

GREEN OLYMPIAD – 2019

LEVEL – II

(Class 6, 7 & 8)

Date of Examination: October 16, 2019

51. Vitamin B – 12 is an important vitamin, needed for nerve tissue health, brain function, and production of red blood cells. Deficiency of this vitamin causes
(A) Anaemia (B) Night blindness
(C) Beri beri (D) Biotin
52. In the absence of supply of primary nutrients to plants, their health, yield and growth are affected. Which of the following is a primary nutrient?
(A) Sulphur (B) Cobalt
(C) Sodium (D) Potassium
53. Antarctica at the South Pole has about 90% of the world's ice and is extremely vulnerable to impact of climate change. Of the animals found here, which is endangered due to climatic changes affecting this fragile zone?
(A) Penguins (B) Whales
(C) Seals (D) Southern Fulmar
54. Most of the minerals in Earth's crust are found in which layer?
(A) Crust (B) Mantel
(C) Inner crust (D) Core
55. The movement of air from a high pressure area to a low pressure area constitutes a wind, which is further classified into three types, i.e, seasonal winds, permanent winds, and local winds. Winds that blow throughout the year are called permanent winds like the trade winds, easterlies, and westerlies. What are winds during cyclones known as?
(A) Seasonal winds (B) Permanent winds
(C) Local winds (D) None of the above
56. Tropical cyclones are like giant engines that use warm, moist air as fuel. The warm, moist air over the ocean rises upward from near the surface and less air is left near the surface. Another way to say the same thing is that the warm air rises, causing an area of ___ below causing cyclones.
(A) low air pressure (B) high air pressure
(C) neutral air pressure (D) same air pressure
57. Volcanic eruption cause short term climate change and contributes to natural climate variability. Large scale volcanic activity may last only a few days, but the massive outpouring of gases and ... can influence climate patterns for years. Which of the following is an active volcano?
(A) Kilauea (Hawaii) (B) Mt. Vesuvior (Italy)
(C) Krakatoa (Indonesia) (D) Mt. St. Helena (USA)
58. Scientists have discovered a new type of plastic pollution – a layer of plastic encrusted onto ocean rocks. This was first observed as patches on the beach rocks in Portuguese island of Madeira in 2016. What are these called?
(A) Plastic rusts (B) Plastic hills
(C) Plastic spills (D) Plastic zipper

59. Name the oldest dump in India covering 326 - acre, found in Mumbai?
 (A) Deonar dumpsite (B) Ghazipur dumpsite
 (C) Dhapa dumpsite (D) Okhla dumpsite
60. E – waste is generated from which of the following sources?
 (A) Discarded, surplus, obsolete, broken, electrical or electronic devices
 (B) Solid waste generated due to domestic activities
 (C) Chemical fertilizers and pesticides to protect crops from insects and pests
 (D) None of the above
61. Since the industrial revolution, the rise in the number of industries has significantly contributed to waste production. What are the types of industrial waste?
 (A) Electronic, metals, paints, ash, radioactive wastes
 (B) Leaves, flowers, and other parts of plants
 (C) Used bandages, syringes
 (D) None of the above
62. E – waste is one of the fastest – growing waste streams in the world According to the Global E – Waste Monitor 2017, India generated about 2 million tones (MT) of e – waste that year and ranked fifth among e – waste producing countries, after the US, China, Japan and Germany. Which of the following is a main cause for this?
 (A) Increasing market penetration in developing countries
 (B) Replacement market in develop countries
 (C) High obsolescence rate
 (D) All of the above
63. Vermicompost is the end products of the composting process using various species of worms, such as red wigglers, white worms, and other earthworms, to create a mixture of decomposed vegetable or food waste, bedding materials. Which product amongst the following options can be composted?
 (A) Food scraps
 (B) Paper
 (C) Yard trimmings such as grass and plants
 (D) All of the above
64. Photovoltaic is a method of generating electric power by using solar cells to convert energy form the sun into a flow of electrons by the photovoltaic effect. It covertes which of the following energy to electricity?
 (A) Light (B) Sound
 (C) Wind (D) Nuclear
65. The electricity bill is normally issued every month by the electricity providers. It shows number of units consumed in a month by the consumer. The unit indicates:
 (A) Current (B) Energy consumed
 (C) Voltage (D) Frequency
66. This rating is a measure of energy efficiency of an appliance. It is a five-point scale where higher the rating lower is the energy consumption and hence better savings. This rating is provided by Bureau of Energy Efficiency, Government of India on electrical home appliances like refrigerators, air conditioners, ceiling fans, etc. Name the rating.
 (A) BIS (B) ISI
 (C) Power (D) Star labelling
67. Coliform bacteria in drinking water indicate the presence of disease-causing organisms (pathogens). The water containing high coliform count is contaminated with _____.
 (A) human wastes (B) phosphorus
 (C) industrial effluents (D) hydrocarbon

