



Name:

Enrolment No:

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Theory Examination, July 2020

Course: Environmental Studies

Program: B.Sc (F, N&D)

Course Code: HSFS1001

Semester: II

Time :3hrs.

Max. Marks: 100

Instructions: Read questions carefully. All questions are compulsory

1	CO3	Effect of thermal pollution is/are	Toxicity of pesticides, detergents and chemicals in the effluents increases with increase in temperature	Fish migration is affected due to formation of various thermal zones	Both (a) and (b)	None of these
2	CO3	Identify the technology adopted to control thermal pollution.	Bag house filter	Cooling tower	Settling chamber	Cyclone
3	CO2	Identify the strategies that can be adopted for water conservation.	Contour cultivation	Surface crop residues,	Water spreading	All of these
4	CO3	Identify the human activities that have been the main cause (s) for increasing the severity and frequency of floods.	Clearing of forests for agriculture	Construction of roads	Both (a) and (b)	None of these
5	CO1	BOD stands for _____	biological oxygen demand	biological oxygen decay	biomedical oxygen demand	None of these
6	CO2	Tea gardens in Chhota Nagpur has disappeared due to _____	deforestation	Soil erosion	landslide	None of these
7	CO1	Highest Dam in India is _____	Tehri	Bhakra	Sardar Sarovar	Hirakund
8	CO1	The Satluj-Yamuna link (SYL) canal dispute is between Punjab and _____	Haryana	Uttar Pradesh	Uttarakhand	Orissa
9	CO2	Effects of groundwater usage is/are	Subsidence	Lowering of water table	Both (a) and (b)	None of these
10	CO4	Nature has provided us with all the resources for leading a beautiful life and she nourishes us like a mother, we should respect her and	Man-centric	Eco centric	Both (a) and (b)	None of these

		nurture her” , this is _____ thinking.				
11	CO3	Grassland ecosystem shows _____ pyramid of numbers.	Upright	Inverted	Spindle	None of these
12	CO3	Functional attributes of an ecosystem is/are	Food chain	producer	Both (a) and (b)	None of these
13	CO2	Economically unproductive lands suffering from environmental deterioration are known as _____	Wastelands	Sanitary landfill	Both (a) and (b)	None of these
14	CO3	Solid waste can be disposed by	Incineration	Composting	Sanitary landfill	All of the above
15	CO1	World environment day is celebrated on _____	05 june	05 july	05 may	None of these
16	CO2	Benefits of big dams is/are	providing employment	control water pollution	displacment of tribal people	None of these
17	CO1	The succession starting in dry area with little moisture is known as _____	Mesosere	Hydrosere	Xerosere	All of the above
18	CO1	Wildlife act, a landmark in the history of wildlife legislation in our country, came into existence in _____ year.	1971	1972	1973	1974
19	CO2	_____ a foul smelling gas, added to LPG so that any leakage of LPG from the cylinder can be detected.	Ethyl mercaptan	Propane	Ethane.	Methane
20	CO4	If you are a climate change expert you have suggested few solutions /steps to slow down the process of global warming. Select the correct solutions	Shift to renewable energy resources	stabilizing the population growth	reduce beef production	All of these
21	CO1	The urban solid waste materials that can be degraded by microorganisms are called _____ wastes.				

22	CO1	Thermal pollution can be defined as presence of waste oil in the water which can cause undesirable changes in the natural environment.	True/False			
23	CO1	CPCB stands for _____				
24	CO2	Species which are restricted only to a particular area are known as _____				
25	CO2	_____ the cure for malaria is obtained from the bark of Cinchona tree.				
26	CO2	Sometimes, the loss of habitat is in instalments so that the habitat is divided into small and scattered patches, a phenomenon known as _____				
27	CO3	Carbon monoxide (CO) reaches lungs and combines with haemoglobin of blood to form _____				
28	CO3	In 1953, people in Japan suffered from numbness of body parts, vision and hearing problems and abnormal mental behaviour. This disease is known as _____				
29	CO3	Substances like DDT are not water soluble and have affinity for body lipids. These substances tend to accumulate in the organism' s body. This process is called _____				
30	CO4	If you are an earthquake expert name the type of house you will recommneded in				

		earthquake prone area _____				
31	CO1	Pollen grain is an example of natural source of air pollution.	True/False			
32	CO1	The point on a fault at which the first movement occurs during an earthquake is called the _____				
33	CO1	Forest act deals with the conservation of forests and related aspects. Except _____, the act is adopted all over India.				
34	CO2	First step of ecological succession process is _____				
35	CO2	Grazing food chain starts with _____ and culminates in carnivores.				
36	CO2	_____ is a nuclear change in which nucleus of certain isotopes with large mass numbers are split into lighter nuclei on bombardment by neutrons and a large amount of energy is released through a chain reaction.				
37	CO3	In dry cooling tower, hot water is sprayed over baffles. Cool air entering from sides takes away the heat and cools the water. This cool water can be recycled or discharged.	True/False			

