

GREEN OLYMPIAD – 2018

LEVEL – II

(Class 6, 7 & 8)

Date of Examination: October 31, 2018

Question Paper

(Q. 51 – 100)

51. What term is used to describe the storehouse of water located between layers of hard rock below the Earth's surface?
(A) Water table (B) Oasis
(C) Aquifer (D) None of the above
52. Sullage water, also known as grey water, is relatively clean wastewater unlike sewage or black water. Sullage water originates from the ____
(A) kitchen and bathroom (B) kitchen and toilet
(C) kitchen, bathroom and toilet (D) None of the above
53. This ancient civilization had the world's first urban sanitation system. Within the city, individual houses or groups of houses obtained water from wells and there was a separate room for bathing. The civilization also had the world's earliest – known system of flush toilets. Identify this civilization.
(A) The Aztecs civilization (B) The Indus Valley Civilization
(C) Mesopotamian civilization (D) The Roman civilization
54. What is the terminology used for drinking water?
(A) Freshwater (B) Clean water
(C) Potable water (D) Neutral water
55. After harvesting this crop, Hari has a lot of crop residue and is seeking advice to effectively dispose it off. Of the listed options, which one will you suggest?
(A) Throw the crop residue into the nearby water body for aquatic organisms to consume.
(B) Dump the waste at a solid waste disposal site.
(C) Burn the crop residue at brick kilns / tandoors / kitchens.
(D) Make pallets of it to be used as fuel in industries and substitute coal.
56. High load of organic waste in water bodies leads to the depletion of oxygen in the water body. Which chemical property helps to identify the organic load in waste water?
(A) Total suspended solids (B) Chemical oxygen demand
(C) Biochemical oxygen demand (D) Total Kjeldahl nitrogen
57. Inorganic waste refers to waste items that do not decompose in nature over a period of time. Which of the following items cannot be decomposed through the Earth's natural processes and stays for a long time in nature?
(A) Egg shells (B) Tea bags
(C) Styrofoam plates (D) Waste paper
58. Hazardous waste refers to any material / item or agent which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors. Hazardous materials thus are ____
(A) toxic (B) explosive
(C) non – fatal (D) explosive and toxic

59. Name the horticultural and silvicultural practices that involves the selective removal of certain parts of a plant (such as branches, buds, or roots) in order to remove deadwood, thus improving the plant's health.
- (A) Weeding (B) Chopping
(C) Trimming (D) Pruning
60. This is the longest canal in India and the largest irrigation project in the world. It runs through The Great Thar Desert for almost 650 km. What is the name of this canal?
- (A) West Coast Canal (B) Upper Ganges Canal
(C) Buckingham Canal (D) Indira Gandhi Canal
61. Humus is a dark organic material that forms in soil when plant and animal matter decays. Which of the following soils has low humus content?
- (A) Alluvial (B) Loamy
(C) Black (D) Desertic
62. Bacteria naturally present in milk will spoil the milk in two or three hours if the milk is left out on the kitchen counter at room temperature. How can the shelf life of milk be enhanced?
- (A) Dilute it with water (B) Store it in an air – tight container
(C) Boiling and pasteurization (D) None of the above
63. Vitamin deficiencies can cause various diseases in the human body. Name the disease that had plagued sailors in the 1600 – 1700's due to the lack of vitamin C in their diets.
- (A) Rickets (B) Pernicious anaemia
(C) Scurvy (D) Beriberi
64. Fibre is a type of ____.
- (A) fat (B) protein
(C) carbohydrate (D) vitamin
65. If the Earth is like a greenhouse, then greenhouse gases (GHGs) in the atmosphere are like ____ as they allow the heat to enter, but trap it on its way out.
- (A) plants (B) sun
(C) ground (D) glass
66. ____ is the strongest greenhouse gas (GHG) and its concentration is largely controlled by the temperature of the atmosphere.
- (A) Carbon dioxide (B) Water vapour
(C) Methane (D) Ozone
67. Glaciers can be classified as alpine glaciers and ice sheets. Alpine glaciers form on mountain sides, while ice sheets are not limited to mountainous areas. The only continent to not have any alpine glacier is ____
- (A) Asia (B) Australia
(C) Africa (D) Europe
68. Climate change will affect agriculture as ____
- (A) increased heat will kill crops
(B) an increase in the carbon dioxide will help crop growth
(C) it will reduce yields and productivity
(D) it will not make any difference
69. Ozone (O₃), a minor greenhouse gas (GHG), is found in relatively low concentrations in the ____ as it is produced by a combination of mostly hydrocarbons and nitrogen oxide compounds
- (A) troposphere (B) stratosphere
(C) mesosphere (D) thermosphere

