

SECTION I
ENGLISH (QUESTION 1-20)

Synonyms:

Choose the lettered word that is most nearly same in meaning to the word printed in bold letters at top.

1. Banish
 - a) Recall
 - b) Black List
 - c) Digest
 - d) Exonerate

2. Eradicate
 - a) Improve
 - b) Remove
 - c) Discover
 - d) Announce

3. Hallucination
 - a) Fantasy
 - b) Devouring
 - c) Mispronunciation
 - d) Melodious

4. Immaculate
 - a) Flawless
 - b) Contaminated
 - c) Juvenile
 - d) Infinite

5. Labyrinth
 - a) Confusion
 - b) Model
 - c) Muze
 - d) Complicated path

Analogy Test:

I. "A" is defining characteristic of "B"

6. Condemnation: Disapproval
 - a) Ignorance: patience
 - b) Optimism: insight
 - c) Humor: Comedian
 - d) Sorrow: intention

II. "A" is spurious/defective form of "B"

7. Mumble: Speak
 - a) Adorn: denude
 - b) Inflammate: damage

- c) Delimit: expand
- d) Plagiarize: write

III. "A" is the same thing as "B" but more extreme

8. Drizzle: Pour
- a) Speak: shout
 - b) Forget: learn
 - c) Consider: formulate
 - d) Sense: Flourish

IV. "A" is a sign of "B"

9. Yawn: boredom
- a) Smile: hatred
 - b) Blink: nausea
 - c) Sigh: hope
 - d) Wince: pain

V. "A" is the study of "B"

10. Botany: plants
- a) Agriculture: herbs
 - b) Astronomy: stars
 - c) Philosophy: books
 - d) Anthropology: religion

Sentence Completion:

11. Death is preferable dishonor.
- a) Than
 - b) To
 - c) From
 - d) Of
12. Urge people who smoke, tothe habit.
- a) Surrender
 - b) Abandon
 - c) Discontinue
 - d) Desert
13. It isto steal
- a) Sinful
 - b) Corrupt
 - c) Immoral
 - d) Wicked
14. The union leader tried to calm down the.....workers.
- a) Turbid
 - b) Turgid
 - c) Torpid
 - d) Turbulent
15. So many servants attendedhim during his illness.
- a) On

- b) At
- c) With
- d) Upon

Reading comprehension:

16. Pipes may be painted to keep them from getting oxidized.
- a) Misplaced
 - b) Soaked
 - c) Rusty
 - d) Frozen
17. Sharks must swim all the time to avoid drowning.
- a) Swiftly
 - b) Rarely
 - c) Precisely
 - d) Constantly
18. As soon as the board of elections promulgates, the list of candidates, a ballot is prepared
- a) Informally discusses
 - b) Quickly contacts
 - c) Officially declares
 - d) Critically reviews
19. Rahim had a reputation for being a prudent businessman.
- a) Clever
 - b) Wealthy
 - c) Careful
 - d) Dishonest
20. Keep two pencils handy while taking the examination.
- a) Extra
 - b) Secret
 - c) Near
 - d) Sharp

SECTION II**SUBJECT BASED (QUESTION 21-100)**

21. One important source of Vitamin C is citrus fruit. Vitamin C is:
- a) Ascorbic acid
 - b) Citric acid
 - c) Salicylic acid
 - d) Tricarboxylic acid
22. If you are making soaps and detergents from scratch, one of your starting ingredients will be:

- a) Helium
 - b) Copper wire
 - c) Air
 - d) Sucrose
30. O₂ and O₃ molecules are
- a) Allotropes
 - b) Structural isomers
 - c) Isotopes
 - d) Geometrical isomer
31. Increasing energy of light goes in the order
- a) Ultraviolet, visible, infrared.
 - b) Visible, infrared, ultraviolet.
 - c) Infrared, visible, ultraviolet.
 - d) Ultraviolet, infrared, visible
32. Argon, which comprises almost 1% of the atmosphere, is approximately 27 times more abundant than CO₂, but doesn't contribute to global warming. Which explanation accounts for this fact?
- a) Single atoms do not vibrate.
 - b) Argon's vibrational energy is not excited by infrared radiation.
 - c) The mass of argon does not allow it to reach sufficiently high in the atmosphere to interact with the earth's radiant energy
 - d) Argon is transparent to UV radiation
33. A gasoline's octane rating is
- a) A measure of the gasoline's resistance to causing knocking in a vehicle's engine.
 - b) A measure of the pollutants produced by burning the gasoline in a vehicle's engine.
 - c) A measure of the energy content of the gasoline; the higher the rating, the better the gas mileage.
 - d) A measure of the purity of the gasoline; the higher the rating the smaller the number of components in the mixture.
34. In an exothermic chemical reaction
- a) The mass of the products is greater than the mass of the reactants
 - b) The mass of the products is less than the mass of the reactants
 - c) Heat is released as the reaction proceeds
 - d) Heat is absorbed as the reaction proceeds
35. Petroleum (crude oil) is a complex mixture of thousands of substances, the majority of which are:
- a) Hydrocarbons
 - b) Natural gases