38	CO3	In nitrogen cycle, after death of the plants and animals, the organic nitrogen in dead tissues is decomposed by several groups of ammonifying and nitrifying bacteria which convert them into ammonia, nitrites and nitrates, which are again used by plants.	True/False			
39	CO3	Oxygen gas and its radioactive daughters are responsible for a large number of lung cancer deaths each year.	True/False			
40	CO4	You are an environmental engineer in a government organization. During one of your official visits you find that there are a large number of hot springs in the state. So you suggest _____ energy to be harnessed from the hot springs to meet the energy demand of the state.				
41	CO4	Nitrate when present in excess in drinking water causes _____	Methaemoglobinemia or blue baby Syndrome	Itai-Itai	Typhoid	Fluorosis
42	CO3	The greenhouse gases present in the troposphere is/are	Carbon dioxide	Methane	Chlorofluorocarbons	All of these
43	CO3	Pollution by another heavy metal cadmium in drinking water had caused the disease called _____ in the people of Japan	Minimata disease	Itai-Itai	Blue baby syndrome	Fluorosis
44	CO3	The United Nations Universal Declaration on Human Rights [Article _____] has declared that right to	25(1)	25(3)	25(2)	25(7)

		housing is a basic human right.				
45	CO1	Ozone molecule contains _____ oxygen atom	one	two	three	Four
46	CO1	Cholera, Dysentery, Typhoid and Jaundice are an example of _____	water borne disease	air borne disease	soil borne disease	None of these
47	CO1	_____ is a type of mining in which chained buckets and draglines are used which scrap up the minerals from under-water mineral deposits.	Dredging	Open-pit mining	Strip mining	None of these
48	CO2	Major consequences of deforestation is /are _____	Hydrological cycle gets affected	Problems of soil erosion	landslides.	All of these
49	CO2	Anthracite, Bituminous and Lignite are examples of _____	Coal	Copper	Iron	Gold
50	CO4	Identify the strategy which is adopted for cyclones management.	deforestation	construction of dams	Water spreading	None of these
51	CO2	Landslides occurs when coherent rock of soil masses move downslope due to gravitational pull.	True/False			
52	CO1	There are two popular indices of measuring species diversity known as Shannon-wiener index and Simpson index	True/False			
53	CO1	A large number of windmills installed in clusters called _____				
54	CO1	Excessive fertilizers use in Punjab and Haryana has caused deficiency of the micronutrient _____ in the soils, which is affecting productivity of the soil.	Zinc			
55	CO1	PCBs stands for _____				

56	CO4	Select the correct methods adopted to control noise pollution.	Reduction in sources of noise	Through Law	Planting more trees having broad leaves	All of these
57	CO2	The Cauvery river water is a bone of contention between Tamilnadu and Maharashtra.	True/False			
58	CO1	The term hotspot of biodiversity was coined by _____				
59	CO2	_____are the organisms derive their nutrition by breaking down the complex organic molecules to simpler organic compounds and ultimately into inorganic nutrients.				
60	CO4	To protect soil from erosion, a form of inter cropping is done in which crops are planted between rows of trees or shrubs. This form of intercropping is called _____				
61	CO3	Effects of Ozone Depletion is /are	Biomagnification	It will result in decrease in their population thereby affecting the population of zooplankton, fish, marine animals, in fact the whole aquatic food chain.	Both (a) and (b)	None of these

62	CO4	<p>You are a solid waste management specialist of X town. During one of your official visit you find that X city is facing a problem for disposing solid waste. So you propose a technique in which garbage is spread out in thin layers, compacted and covered with clay or plastic foams. The bottom layer of garbage is covered with an impermeable liner, usually several layers of clay, thick plastic and sand. The liner protects the ground water from being contaminated due to percolation of leachate. Leachate from bottom is pumped and sent for treatment. Name this proposed technique/ method _____</p>				
63	CO2	<p>_____aquifers which are overlaid by permeable earth materials and they are recharged by water seeping down from above in the form of rainfall and snow melt whereas _____aquifers are sandwiched between two impermeable layers of rock or sediments and are recharged only in those areas where the aquifer intersects the land surface.</p>				
64	CO1	<p>NBPGR stands for _____ and is located in _____</p>				

