LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034



M.A. DEGREE EXAMINATION - PHILOSOPHY

THIRD SEMESTER - NOVEMBER 2016

PL 3809 - PHILOSOPHY OF SCIENCE

Date: 27/10/2016 Time: 09:30-12:30

Part-A

Answer the following (6 x 6=36 Marks)

- 1. How is Philosophy related to Science and Technology?
- 2. Enumerate the Relativity Theories of Einstein.
- 3. Define Heisenberg's Principle of Uncertainty.
- 4. What is 'paradigm shift,' in the history of science?
- 5. Define the terms 'Cosmogony,' 'Cosmology,' and 'Cosmography.'
- 6. What is Francis Bacon's view on scientific method?

PART-B

Answer the following $(4 \times 16 = 64 \text{ Marks})$

7. A. Explain the problem of Induction and critically assess various attempts of resolving it.

OR

- B. Enumerate the scientific procedure of observation, description, explication, reduction.
- 8. A. Critically assess modern understanding of Space and Time in the light of Quantum Mechanics and Theories of Relativity.

OR

- B. Estimate the issues in scientific understanding of the world from the perspective of Reductionism and Hylemorphism.
- 9. A. Explain Big Bang Theory in the light of recent discoveries and understanding of the universe. How do you evaluate the theories of origin and end of the universe?

OR

- B. What are the characteristics of the universe as evident from science and philosophy?
- 10. A. Analyze the notion of 'value-neutrality' for science in the light of social/moral responsibility of scientists and reflect about the role of religion in scientific activities.

OR

B. How does Thomas Khun refute claims of logical positivists' about scientific activities?