68. _____ is built across the Mahanadi River in Odisha in India. This is one of the first major multipurpose river valley projects started after India's independence.
(A) Hirakund Dam (B) Deras Dam
(C) Indiravati Dam (D) Mandira Dam
69. Greywater or sullage is the wastewater without faecal contamination. It is reused by some households to meet their water demands. Greywater should never be used in which of the following activities?
(A) Watering lawns (B) Mopping the floor
(C) Washing the cars (D) Washing edible vegetables and fruits
70. Electric fuse is a device that protects electrical equipment in case of short circuit by breaking the circuit. Fuse wire which protects against short circuit is made up of:
(A) Plastic with low melting point (B) Metal with low melting point
(C) Plastic with high melting point (D) Metal with high melting point
71. Energy Conservation Act, 2001 provides for the legal framework, institutional arrangement, and a regulatory mechanism at the Central and State levels to embark upon energy efficiency drive in India. This act was amended in which year?
(A) 2002 (B) 2005
(C) 2010 (D) 2017
72. Which of the following statements best defines "producers"?
(A) The green plants in the ecosystem
(B) Animals that depend on plants (directly or via for their food needs)
(C) Animals that eat other animals which in turn eat the plants
(D) None of the above
73. What is the objective of biosphere reserve?
(A) To conserve diversity of plants, animals and micro organisms
(B) To promote research on ecological conservation and other environment aspects
(C) To provide facilities for education, awareness and training
(D) All of the above
74. RDB is a public document created by the IUCN for recording the conservation status of species as well as some local subspecies which are present in a particular region. What is RDB.
(A) Red Data Book (B) Red Diversity Book
(C) Red Depression Book (D) Red Demarcation Book
75. Which amongst the following substances best define '
(A) variety of different species in a given area
(B) variations at the level of individual genes
(C) variations in habitats available for organisms in the ecosystem
(D) none of the above
76. Human blood is highly specialized _____ that delivers necessary substances such as nutrients and oxygen to the cells and also transports away metabolic waste products.
(A) organelle (B) tissue
(C) organic compound (D) inorganic compound
77. Retinal is part of the light-sensitive pigment for the retina of the eye. Oxidation of retinol generates retinal and when this is linked to a protein called opsin, it forms rhodopsin, a light-sensitive pigment. Rhodopsin is the pigment responsible for night-vision and allows you to see in black and white. Which vitamin is needed for the formation of a light-sensitive pigment in the retina?
(A) Vitamin A (B) Vitamin C
(C) Vitamin D (D) B complex

78. Human body weight refers to a person's mass or weight. Body weight is measured in kilograms, a measure of mass, throughout the world. How much does total oxygen account for a human body mass?
 (A) 65% (B) 18%
 (C) 10% (D) 3%
79. An airborne disease is caused by pathogens that can be transmitted through the air. Which of the following is not an airborne disease?
 (A) Meningitis (B) Chicken Pox
 (C) Tuberculosis (D) AIDS
80. _____ is a bi-molecular consisting of carbon, hydrogen, and oxygen atoms, usually with a hydrogen, oxygen atom ratio of 2:1. It is an energy giving food, for example, sugars, starches, and fibres found in fruits, grains, vegetables, and milk products.
 (A) Carbohydrate (B) Protein
 (C) Amino acid (D) None of the above
81. WBCs (also called leukocytes or leucocytes) are cells of the immune system that are involved in protecting the body against infectious diseases and foreign invaders. What is the colour of WBCs?
 (A) Yellow (B) Colourless
 (C) Red (D) Blue
82. Water boils when molecules are able to overcome the vapour pressure of the surrounding air to move from the liquid phase to the gas phase. If we add salt to pure water its boiling point will _____.
 (A) increase (B) decrease
 (C) remain same (D) none of the above
83. _____ are giants clouds of dust and gas in space. These are formed from the gas and dust thrown out by the explosion of a dying star, such as a supernova. These are also the site of origin of new stars, and are known as 'star nurseries'.
 (A) Asteroids (B) Comets
 (C) Planets (D) Nebulae
84. Washing soda is used to remove stubborn stains from laundry and is an essential component in most homemade laundry detergents for powder, liquid, or single-pod formulas. Washing soda is a common name for which chemical compound?
 (A) Sodium carbonate (B) Calcium bicarbonate
 (C) Sodium bicarbonate (D) Calcium carbonate
85. What is the study of Trees known as?
 (A) Dendrology (B) Dermatology
 (C) Haematology (D) Paedology
86. Study of animal behaviour is called ethology what specific behaviour
 (A) They try to understand perception, coordination, orientation, learning and manners in animals
 (B) They try to understand what .. behaviours in animals
 (C) They try to understand the evolutionary behavioural trends
 (D) All of the above
87. The Earth's ocean's temperatures are getting warmer too – which means that tropical storms can pick up more energy. So, global warming could turn, say a, category 3 storm into a more dangerous category 4 storm. These storms may rise to:
 (A) Cyclones (B) Earthquake
 (C) Tsunami (D) None of the above