- c) Complex carbohydrates
d) Cellulose-based substances
36. What is the molarity of sodium chloride in a solution containing 0.50 mol of sodium chloride in 500 mL of water?
a) 0.25 M
b) 0.50 M
c) 1.0 M
d) 5.0 M
37. Which of these is *not* a trihalomethane?
a) CHCl_3
b) CHBr_2Cl
c) CHF_3
d) CH_3Cl
38. Which naturally occurring radioactive particles are negatively charged?
a) Alpha particles
b) Beta particles
c) Gamma radiation
d) Neutrons
39. If you have 200.0 g of radioisotope with a half-life of 5 days, how much isotope would remain after 15 days?
a) 12.5 g
b) 13.3 g
c) 25.0 g
d) 40.0 g
40. Which naturally occurring radioactive particles are negatively charged?
a) Alpha particles
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c) Gamma radiation
d) Neutrons
41. If you have 200.0 g of radioisotope with a half-life of 5 days, how much isotope would remain after 15 days?
a) 12.5 g
b) 13.3 g
c) 25.0 g
d) 40.0 g
42. Which type of widely used battery is *not* rechargeable?
a) Alkaline
b) Lithium-ion
c) Lead-acid (storage batteries)
d) Nickel-cadmium (NiCad)

43. Chemical energy is converted directly into electrical energy in
- A battery
 - An electrical power plant
 - An electrolytic cell
 - An automobile's engine
44. Which is the hardest natural substance known today
- Graphite
 - Iron
 - Steel
 - Diamond
45. What is the chemical composition of Diamond?
- Phosphorous
 - Steel
 - Carbon
 - Nitrogen and Oxygen
46. In northern hemisphere, summer solstices occur during_____.
- 21st, 22nd June
 - 21st, 22nd December
 - 22nd, 23rd March
 - 22nd, 23rd September
47. What parts of the Earth have the most biologically diverse ecosystems, containing 50 to 90 percent of the world's plant and animal species _____.
- Oceans
 - Deserts
 - Rain forests
 - Mountains
48. A particular geographical area where all the plants, animals and decomposers interact with one another, make up_____.
- Population
 - Community
 - Species
 - Ecosystem
49. Is ozone good or bad?
- Always good.
 - Always bad.
 - Good in the upper atmosphere, bad at ground level
 - Bad in the upper atmosphere, good at ground level.
50. The lowest layer of the atmosphere where different weather phenomena observe is the _____.
- Mesosphere

- b) Troposphere
 - c) Thermosphere
 - d) Stratosphere
51. The coldest layer of the atmosphere is the _____.
- a) Thermosphere
 - b) Troposphere
 - c) Stratosphere
 - d) Mesosphere
52. Latitude measures _____.
- a) Angular distance east and west of the Prime Meridian
 - b) Distance in miles east and west of the Prime Meridian
 - c) Angular distance east and west of the Equator
 - d) Angular distance north and south of the Equator
 - e) Distance in kilometers north and south of the Equator
53. We measure longitudes up to _____ degrees.
- a) 360
 - b) 180
 - c) 0
 - d) 145
 - e) 90
54. Carbon dioxide (CO₂)
- a) is not present in the troposphere
 - b) is produced by green plants during photosynthesis
 - c) absorbs long-wave terrestrial radiation
 - d) is decreasing in concentration in the atmosphere
55. Where do temperatures normally decrease with altitude?
- a) in the stratosphere
 - b) in the thermosphere
 - c) in the troposphere
 - d) in the tropopause
 - e) none of the above
56. The ozone layer in the stratosphere is critical to life because
- a) Ozone provides oxygen for animals to breathe
 - b) Ozone absorbs long wave terrestrial radiation, to help keep the atmosphere warm
 - c) Ozone absorbs ultraviolet light
 - d) Ozone is an essential element for organisms
57. Which of the following electromagnetic wavelengths are the longest?
- a) Radio waves
 - b) X rays
 - c) Visible light
 - d) Infrared light
58. The Earth's axis is inclined approximately _____ degrees from the perpendicular to the Plane of the Ecliptic.