70. Climate change will have multi – and cross – sectoral impacts affecting people in all domains of life – economically, socially, and environmentally. Which of the following companies do you think will be affected by global warming?
(A) Fruit packaging (B) Fish processing
(C) Insurance companies (D) All of the above
71. El Nino and La Nina are opposite phases of El Nino – Southern Oscillation (ENSO) cycle. The ENSO cycle describes the fluctuations in temperatures between the ocean and the atmosphere in the east – central Equatorial Pacific. ____ is a climate pattern that describes the unusual warming of surface waters in the eastern tropical Pacific Ocean.
(A) ENSO (B) El Nino
(C) La Nina (D) Walker circulation
72. Biogas, a type of biofuel is naturally produced from the decomposition of organic waste. The process is also known as anaerobic digestion and is a natural form of waste-to-energy that uses the process of _____ to break down organic matter.
(A) digestion (B) fermentation
(C) pasteurization (D) dehydration
73. Clouds are a collection of tiny droplets of water or ice crystals that settle on _____ in the atmosphere. They are either composed of ice water droplets depending on the height of the cloud and the atmospheric temperature.
(A) smoke (B) fog
(C) dust particles (D) all of the above
74. Name the world's leading producer of petroleum and natural gas hydrocarbons.
(A) Saudi Arabia (B) The United States of America
(C) Russia (D) Canada
75. Which of the following forms of energy has the least amount of negative impact on the environment when it is harnessed and utilized?
(A) Nuclear energy (B) Thermal energy
(C) Solar energy (D) Geothermal energy
76. From the below-mentioned options, pick an example of a primary pollutant.
(A) Smog (B) Acid rain
(C) Sulphuric acid (D) Carbon monoxide
77. There are some pollutants that are already present in the environment but are termed as pollutants only when their concentration increases. What are such pollutants known as?
(A) Primary pollutants (B) Secondary pollutants
(C) Quantitative pollutants (D) Qualitative pollutants
78. From the following options, name an effective air pollution-control device for removing particles and/or gases from industrial exhaust streams. It operates by introducing a scrubbing liquid (typically water) into the dirty gas stream, following which the contaminants are then collected in the scrubbing liquid itself.
(A) Cyclone separator (B) Wet scrubber
(C) Fabric filter (D) Electrostatic precipitator
79. Light pollution, also known as photo pollution, occurs due to the presence of _____ at night.
(A) excessive natural light (B) excessive artificial light
(C) moonlight (D) any form of light

80. Which sector of the economy is known to produce extremely high amounts of carbon monoxide?
(A) Industry (B) Domestic
(C) Real estate (D) Transportation
81. _____ is the most metamorphized type of ignitable coal with the highest amount of carbon content.
(A) Peat (B) Lignite
(C) Anthracite (D) Graphite
82. This continent is home to 56 countries and houses areas that are key to scientists studying evolution as it is thought to be the place where hominids began to evolve. Name the continent in question.
(A) Asia (B) South America
(C) Africa (D) Australia
83. Which is the first manned mission to land on the moon in July 1969?
(A) Apollo 10 (B) Apollo 11
(C) Apollo 12 (D) Apollo 13
84. The atmosphere is a combination of many gases, such as argon, carbon dioxide, neon, helium and hydrogen. However, _____ and oxygen are the two primary gases that constitute the atmosphere.
(A) neon (B) helium
(C) methane (D) nitrogen
85. Hurricanes, typhoons and cyclones are all the same weather phenomena with high-speed winds reaching at least 74 miles per hour (119 km per hour). Scientists name these storms depending on 'where they occur'. What are the storms that form in the Indian Ocean known as?
(A) Typhoons (B) Cyclones
(C) Tornadoes (D) Whirlwinds
86. Which of the following is an example of 'energy conservation'?
(A) Using incandescent bulbs
(B) Leaving electrical appliances on standby mode
(C) Painting the house with darker shades
(D) Walking, carpooling, or using public transport
87. Solar water heaters are a cost-effective way to generate hot water. Which form of energy is used to heat water flowing through panels?
(A) Electricity (B) Infrared radiation
(C) Thermal energy (D) No energy is used
88. In order to conserve resources, what should one do?
(A) Carpool (B) Bicycle to school
(C) Turn off lights when not in use (D) All of the above
89. According to the International Energy Agency (IEA), a majority of the additional investments need to be allocated to _____ so as to help achieve the goal of universal energy access by 2030.
(A) natural gas (B) smart cities
(C) off-grid and mini grid systems (D) smart grids
90. From the below-mentioned options, select the alternate energy-efficient equipment that can be used to replace electrical geysers (water heaters).
(A) Induction heater (B) Immersion rods
(C) Solar heater (D) Microwave

