ORGANIC CHEMISTRY

NEET

CRASH COURSE

ENVIRONMENTAL CHEMISTRY

SMART ACHIEVERS

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ENVIRONMENTAL CHEMISTRY

Q.1 Which is not an air pollutant?
(1) H_2S (2) H_2 (3) SO_2 (4) O_3

Q.2 Solar ultraviolet radiation is absorbed by :
(1) ionosphere (2) troposphere (3) stratosphere (4) mesosphere

Q.3 Which is not a chemical pollutant?
(1) pesticides (2) liquid wastes (3) solid wastes (4) noise

Q.4 Which of the following is a secondary pollutant?
(1) NO (2) PAN C) CO (4) SO_2

Q.5 Air pollutants that produce photochemical smog –
(1) Ozone, chlorine and sulphur dioxide (2) Oxygen, chlorine and nitric acid
(3) Nitrous oxide, PAN and acrolein (4) CO_2, CO and SO_2

Q.6 Ozone layer of upper atmosphere is being destroyed by -
(1) Sulphurdioxide (2) CO_2 (3) Chlorofluorocarbon (4) Smog

Q.7 The UV radiation which come from sun causes -
(1) Fever (2) Skin cancer (3) Blue baby syndrome (4) Blood cancer

Q.8 CFC are also known as -
(1) Hydrocarbon (2) Aromatic carbon (3) Freon (4) Both (1) and (2)

Q.9 The main element of CFC which cause breakdown of ozone ?
(1) Carbon (2) Chlorine (3) Oxygen (4) Hydrogen

Q.10 O_3(Ozone) protect us from which type of radiation ?
(1) X-ray (2) Visible radiation (3) UV-radiation (4) Infrared radiation

Q.11 BOD is connected with -
(1) Organic matter (2) Microbes (3) Both (4) None

Q.12 The major source of BOD(Biological oxygen demand) in the river Ganga is-
(1) Leaf litter (2) Fishes (3) Human waste (4) Aquatic plants

Q.13 What is BOD (Biological oxygen demand)?
(1) The amount of O_2 utilized by organism in water
(2) The amount of O_2 utilized by microorganisms for decomposition of organic matter in certain volume of water sample
(3) The total amount of O_2 present in water
(4) All of the above

Q.14 Freon is –
(1) Metal fluoride (2) Iron containing polycyclic
(3) Chloroflurocarbon (4) Ferrous sulphide pollutant

Q.15 Burning of fossil fuels is the main source of pollution –
(1) Nitric oxide (2) Sulphur dioxide (3) Nitrogen oxide (4) Nitrous oxide

Q.16 The concentration of dissolved O_2 which inhibit the growth of fishes is -
(1) Greater than 10 ppm (2) 50 ppm
(3) Less than 6 ppm (4) None of these

Q.17 The BOD(Biological oxygen demand) value for clean water is -
(1) 7 ppm (2) 10 ppm (3) less than 5 ppm (4) more than 5 ppm

Q.18 The BOD(Biological oxygen demand) value for highly polluted water is -
(1) Less than 5 ppm (2) Less than 15 ppm (3) 17 ppm or more (4) Less than 1 ppm

Q.19 Which of the following is not a general pollutant of atmosphere –
(1) Hydrocarbons (2) SO_3 (3) CO_2 (4) SO_2

Q.20 Which of the following produces another air pollution by reacting with oxides of nitrogen in presence of sunlight?
(1) O_3 (2) HCl (3) SO_2 (4) H_2

Q.21 The phosphate in fertilizers enhance the growth of which microbes ?
(1) Bacteria (2) Fungi (3) Algae (4) Both (1) & (2)

Q.22 The standard limit concentration of fluoride ion in drinking water is -
(1) 1 ppm (2) 5 ppm (3) 7 ppm (4) 100 ppm

Q.23 The standard limit concentration of lead in drinking water is -
(1) 2 ppm (2) 10 ppm (3) 50 ppb (3) 100 ppb

Q.24 The standard maximum concentration of nitrate in drinking water is -
(1) 10 ppm (2) 50 ppm (3) 100 ppm (4) 500 ppm

Q.25 The excessive concentration of sulphate in drinking water causes laxative effect, concentration is -
(1) Less than 10 ppm (2) 10-50 ppm
(3) Greater than 500 ppm (4) 50-100 ppm

Q.26 Removal of the soil by the action of wind & water is know as -
(1) Erosion (2) Fossilization (3) Leaching (4) Calcification

Q.27 A primary pollutant is :
(1) CO (2) DDT (3) CO_2 (4) all of these

Q.28 Which of the following is not correctly matched?

