

Chapter-Friction

Question (Full Marks =10)

***** You can use your textbook or class notes. *****

Friction often converts kinetic energy into heat, leading to energy loss in machines and everyday activities. Answer the following:

1. **Explain how friction causes energy loss in machines.** Use the example of a car engine or a bicycle to illustrate your answer. (4)
2. **Describe two methods used to reduce energy loss due to friction in mechanical systems.** How do these methods work? Provide examples from the textbook. (4)
3. **In some situations, converting kinetic energy into heat through friction is beneficial.** Provide one example where this is advantageous and explain why. (2)