

PART – A

[100 marks]

1. a) Bio-Geo chemical cycle.  
b) Species diversity  
c) Primary productivity  
d) Marine parks  
e) Sanctuaries  
f) Key elements in disaster management.  
g) Global warming  
h) Harmful algal blooms (HAB)  
i) Survival tools and kits used in fishing vessels.  
j) Fouling organisms

[5×9=45]

PART – B

2. Define and classify estuary. Write briefly the estuarine productivity.
3. What are mangroves? Write briefly the importance of mangroves in relation to fisheries?
4. What are the efforts to be taken to mitigate disaster?
5. Explain the role of State Govt. agencies for disaster management of coastal fisheries.
6. What are the conservation programmes undertaken and management practices adopted for endangered species?
7. What do you mean by early warning system and how it is going to minimize the impact of disaster?
8. Write short notes (any **Three**):-  
a) Threats to biodiversity  
b) Over fishing  
c) Symbiosis  
d) Community based preparedness  
e) El-nino

[3×3=9]