Column I	**Column II**
(1) Photochemical smog	- warm dry climate
(2) Classical smog	- cool humid climate
(3) Classical smog	- reducing smog
(4) Photochemical smog	- contains SO_2

Q.29 Soil erosion is greater when
(1) No rain occurs
(2) Wind do not blow
(3) The rainfall is evenly distributed
(4) The rainfall is received in heavy down pour

Q.30 Soil conservation is the process when-
(1) Soil is areated
(2) Soil erosion is allowed
(3) Soil is protected against loss
(4) Sterile soil is converted into fertile soil

Q.31 The process in which nutrient enriched water bodies support a dense plant population, which kill animal life by depriving it of oxygen & loss of biodiversity is called as-
(1) Biochemical oxygen demand
(2) Eutrophication
(3) Both (1) and (2)
(4) None of these

Q.32 Examples of herbicides are -
(1) DDT
(2) Sodium chlorate and sodium Arsinite
(3) Aldrin
(4) Dieldrin

Q.33 Hazardous wastes are -
(1) Bio-degradable & highly reactive
(2) Pathogens & bio-degradable
(3) Composite explosive, inflammable & highly reactive
(4) None of these

Q.34 Which of the following is a colourless and highly toxic gas which reduced oxygen carrying capacity of blood?
(1) CO (2) SO_2 (3) NO (4) SO_3

Q.35 Peroxy Acetyl Nitrate (PAN) is an important constituent of photochemical smog, is a–
(1) Quantitative pollutant
(2) Primary pollutant
(3) Natural pollutant
(4) Secondary pollutant

Q.36 P.A.N. stands for –
(1) Peroxy acetyl nitrite
(2) Peroxy acetyl nitrate
(3) peroxy aceto-nitrile
(4) Pyridine aceto–nitrite

Q.37 Which is the not a green house gas –
(1) CFC's (2) Methane (3) H_2 (4) CO_2

Q.38 Fuel obtained from plastic waste has high octane rating. It contain no lead are called as -
(1) Biodegradable fuel
(2) Green fuel
(3) Non-biodegradable fuel
(4) None of these

Q.39 It is a way of thinking and is about utilising the existing knowledge and principle of chemistry & other science to reduce the adverse impact on environment, is called as -
(1) Organic chemistry
(2) Environmental chemistry
(3) Green chemistry
(4) Inorganic chemistry

Q.40 Green chemistry is a cost effective approach which involves reduction in material, energy consumption and waste generation, example in day to day life of green chemistry is ?
(1) Dry cleaning of clothes by liquid CO_2 & H_2O_2
(2) Bleaching of paper by H_2O_2
(3) Both (1) & (2) (4) None of these

Q.41 Taj Mahal is threatened by pollution from –
(1) Carbon dioxide (2) Oxygen (3) Sulphur dioxide (4) Chlorine

Q.42 Aerobic oxidation is caused by :
(1) aerobic bacteria in presence of excess of oxygen.
(2) anaerobic bacteria in presence of insufficient of oxygen.
(3) aerobic bacteria in absence of oxygen.
(4) both anaerobic and aerobic bacteria in any condition

Q.43 Excess amount of nitrate in drinking water causes -
(1) Harmful effect on bones and teeth (2) Blue baby syndrome (methemoglobinemia)
(3) Damage kidney (4) Skin cancer

Q.44 The amount of dissolved oxygen in water is -
(1) 15 ppm (2) 10 ppm (3) 200000 ppm (4) 50 ppm

Q.45 The amount of dissolved oxygen in air is -
(1) 15 ppm (2) 10 ppm (3) 200000 ppm (4) 50 ppm