91. Which of the following statement(s) is/are correct about geothermal energy?
 (i) It is generated from the kinetic energy of moving ocean tides.
 (ii) It can be captured in a gas turbine to produce power.
 (A) Only (i) (B) Only (ii)
 (C) Both (i) and (ii) (D) Neither (i) nor (ii)
92. Why should we use a light-emitting diode (LED) bulb at home as against tubelights?
 (A) An LED bulb is cost effective and energy efficient.
 (B) Conventional tube lights lose brightness over time.
 (C) An LED bulb outlives the combined lifespan of at least 4-5 conventional tubelights.
 (D) All of the above
93. What type of plants will you choose when undertaking a plantation drive in school??
 (A) Choose plants that need less water (B) Choose plants that are resilient
 (C) Choose plants that are locally found (D) All of the above
94. Biodiversity hotspots are the richest and most threatened reservoirs of plant and animal life. They have the maximum number of _____ species and have lost at least 70% of their original habitats.
 (A) keystone species (B) endemic species
 (C) invasive species (D) All of the above
95. This ecosystem is one of the most threatened ecosystems in the world. Although it covers less than 1 per cent of the Earth's surface, it is home to around 25 per cent of the world's fish species. This fragile and complex ecosystem is also incredibly pleasing to the eye due to its vibrant and diverse colours. Name it.
 (A) Wetlands (B) Mangrove ecosystem
 (C) Coral reef ecosystem (D) Freshwater ecosystem
96. The linked feeding series in an ecosystem results in a food chain. Name the first trophic or feeding level in the food chain that comprises the highest biomass on the Earth's surface.
 (A) Autotrophs (B) Primary consumers
 (C) Secondary consumers (D) Tertiary consumers
97. Name the European city that focussed on reducing emissions by improving mobility and integrating transport and building through its 'super cycle highway' initiative. Super cycle highways and other bike lanes around the city have led to a 45 per cent increase in the number of residents commuting by bike daily.
 (A) Venice (B) Zurich
 (C) Stockholm (D) Copenhagen
98. The main aim of the 17 Sustainable Development Goals (SDGs) which replaced the Millennium Development Goals in 2015 is to end poverty, protect the planet, and ensure prosperity for everyone. Which of the following is not a part of the SDGs?
 (A) Access to sustainable energy for all (B) Availability of water and sanitation for all
 (C) Provision of Internet services for all (D) Promotion of decent jobs for all
99. Each and every Sustainable Development Goal (SDG) has specific targets the need to be met by 2030. The Bertelsmann Stiftung and the UN Sustainable Development Solutions Network have created a prototype index that measures the performance of various countries in achieving the same. Which country tops the list for achieving the 2030 targets enlisted by the 17 SDGs?
 (A) Norway (B) Sweden
 (C) Denmark (D) Canada

100. Rapid urbanization has resulted in slums and informal settlements in cities, which according to the UN Habitat attributes to around 33% of the urban population in the developing world. From the following options, which problem will be faced through rapid urbanization?
- (A) Poor housing which will not withstand natural disasters.
 - (B) Inadequate access to safe water and sanitation.
 - (C) Overcrowding and eviction.
 - (D) All of the above.

FITJEE