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LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

M.A. DEGREE EXAMINATION – **PHILOSOPHY**

THIRD SEMESTER - NOVEMBER 2022

PPL 3503 - PHILOSOPHY OF SCIENCE

Date: 07-12-2022 Dept. No. Max. : 100 Marks

Time: 09:30 AM - 12:30 PM

PART-A

Answer the following:

(6X6=36 Marks)

- 1. What is Deductive Nomological explanation? Explain its advantage with examples.
- 2. What, according to Bacon, are the four idols that the scientist must avoid to acquire true knowledge?
- 3. Highlight the Lambda-CDM model of the universe.
- 4. Explain Lemaitre's theory of the origin of the universe and bring out its strength and weaknesses
- 5. Describe the 'heat-death' theory of the universe.
- 6. What is objectivity in science? Illustrate how Thomas Kuhn refutes objectivity in science.

PART-B

Answer the following questions

(4X16=64 Marks)

7A. What are the chief characteristics of empirical sciences? Describe.

OR

- 7B. How is science distinguished from non-science? Is the demarcation criterion proposed by Popper sound?
- 8A. Describe the Special Theory of Relativity and highlight and its philosophical implications.

OR

- 8B. What are the various types of explanations? Discuss each one with examples.
- 9A. How is the ultimate fate of the universe related to matter density and the shape of the universe. Elaborate.

OR

- 9B. Explain the General theory of Relativity and its implications.
- 10A. What are the philosophical implications of Kuhn's position on history of science?

OR

10B. Explain the big bang model of the universe and discuss the evidences for it.

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