Q.46 Which of the following statement is **correct** ?
(1) Polychlorinated biphenyls which are used as cleansing solvent, are suspected to be carcinogenic.
(2) The amount of O_3 required by bacteria to break down the organic matter called BOD (Biological oxygen demand).
(3) Both (1) & (2) are correct.
(4) None of these

Q.47 Which one of the following gaseous pollutants is carcinogenic?
(1) oxides of sulphur (2) oxides of carbon (3) oxides of nitrogen (4) Arsenic

Q.48 Acid rain occurs in areas where –
(1) There are big industries and the atmosphere is polluted with SO_2
(2) There are large plantation of pine plants
(3) Citrus plants are grown
(4) There are large plantation of eucalyptus

Q.49 Which of the following statement is **incorrect** ?
(1) CFC are transporting agent for continuously generating chlorine radical into stratosphere and damaging the ozone layer.
(2) Ozone is thermodynamically unstable and decomposes to molecular oxygen.
(3) UV - radiation leads to the harmful mutation of cell.
(4) Green chemistry approach is not environmental friendly.

Q.50 Protections from ultraviolet rays coming from sun is provided by –
(1) SO_2 (2) CO_2 (3) Ozone (O_3) (4) Oxygen (O_2)

Q.51 Trapping of reflected heat radiation by atmospheric dust, water vapour, ozone, CO_2 etc. is known as –
(1) Radioactive effect (2) Ozone layer effect (3) Solar effect (4) Green house effect

Q.52 Green house effect is related to –
(1) Cultivation of green plants (2) Cultivation of vegetables in houses
(3) Global warming (4) Global green algae

Q.53 Which one of the following is a viable pollutant?
(1) smoke (2) mist (3) fumes (4) moulds

Q.54 Photochemical smog involves :
(1) O_3 (2) NO (3) NO_2 (4) All of these

Q.55 Ozone layer of upper atmosphere is being destroyed by –
(1) Photochemical oxidants/O_2 and CO_2 (2) Chlorofluorocarbon
(3) Smog (4) SO_2

Q.56 Ultraviolet radiations from sunlight causes a reaction that produces –
(1) Ozone (2) Fluorides (3) Carbon monoxide (4) Sulphur dioxide

Q.57 Which of the following does not causes air pollution –
(1) Pollen grains (2) Hydroelectric power (3) Diesel engine (4) Thermoelectric power

Q.58 Carbon monoxide (CO) is harmful to man because –
(1) It competes with O_2 for haemoglobin (2) It forms carbolic acid
(3) It generates excess CO_2 (4) It is carcinogenic

Q.59 Ozone in stratosphere is depleted by :
(1) C_4H_{16} (2) $C_4H_6Cl_6$ (3) C_4F_6 (4) CF_2Cl_2

Q.60 The substance which produces resistance against carcinogen is –
(1) Tocoferol (2) Afflatoxin (3) Streptomycin (4) Penicillic acid

Q.61 Drawback of DDT as pesticide is –
(1) It is less effective than others (2) It is not easily/rapidly degraded in nature
(3) Its high cost (4) It becomes ineffective after some time

Q.62 When PO_4 and NO_3 is more in the water of a lake it causes –
(1) Growth of bacteria (2) Growth of fishes (3) Death of algae (4) Algal bloom

Q.63 Minimata diseased was caused due to water pollution by –
(1) Cyanides (2) Mercury (3) Lead (4) Methyl isocyanate

Q.64 BOD is –
(1) Biochemical oxygen demand (2) Biological oxygen deficit
(3) Biosphere oxygen demand (4) None of the above

Q.65 Which one of the following is not a green house gas?
(1) carbon dioxide (2) water vapour (3) methane (4) oxygen

Q.66 Which one of the following statement is false?
(1) Photochemical smog causes irritation in eyes.
(2) London smog is a mixture of smoke and fog.
(3) Photochemical smog results in the formation of PAN.
(4) London smog is oxidising in nature.

