

	Reg. No.:	
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Mid-Term Examinations – August 2021

Programme	: B.Tech. [BCE]	Semester	: Fall 2021-22
Course	: Energy & Environmental Physics	Code	: PHY2002
Faculty	: Dr. Suchetana Sadhukhan	Slot/ Class No.	: F11+F12/ 0247
Time	: 1 ½ hours	Max. Marks	: 50

Answer all the Questions

Q.No.	Sub. Sec.	Question Description	Marks
1	(a)	Figure out 5 different types of energy transformations in a car. What would be your suggestion to make it more energy sustainable transport.	10
	(b)	You are helping your friend in shifting to a new house nearby. You are carrying his heavy suitcase from ground floor of old house to ground floor of the new house. You must apply an upward force to the suitcase otherwise it will fall due to gravitational force. You feel very tired. But, at last, your friend claims that you have done no work! Justify him.	6
2		Global warming is causing climate changes and becoming a serious threat to life. Discuss it in the light of solar radiation and greenhouse effect.	10
3		Define black body and grey body emphasising on the differences and similarity.	6
4		How does a refrigerator reflect the Second Law of Thermodynamics?	8
5		What is fractional distillation process and how does it work?	10

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