65	CO1	The Antarctic ozone hole was discovered by _____ and his colleagues in the British Antarctic Survey who had been recording ozone levels over this region since _____ year				
66	CO4	Suggest a control method, which can be adopted to control adverse effect of acid rain on lake and river water quality.				
67	CO3	It is estimated that the earth's mean temperature will rise between _____ °C to _____ °C by 2050				
68	CO2	The main greenhouse gas _____ is absorbed by the forests as a raw material for _____				
69	CO1	Bhakra dam is situated on river _____ in _____				
70	CO1	Each food level is known as _____ and the amount of living matter at a given time is known as _____				
71	CO4	It is witnessed that in rural area, villagers are opting for biogas as a fuel. Select the reasons due to which biogas is becoming a popular choice among the villagers	cheap	clean	non polluting	All of these
72	CO3	The effects of air pollution on plant is/ are	necrosis	abscission	epinasty	All of these
73	CO2	Chemical conditioners like _____ when applied to sodic soils improve _____ and reduce run off.	gypsum, soil permeability	eldrin, soil pH	humus, soil fertility	DDT, soil fertility
74	CO1	_____ of Rajasthan popularly known as "water man" has been doing a	Ashok Gehlot, building roads	Rajendra Singh, building checkdams	Sachin Pilot, afforestation	R.K.Pachuri, controlling global warming

		commendable job for harvesting rainwater by _____ in Rajasthan				
75	CO1	Earthquake-generated water waves called _____ can severely affect coastal areas. These giant sea swells can move at a speed upto _____ Km/hr or even faster.	Tsunamis,1000	Willy Willies,100	Saltation,500	Suspension,500
76	CO4	Suggest the measures which help in in-situ conservation of biodiversity	Zoo	Garden	National park	All of these
77	CO3	Easy absorption of UV rays by the lens and _____ of eye will result in increase in incidents of _____	cornea,cataract.	Pupil, cancer	Iris, TB	optic nerve, typhoid
78	CO2	_____, the lowermost layer of the atmosphere, traps _____ by a natural process due to the presence of certain gases. This effect is called greenhouse effect.	Troposphere, heat	Stratosphere, moisture	Mesosphere, cold	Thermosphere, steam
79	CO1	The direct use values where the biodiversity product can be harvested and consumed directly is known as _____ value of biodiversity.	Consumptive	Productive	Social	Aesthetic
80	CO1	The International Union for Conservation of Nature and Natural Resources (IUCN) publishes the _____ which includes the list of _____ species of plants and animals.	red data book, endangered	yellow data book, extinct	green data book, vulnerable	brown data book, vulnerable
81	CO1	Conservation of biodiversity outside the natural habitat is called as _____	Ex- situ	In-situ	Conservation	In-vivo

82	CO3	The environmental damage caused by mining activities is /are :	Devegetation and defacing of landscape	Subsidence of land	Air pollution	All of these
83	CO2	Several mechanical measures like terracing, bunding, bench terracing, no-till farming, contour cropping, strip cropping etc. are used to minimize runoff and soil erosion particularly on the slopes of watersheds are an example of watershed management practices	True/False			
84	CO3	Heavy rainfall often causes_____in low-lying coastal areas.				
85	CO1	The flow of energy in an ecosystem is unidirectional.	True/False			
86	CO2	Heavy duty diesel vehicles spew more NOx and suspended particulate matter (SPM) than petrol vehicles which produce more carbon monoxide and hydrocarbons.	True/False			
87	CO1	Genes are the basic units of hereditary information transmitted from one generation to other.	True/False			
88	CO1	_____refers to the variety and variability among all groups of living organisms and the ecosystem complexes in which they occur.				
89	CO2	Primary productivity of an ecosystem is defined as the rate at which radiant energy is converted into organic substances by photosynthesis or chemo-synthesis by	True/False			

		the primary producers.				
90	CO1	The Guano deposits on the coasts of Peru are very rich sources of _____				
91	CO3	The main impacts of traditional agriculture is/are	Deforestation	soil erosion	Depletion of nutrients	All of these
92	CO3	Threats to biodiversity is /are	Poaching	Man and wildlife conflict	Both (a) and (b)	None of these
93	CO2	Water has a high _____. Hence, it takes a huge amount of energy for getting vaporized. That's why it produces a cooling effect as it evaporates.	boiling point	latent heat of vaporization	Surface tension	Both (a) and (b)
94	CO3	Environmental education and mass communication are two important subjects that are instrumental in _____	creating environmental awareness	environmental modelling	Both (a) and (b)	None of these
95	CO1	Vinblastin and Vincristine, two anticancer drugs, have been obtained from Periwinkle (Catharanthus) plant.	True/False			
96	CO2	National Parks are also protected areas where killing, hunting, shooting or capturing of wildlife is prohibited except under the control of highest authority.	True/False			
97	CO1	Physical factors of an ecosystem is/are	Producer	Decomposer	Water availability	Consumer
98	CO1	Man made source of air pollution is	Agricultural activities	Pollen grains	Both (a) and (b)	None of these
99	CO2	_____ is a common fuel used in Brazil and Zimbabwe for running cars and buses.	LPG	CNG	Gasohol	SNG

100	CO4	A group of solar cells joined together in a definite pattern form a _____ which can harness a large amount of solar energy and can produce electricity enough to run street-light, irrigation water pump etc.	solar panel			
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