Q.67 Indiscriminate use of DDT is undesirable because –
(1) It is harmful (2) It is degradable
(3) It causes mutation (4) It is accumulated in food chain

Q.68 A persistent insecticide is –
(1) Chlorinated hydrocarbons (2) Organophosphates
(3) Carbamates (4) Thiocarbamates

Q.69 Sudden mass death of fishes from oxygen depletion is more likely in case of –
(1) Oligotrophic lake (2) Oxalotrophic lake (3) Eutrophic lake (4) Mesotrophic lake

Q.70 Continuous sewage flow into a stream would lead to –
(1) Increase in temperature (2) Algal bloom
(3) Eutrophication (4) Depletion of oxygen

Q.71 Which of the following types of pollution causes the out break of jaundice –
(1) Water (2) Land (3) Thermal (4) Air

Q.72 pH of rain water is about.
(1) 4.5 (2) 5.6 (3) 6.4 (4) 7.8

Q.73 The pollutants chlorofluorocarbons are major source of air pollution, which are contributed by –
(1) Sewage pollutants (2) Aerosols (3) Industrial effluents (4) All above

Q.74 Acid rains are produced by–
(1) Excess production of NH_3 by industry and coal gas
(2) Excess release of carbon monoxide by incomplete combustion
(3) Excess formation of CO_2 by combustion and animal respiration
(4) Excess NO_2 and SO_2 from burning of fossil fuels

Q.75 Water pollution causes –
(1) Increased deoxygenation and turbidity (2) Decreased turbidity
(3) Increased oxygenation (4) Increased photosynthesis

Q.76 Most harmful types of environment pollutants are –
(1) Human organic wastes (2) Non biodegradable chemicals
(3) Natural nutrients present in excess (4) Wastes from feed lots

Q.77 Photochemical smog is :
(1) reducing in nature (2) dehydrating in nature
(3) bleaching in nature (4) oxidising in nature

Q.78 Cause of Pneumoconiosis is :
(1) SO_2 (2) Silica
(3) Depletion of ozone layer (4) Particulates

Q.79 Ozone hole refers to :
(1) increased concentration of O_3.
(2) reduction in the thickness of ozone layer in the stratosphere.
(3) reduction in the thickness of ozone layer in the troposphere.
(4) hole in ozone layers.

Q.80 One of the pollutants that is generally helping in the early degradation of the ozone layer is
(1) SO_2 (2) DDT (3) CO_2 (4) Freons

Q.81 In coming years, skin related disorders will become more common due to –
(1) Air pollution (2) Excessive use of detergents
(3) Depletion of ozone layer (4) Water pollution

Q.82 The term biomagnification refers to the –
(1) Increase in population size
(2) Growth of organisms due to food consumption
(3) Increase in the concentration of nondegradable pollutants at successive higher levels in a food chain
(4) Blowing up of environmental issues by man

Q.83 CO produced by incomplete combustion of fuel exerts a harmful effect because –
(1) It is respiratory inhibitor (2) It is CO_2 antagonist
(3) It is carcinogenic (4) It is corrosive to eye

Q.84 Which of the following is not a direct atmospheric pollutant –
(1) CO (2) SO_2 (3) Hydrocarbons/CH_4 (4) CO_2 & Water vapour

Q.85 As it travels along the food chain the concentration of DDT –
(1) Decrease (2) Stays constant
(3) Increases (4) Fluctuates randomly

Q.86 Pollutant from motor car exhaust which inhibit haemoglobin formulation, causes a mental disease (OR) substance which need to be removed from petrol/diesel is –
(1) Pb (2) NO_2 (3) Hg (4) SO_2

Q.87 If there was no CO_2 in the earth's atmosphere, the temperature of earth's surface would be –
(1) Less than the present (2) The same
(3) Dependent on the amount of oxygen in the atmosphere
(4) Higher than the present

Q.88 Green house effect refers to –
(1) Warming of earth (2) Production of cereals
(3) Trapping of UV rays (4) Cooling of earth

Q.89 Aerosol of a jet airliner which destroys the Ozone-layer of atmosphere is –
(1) CF_2Cl_2 (2) CO_2 and SO_2 (3) SO_2 (4) NH_3 and CCl_4

Q.90 Which of the following organism is likely to have higher concentration of DDT in its body –
(1) Carnivores (2) Top carnivores (3) Primary producers (4) Herbivores

Q.91 Biodegradable pollutant is –
(1) Sewage (2) Mercury (3) Plastic (4) Asbestos

