

B. TECH.
(SEM-I) THEORY EXAMINATION 2019-20
ENVIRONMENT AND ECOLOGY

Time: 3 Hours**Total Marks: 100****Note:** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief.****2 x 10 = 20**

a)	On which date world environment day is celebrated?
b)	Define eutrophication and its causes.
c)	Differentiate between bioaccumulation and biomagnification.
d)	Differentiate between renewable and non renewable energy sources.
e)	Differentiate between food chain and food web.
f)	Enlist few toxic heavy metals and respective diseases caused by them.
g)	What is GHG's? Name six GHG's present in troposphere.
h)	Differentiate between necrosis and chlorosis.
i)	What are hot spots of biodiversity?
j)	Which toxic gases are released due to burning of plastic?

SECTION B**2. Attempt any three of the following:****10x3=30**

a.	How environmental education can bring sustainable development?
b.	What are the major causes and consequences of deforestation and desertification?
c.	Define biogeochemical cycle. With the help of neat and clean sketch explain nitrogen cycle in ecosystem.
d.	Define Arsenicosis. Discuss the case study of arsenic poisoning in drinking water. Discuss the impact of air pollution on plants, animals and materials.
e.	e) Discuss all the steps of Environmental Impact Assessment done for hydroelectric power plant.

SECTION C**3. Attempt any one part of the following: 10x1=10**

a.	With the help of diagram explain hydrological cycle and explain all the water quality parameters.
b.	Discuss in detail various segments and composition of atmosphere.

4. Attempt any one part of the following: 10x1=10

a.	Discuss the deteriorating effects of modern agricultural activity and transportation on man and environment.
b.	How non conventional energy resources may contribute to a better environment?

5. Attempt any one part of the following: 10x1=10

a.	Define biodiversity. Discuss in detail the in situ and ex situ conservation strategy.
b.	Define Ecosystem. Give an account of the structure and functions of an ecosystem.

6. Attempt any one part of the following: 10x1=10

a.	With the help of neat and clean flow chart explain various treatments involved in sewage treatment plant.
b.	Discuss in detail solid waste management.

7. Attempt any one part of the following: 10x1=10

a.	On what mechanism global warming is based upon? Elaborate the various impacts of global warming.
b.	Discuss the salient features of the Water (Prevention and Control of Pollution) Act, 1974 elaborating the functions and responsibility of CPCB and SPCB.