

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**M.A. DEGREE EXAMINATION – PHILOSOPHY****SECOND SEMESTER – APRIL 2023****PPL2MC01 – PHILOSOPHY OF NATURE**

Date: 25-04-2023

Dept. No.

Max. : 100 Marks

Time: 09:30 AM - 12:30 PM

SECTION A – K1 (CO1)**Answer ALL the questions****(5 x 1 = 5)****1. Fill in the blanks**

- a) The term 'positivist' was coined by _____
A) Francis Bacon B) Carl Hempel C) Auguste Comte D) Popper
- b) The laws of planetary motion were drawn by _____
A) Galileo B) Kepler C) Newton D) Newton
- c) Kuhn in his account of philosophy of science refutes falsification theory of
A) Ian Hacking B) Newton C) Popper D)Hempel
- d) According to 'Big Bang' theory, Universe had a beginning in _____
A) God B) universal Force C) Primeval Atom D) Nothingness
- e) Einstein's Theory of Space-Time asserts that they are
A)Absolute B) Relative C) As one continuum entity D)Two separate entities

SECTION A – K2 (CO1)**Answer ALL the questions****(5 x 1 = 5)****2. Match the following**

- | | |
|-------------------------|--------------------|
| a) Idols of the Market | i) Einstein |
| b) Theory of Relativity | ii) Satellite |
| c) Max Planck | iii) Francis Bacon |
| d) Moon | iv) Hoyle |
| e) Big Bang | v) Quantum Physics |

SECTION B – K3 (CO2)**Answer any THREE of the following in 300 words****(3 x 10 = 30)**

3. Describe the Lambda-CDM model of the universe.
4. What, according to Bacon, are the four idols that the scientist must avoid to acquire true knowledge?
5. Describe and evaluate the 'heat-death' theory of the universe
6. Distinguish between classical physics and quantum physics
7. Explain the General theory of Relativity and its implications.