Q.92 Which of the following is present in highest concentration in exhaust emission –
(1) CO_2 (2) Hydrocarbons (3) CO (4) Oxides of nitrogen

Q.93 By what method the quantity of organic pollutants in water can be determined –
(1) By measuring BOD (2) By pH Measurement
(3) By transparency measurements (4) By measuring the change of colour/CFC

Q.94 A dental disease characterised by mottling of teeth is due to presence of a certain chemical element in drinking water. Which is the element –
(1) Fluorine (2) Mercury (3) Boron (4) Chlorine

Q.95 Chlorine treatment of water –
(1) Disinfect by killing germs (2) Remove hardness of water
(3) Remove all the air pollutants (4) All above

Q.96 Often in water bodies subjected to sewage pollution, fishes die because of the –
(1) Foul smell
(2) Reduction in dissolved oxygen caused by microbial activity
(3) Clogging of their gills by solid substances (4) Pathogens released by the sewage

Q.97 When huge amount of sewage is dumped into a river the BOD will –
(1) Remain unchanged (2) Slightly decrease (3) Increase (4) Decrease

Q.98 Measurement of the rate of O_2 consumption in unit volume of water over a period of time is done to find out
(1) Biosynthetic oxygen demand (2) Biogas generation
(3) Biochemical oxygen demand (4) Fermentation

Q.99 Sewage drained into water bodies kill fishes because –
(1) It increases competition within fishes for the present dissolved oxygen / decreases the amount of dissoved oxygen (O_2)
(2) It removes the competition with fishes to dissolve CO_2
(3) Excessive CO_2 is added in water (4) It gives of a bad smell

Q.100 Pick up the correct statement among the following
(1) CO which is major pollutant resulting from the combustion of fuels in automobiles plays a major role in photochemical smog
(2) Classical smog has an oxidizing character while the photochemical smog is reducing in character
(3) Photochemical smog occurs in day time whereas the classical smog occurs in early morning hours
(4) During formation of smog the level of ozone in the atmosphere goes down

Q.101 Eutrophication is caused by –
(1) Increase nutrient concentration (2) Petrochemical and fertilizer plant effluents
(3) NO_3^{-1} and SO_4^{-2} present in acid rains (4) Mine effluents

Q.102 Increase asthamatic attacks in certain seasons are related to –
(1) Inhalation of seasonal pollen (2) Eating of seasonal vegetables
(3) Low temperature (4) Wet and dry environment

Q.103 Though air pollutant, this gas act as umbrella of life on earth.
(1) SO_2 (2) CO (3) CO_2 (4) O_3

Q.104 The pollutants released by jet aeroplanes in the atmosphere as fluorocarbons are called:
(1) Aerosols (2) Photochemical oxidants.
(3) Photochemical reductants. (4) Physical pollutants.

Q.105 A body which allows the short wavelength incoming solar radiations to enter in but does not allow long wave outgoing infrared radiation to escape out is called.
(1) global warning (2) green house (3) atmospheric effect (4) ionosphere

Q.106 Global warming may result in :
(1) flood (2) cyclone
(3) decrease in forest productivity (4) all of these

Q.107 Which is non-degradable pollutant?
(1) Polyethene (2) Benzene Hexa Chloride (BHC)
(3) Natural polymers (4) DDT

Q.108 Which of the following is a primary pollutant?
(1) SO_2 (2) CO (3) H_2S (4) SO_3

Q.109 Which of the following statements is/are True ?
(1) The upper stratosphere consist of considerable amount of O_3.
(2) O_3 protect from harmful ultraviolet radiation.
(3) The main reason of ozone layer depletion is CFC.
(4) These radiation cause air polution.

Q.110 Which of the following is/are true-
(1) With the depletion of ozone layer, more UV radiation filter into troposphere.
(2) UV radiation causes ageing of skin, sunburn, skin cancer, killing of many phytoplanktones and damage to fish productivity.
(3) If too much of organic matter is added to water, all the available oxygen is used up, this causes oxygen dependent aquatic life to die.
(4) The amount of oxygen required by bacteria to break down the organic matter present in a certain amount of sample of water called biochemical oxygen demand

Q.111 In absence of green house gases :
(1) average surface temperature will fall.
(2) temperature will fall and approximately all water will freeze.
(3) will destroy most of the living things.
(4) average surface temperature will rise.

