PRN:		Course Code :	U22IK101

First Year **B. Sc.** End Semester Examination Winter 2024 000616

Evolution of Science & Technology in World, & India

Day and Date: Fri 6 DEC 2024 Max Marks: **35**

Time : 10:30AM To 12:30PM Duration: **02** hrs

Instructions: All questions are compulsory.

			Marks	Bloom's Level	CO
Q.1		**Attempt the following**			
	a)	Name one contribution of an Indian physicist to particle physics.	01	L2	CO1
	b)	What is the significance of nanotechnology in ancient Indian physics?	01	L2	CO2
	c)	Describe an application of Raman Spectroscopy in modern research	01	L2	CO3
	d)	Why is the conservation of medicinal plants important?	02	L2	CO3
	e)	What is Vedic Mathematics and its historical significance?	02	L2	CO4
Q.2		**Attempt any two from the following**			
	a)	Who are some prominent Indian physicists, and what are their contributions to physics?	04	L2	CO1
	b)	What are the major components of the Indian Knowledge System? **Ans:** Mark distribution each step:1 mark	03	L2	CO1
	c)	How did the Indian Knowledge System originate?	03	L2	CO1
Q.3		**Attempt any two from the following**			
	a)	State advantage and disadvantage of Raman Spectroscopy	04	L2	CO2
	b)	Which plant parts are used in Ayurvedic treatments?	03	L2	CO2
		OR			
	c)	What is Raman Effect and write note on it.	03	L2	CO2

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Q.4		**Attempt any two from the following**			
	a)	State and Explain Applications of Vedic Mathematics	04	L2	CO2
	b)	State Applications of RAMAN spectrometer	03	L2	CO2
		OR			
	c)	Characteristic Properties of Raman line	03	L2	CO2
Q.5		**Attempt any two from the following**			
	a)	Apply the Nikhilam Sutra to multiply numbers close to a base, and analyze the step-by-step process in solving problems such as 92×93, 90×99, and 97×94.	04	L4	CO3
		OR			
	b)	State and Explain Applications of Vedic Mathematics	03	L2	CO3
	c)	Apply the Ekadhikena Purvena Sutra to Square numbers end with 5, and analyze the step-by-step process in solving problems such as 15, 55, and 195.	03	L2	CO4

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