

INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

End-Spring Semester 2022-2023

Subject Name: **Energy Economics and Policy**
Time: **3 hours**
Department: **Humanities and Social Sciences**

Subject No. **HS60092**
Full Marks: **50**
No of Students: **91**

Answer any seven of the following questions.

Note: Question 7 is mandatory.

1. The countries focusing on fossil fuels could experience economic instability in the presence of geo-political risks. Give your thoughts. (Mark: 7)
2. Conceptualize the difference between primary and secondary fuels and discuss the reasons why primary fuels have greater energy content efficiency than the secondary fuels. (Mark: 7)
3. The traditional growth model harms environmental quality. It is a question of growth design that you can suggest for sustainable development in long run. (Mark: 7)
4. Discuss the redistributive and regenerative roles of renewable energy in achieving the inclusive and thriving environment. (Mark: 7)
5. The age of high mass consumption continues to demand more of fossil fuels for better economic growth but at the cost of natural environment. In this context, bring the role of institutions how it can introduce the clean energy into the economic activities. (Mark: 7)
6. Specify how doughnut economics can promote the use of clean energy through which emerging economies can continue to have thriving environment in long-run. (Mark: 7)
7. Explain energy displacement hypothesis in your own words. If the energy displacement coefficient of an economy is -1.50, then explain the extent of energy transition. If the energy displacement coefficient is -0.50, explain the extent of energy transition. Further provide the long-run environmental implications of both the cases. (Mark: 8)
8. Define tragedy of the commons. Explain how the community management of resources is better than the public and private management of resources. (Mark: 7)