Q.112 Which of the following is an air pollutant?
(1) N_2 (2) N_2O (3) NO (4) CO

Q.113 Depletion of ozone layer can cause :
(1) damage of DNA (2) skin cancer (3) cataract (4) rickets

Q.114 The maximum prescribed concentration of some element, in drinking water is -
(1) For Fe, maximum concentration is 0.2
(2) Lead, maximum concentration is less than 500 ppm
(3) F^- ion concentration is 1 ppm in drinking water
(4) F^- ion concentration is 10 ppm in drinking water

Q.115 Which of the following is a green house gas?
(1) CO_2 (2) CH_4
(3) Chlorofluorocarbons (4) O_2

Q.116 Which of the following statement is/are true?
(1) London smog is oxidising in nature. (2) London smog contains H_2SO_4 droplets.
(3) London smog is formed in winter. (4) London smog causes bronchitis.

Q.117 Which of the following statements are **correct** ?
(1) Due to formation of ozone hole, UV radiation can penetrate into earth's atmosphere causing mutation of genes.
(2) The increases in the green house gases is raising the temperature of earth's atmosphere .
(3) The decrease in the green house gases is raising the temperature of earth is atmosphere.
(4) Utilizes the existing knowledge and practices so as to bring about reduction into the production of pollutants called green chemistry.

Q.118 Excess fluoride ion [over 10 ppm] causes harmful effect which are-
(1) Skin cancer (2) Harmful effect to bones
(3) Harmful effect to teeth (4) 'Blue baby' syndrome

Q.119 Pollution is rising due to –
(1) Automobiles and industries (2) Population explosion
(3) Rains (4) Research institute

Q.120 Domestic waste contains –
(1) Hydrocarbons (2) Non-biodegradable pollutants
(3) Biodegradable pollutants (4) None of the above

ANSWER KEY

Q.1	2	Q.2	3	Q.3	4	Q.4	2	Q.5	3	Q.6	3	Q.7	2
Q.8	3	Q.9	2	Q.10	3	Q.11	3	Q.12	3	Q.13	2	Q.14	3
Q.15	2	Q.16	3	Q.17	3	Q.18	3	Q.19	3	Q.20	1	Q.21	3
Q.22	1	Q.23	3	Q.24	2	Q.25	3	Q.26	1	Q.27	4	Q.28	4
Q.29	4	Q.30	3	Q.31	2	Q.32	2	Q.33	3	Q.34	1	Q.35	4
Q.36	2	Q.37	3	Q.38	2	Q.39	3	Q.40	3	Q.41	3	Q.42	1
Q.43	2	Q.44	2	Q.45	3	Q.46	1	Q.47	4	Q.48	1	Q.49	4
Q.50	3	Q.51	4	Q.52	3	Q.53	4	Q.54	4	Q.55	2	Q.56	1
Q.57	2	Q.58	1	Q.59	4	Q.60	1	Q.61	2	Q.62	4	Q.63	2
Q.64	1	Q.65	4	Q.66	4	Q.67	4	Q.68	1	Q.69	3	Q.70	4
Q.71	1	Q.72	2	Q.73	2	Q.74	4	Q.75	1	Q.76	2	Q.77	4
Q.78	4	Q.79	2	Q.80	4	Q.81	3	Q.82	3	Q.83	1	Q.84	4
Q.85	3	Q.86	1	Q.87	1	Q.88	1	Q.89	1	Q.90	2	Q.91	1
Q.92	1	Q.93	1	Q.94	1	Q.95	1	Q.96	2	Q.97	3	Q.98	3
Q.99	1	Q.100	3	Q.101	1	Q.102	1	Q.103	4	Q.104	1	Q.105	2
Q.106	4	Q.107	124	Q.108	123	Q.109	123	Q.110	1234	Q.111	1234	Q.112	234
Q.113	123	Q.114	123	Q.115	123	Q.116	234	Q.117	1234	Q.118	23	Q.119	12
Q.120	23												