Worksheet: Life on the Earth (Biosphere and Ecosystems)

IB · Class 11 · Geography · 3 questions · 12 marks

Name: _____	Date: _____	Score: _____ / 12

Q1. A grassland food chain is: Grass 'Grasshopper 'Frog 'Snake 'Eagle. If the grass contains 10,000 kcal of energy, (a) how much energy does the grasshopper receive? (b) How much does the eagle receive? (c) Why is it inefficient for humans to eat meat instead of grain? *[3 marks]*

Q2. Match each biome to its climate conditions and give ONE specific location and ONE characteristic plant or animal adaptation:
(a) Tropical Rainforest (b) Taiga/Boreal Forest (c) Desert (d) Tundra *[4 marks]*

Q3. The Sariska Tiger Reserve in Rajasthan lost ALL its tigers by 2005 due to poaching, despite being a protected area. Using the concepts of food chain, food web, and ecosystem stability, explain: (a) what happens to the ecosystem when apex predators are removed, (b) why food webs are more stable than simple food chains, and (c) what conservation strategy can restore apex predator populations. *[5 marks]*