

M.A. PHILOSOPHY (MAPY)

Term-End Examination

June, 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.*

1. Explain historical realism and give your critical observations on it. 20

OR

Elaborate on the philosophical significance of Relativity theory.

2. Write an essay on the role of values in science. 20

OR

Discuss any one important theory on the end of the universe and give your critique of the same.

3. Answer any two of the following in about 250 words each :
- (a) What is the principle of causality ? Is it important for science ? Discuss. 10
- (b) Discuss the discovery theory of science. 10

- (c) Describe space-time as the ultimate stuff of the matrix of the universe. 10
- (d) What is "Theory ladedness of observation?" Give your criticism of it. 10
4. Answer any four of the following in about 150 words each :
- (a) Describe any one ancient theory on the world model. 5
- (b) Mention some practical values of quantum mechanics. 5
- (c) What is historicist's challenges to logical positivism? 5
- (d) Give the difference between hypothesis and theory. 5
- (e) What is inductive reasoning? 5
- (f) Describe some implications of uncertainty principle. 5
5. Write short notes on any five of the following in about 100 words each :
- (a) Big Bounce 4
- (b) Momentum 4
- (c) Dark energy 4
- (d) Wave mechanics 4
- (e) WIMP 4
- (f) Scientific realism 4
- (g) Verification theory 4
- (h) Hubble's law 4
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