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Register Number:

DATE: **4** **-04-2018 (9 AM)**

**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU-27**

**UG – IV SEMESTER**

**SEMESTER EXAMINATION: APRIL 2018**

**PHOE 4316: Wonders of Physics**

**Time: 1½ hours. Max. Marks: 35**

**PART A**

Answer any **five** questions. Each question carries 5 marks  **5x5 = 25**

1. What are the different ways of arriving at knowledge? Give one example for each.

2. What do you understand by a tri-universe? Explain.

3. Briefly write a note on how size and distance of astronomical objects has induced a sense of     wonder in you.

4. Explain the semantic, pragmatic and Apobetics levels of time with examples.

5. How did Quantum physicist Erwin Schrödinger revolutionize modern biology with his book     what is life? Is information is a non material entity. Justify.

6. Do you think the Earth has a special significance in the vast cosmos? Explain.

7. Explain the fact that the universe had a beginning based on the laws of logic,     thermodynamics and causality.

8. Write a note on any three attributes of time.

**PART B**

**This is a compulsory question. 1x10=10**

9. Write in about 150 words on your experience in demonstrating your experiment in the class

PH-4316-A-18