **any two** of the following in about **250** words each.
- (a) Describe the contribution of Galileo Galilei to science in general and cosmology in particular. 10
  - (b) What is "Theory Ladedness of observation"? Give your criticism of it. 10
  - (c) Discuss some of the challenges and difficulties of Copenhagen interpretation. 10
  - (d) Is the universe finite or infinite according to contemporary scientific theories ? Discuss. 10
4. Answer **any four** of the following in about **150** words each.
- (a) How do you relate reason to faith ? 5
  - (b) Mention some practical values of quantum mechanics. 5
  - (c) How does Larry Landen understand science ? 5
  - (d) What is cosmological principle ? 5
  - (e) What is the main contribution of Johannes Kepler to Astronomy ? 5
  - (f) How do you understand heat death theory of the end of the universe ? 5
5. Write short notes on **any five** of the following in about **100** words each.
- (a) Big Bounce 4
  - (b) Relativity of time 4
  - (c) Dark matter 4
  - (d) Scientific realism 4
  - (e) Carl Hampel 4
  - (f) Research Tradition 4
  - (g) Brahmanda 4
  - (h) General theory of relativity. 4