88. Earth's rising temperature are fuelling longer and hotter heat waves, more frequent droughts, heavier rainfall, and more powerful hurricanes. What is the name of the cyclone that hit the Bay of Bengal in May 2019?
 (A) Cyclone Fani (B) Cyclone Phailin
 (C) Cyclone Bhola (D) Cyclone Jal
89. Greenland is just one island. But possible melting of its ice sheet has the potential to transform the entire planet. The Greenland ice sheet has existed for 2.4 million years and is 2.1 miles (3.4 kilometers) thick at its deeper point. What is causing the meltdown of the Greenland ice caps?
 (A) Ozone – layer depletion (B) Global warming
 (C) Greenhouse effect (D) All of the above
90. Which of the following greenhouse gases is not abundant in the atmosphere?
 (A) Carbon dioxide (B) Methane
 (C) Nitrous oxide (D) Water vapour
91. Name the natural process through which trees accept CO₂ and release O₂?
 (A) Photosynthesis (B) Oxidation
 (C) Radiation (D) None of the above
92. In order to promote successes of urbanization, or address specific challenges resulting from urbanization, 'World Cities Day' is celebrated every year. What was the sub theme for 2018 which was to highlight that cities need support to become resilient and develop their capacity to absorb the impact of hazards?
 (A) Innovative Governance, Open Cities (B) Building Sustainable and Resilient Cities
 (C) Designed to live together (D) Inclusive cities, shared development
93. Nuclear waste or radioactive waste is isolated for a long period of time due to which of the following reasons?
 (A) It can be recycled and put to further use for make nuclear weapons
 (B) The components have decayed and no longer pose a threat to human health due to radiation exposure
 (C) To reduce the expenditure incurred in treatment of nuclear waste
 (D) None of the above
94. The City Beautiful Movement was a reform philosophy American urban planning that flourished during the 1800 and 1900s with the intent of introducing beautification monumental grandeur in cities not only for its own sake but also to create moral and civic virtue amongst urban populations. Who conceptualized it?
 (A) George Edgar Merrick (B) Daniel Burnham
 (C) Frederick Law Olmated. Jr. (D) Cass Gilbert
95. It is believed that over 800 aftershocks of magnitude 4.5 or greater have occurred over the last few years. An after shock is a smaller earthquake that occurs after a previous large earthquake, in the same area of the main shock. If an aftershock is larger than the main shock, the aftershock is redesignated as the main shock and the original main shock is redesignated. What is it redesignated as?
 (A) Before shock (B) Foreshock
 (C) Earlier shock (D) Antecedent shock
96. Bricks, pipes, iron rods, sand, grit, lumber, asbestos composites which of the following types of waste?
 (A) Construction and demolition waste (B) Industrial waste
 (C) Commercial waste (D) Agricultural waste

97. The UN agency provides leadership to cities for promoting sustainable energy production and energy use by encouraging energy efficiency, alternative energy, mass transit, and public awareness. This agency also encourages partnerships to promote the climate neutral urban environment by inspiring, informing and enabling local authorities and people to improve their quality of life without compromising that of future generations. Name the agency.
- (A) World Health Organisation (B) United Nations Human Settlements Program
(C) The United Nations Children's Fund (D) None of the above
98. Reykjavik, Iceland's capital city in 1930 began using _____ energy for district heating and now has the world's largest district heating system. Once heavily polluted, Reykjavik is now one of the world's cleanest cities.
- (A) solar (B) hydro
(C) geothermal (D) nuclear
99. The city is situated beside Lake Ontario and uses the deep-lake water cooling system to cool not only the office building near the waterfront but also around seven thousands homes in the surrounding area. Name the city.
- (A) Toronto (B) London
(C) Frankfurt (D) Tokyo
100. Kola Superdeep Borehole is the deepest borehole in the world. This was result of scientific drilling project to find out more about the Earth's crust and drilling began on May 24, 1970. It was later stopped in 1992 as drilling deeper was deemed unfeasible as it became too hot at the bottom of the hole for drilling to continue. In which country is this borehole located?
- (A) Russia (B) Germany
(C) The USA (D) China