LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034			
M.A. DEGREE EXAMINATION – PHILOSOPHY SECOND SEMESTER – APRIL 2023			
			PPL2MC01 – PHILOSOPHY OF NATURE
Ι	Date: 25-04-2023 Dept. No. Max. : 100 Marks		
Т	Time: 09:30 AM - 12:30 PM		
SECTION A – K1 (CO1)			
	Answer ALL the questions $(5 \times 1 = 5)$		
1.	Fill in the blanks		
a)) The term 'positivist' was coined by		
	A) Francis Bacon B) Carl Hempel C)	Auguste ComteD) Popper	
b)	The laws of planetary motion were drawn by		
	A) Galileo B) Kepler C) Ne	ewton D) Newton	
c)	Kuhn in his account of philosophy of science refutes falsification theory of		
,	A) Jan Hacking B) Newton C) Popper D)Hempel		
4)	A) fail flacking b) Newton C) f opper D) fremper		
a)	According to Big Bang theory, Universe had	a beginning in	
	A) GodB) universal ForceC) Primeval AtomD) 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 $(5 \times 1 = 5)$		
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?		
Э. С	Describe and evaluate the 'heat-death' theory of the universe		
0. 7	Distinguish between classical physics and quantum physics		
/.	Explain the General theory of Relativity and it	s implications.	

SECTION C – K4 (CO3)			
	Answer any TWO of the following in 500 words (2 x 12.5 = 25)		
8.	Explain Newton's Law of motion and its impact of world view on mechanistic view of		
	nature.		
9.	What are the philosophical implications for the theory of relativity?		
10.	0. Compare and contrast the Aristotelian Cosmology with Copernican Cosmology.		
11.	11. Explain the Big Freeze model as described for the fate of the Universe.		
SECTION D – K5 (CO4)			
	Answer any ONE of the following in 750 words (1 x 15 = 15)		
12.	Examine Lemaitre's theory of the origin of the universe and bring out its strength and		
	weaknesses.		
13.	Analyse the contribution of Copernicus, Kepler and Galileo in proving the heliocentric		
	universe.		
SECTION E – K6 (CO5)			
	Answer any ONE of the following in 1000 words(1 x 20 = 20)		
14.	How is the ultimate fate of the universe related to matter, density and the shape of the		
	universe?		
15.	Discuss the Principle of Indeterminacy and its philosophical implications and see whether		
	this principle imply ontological indeterminism.		
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