- a) 10
 - b) 23 ½
 - c) 66 ½
 - d) 0
 - e) 50 ½
59. Two gases, oxygen and _____, make up 99% of the volume of dry, clean air.
- a) Nitrogen
 - b) Water vapor
 - c) Carbon dioxide
 - d) Argon
60. The absorption and release of water by plants and trees is known as_____.
- a) Runoff
 - b) Infiltration
 - c) Evapotranspiration
61. An aggregate of mineral is best described by the term_____.
- a) Rock
 - b) Element
 - c) Compound
 - d) Soil
62. The ability of the earth (or a system) to sustain a population in an acceptable standard of living is known as _____.
- a) Carrying capacity.
 - b) Ecological maintenance.
 - c) Ecological balance.
 - d) Comfort capacity
63. The term Big Bang refers to the formation of the
- a) Solar system.
 - b) Earth.
 - c) Universe.
 - d) Sun.
64. A volcano that has no recent eruptive history and appears extensively eroded is categorized as _____.
- a) Inactive.
 - b) Passive.
 - c) Dormant.
 - d) Extinct
65. Which of the following alternate energy resource is not considered a renewable energy resource?
- a) Solar energy
 - b) Tidal energy
 - c) Wind energy
 - d) Nuclear energy

66. Soil erosion is an important topic because it can _____.
- Increase in rate during droughts
 - Result in topsoil loss
 - Increase unwanted sediment deposition elsewhere
 - All of the above
67. The biome found near equator are_____.
- Tropical rain forest
 - Temperate deciduous forest
 - Alpine forest
 - Coniferous forest
68. A tectonic plate is_____.
- A piece of crust floating on the mantle
 - A continent
 - A piece of land floating in the sea
 - An ice sheet on the north pole
69. Which of the following is the thinnest Earth shell?
- Mantle
 - Inner core
 - Outer core
 - Crust
70. From the center of the Earth outward, what are the three layers of Earth?
- core - crust - mantle
 - core - mantle - crust
 - crust - mantle - core
 - mantle - crust - core
71. The movement of water from cell to cell via plasmadesmata is called:
- Symplastic
 - Transmembrane
 - Apoplastic
 - Facilitated
 - None of these
72. In maize plant, the CO₂ fixation mechanism is called:
- C₃ pathway
 - C₄ pathway
 - CAM pathway
 - C₃ – C₄ intermediate
 - None of these
73. Salt-loving plants are known as:
- Glycophytes
 - Halophytes

- c) Xerophytes
 - d) Mesophytes
 - e) None of these
74. With the addition of solution to a liquid system, the water potential of the system:
- a) Increases
 - b) Decreases
 - c) Remains stable
 - d) Remains variable
 - e) None of these
75. The conversion of pyruvate into acetyl CO₂ is called:
- a) Glycolysis
 - b) Fermentation
 - c) Oxidative carboxylation
 - d) B-Oxidation
 - e) None of these
76. The stage of meiosis in which pairing of homologous chromosomes starts is called:
- a) Leptotene
 - b) Zygotene
 - c) Diplotene
 - d) Pachytene
 - e) None of these
77. The site of chromosome on which a gene is located is called:
- a) Allele
 - b) Locus
 - c) Site
 - d) Trait
78. Lamarck's theory of evolution was published in:
- a) 1807
 - b) 1808
 - c) 1809
 - d) 1810
 - e) None of these
79. The book "Origin of Species" was written by:
- a) Linnaeus
 - b) Lamarck
 - c) Mendel
 - d) Darwin
 - e) None of these
80. The actual location or place where an organism lives is called:

- a) Habitat
- b) Ecosystem
- c) Niche
- d) Biome
- e) None of these

81. The organisms swimming on the surface of water are called

- a) Plankton
- b) Nekton
- c) Neuston
- d) Periphyton

82. The total area of the world covered by Forest is

- a) 30%
- b) 60%
- c) 40%
- d) 20%

83. The Pothohar area mainly serve as

- a) Wood land
- b) Range land
- c) Animal reserve
- d) Recreational area

84. Conifer trees are mostly

- a) Monoacious
- b) Diaceous
- c) Monocot
- d) Non woody

85. The tallest trees of the world are found in

- a) Tropical forest
- b) Red wood forests
- c) Yellow stone forests
- d) Savannas

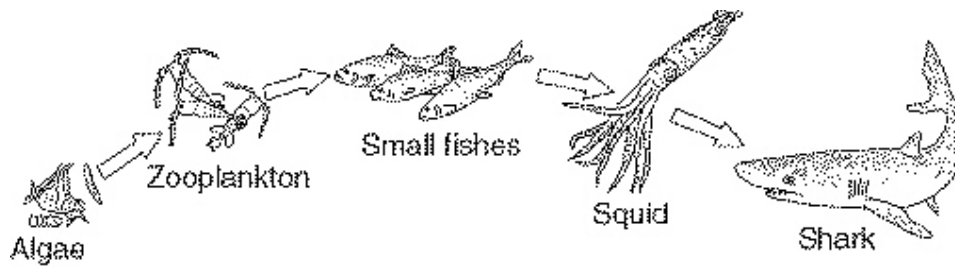
86. Pruning means cutting trees at

- a) The bottom
- b) At the top
- c) Form the roots
- d) At 10 feet height

87. Thinning means removing

- a) Trees of the same species
- b) Weeds
- c) Herbs
- d) Shrubs

-
88. Forests are also called the
- Lungs of atmosphere
 - Stomach of atmosphere
 - Liver of atmosphere
 - None of these
89. One of the important role of the forests is
- To provide wild life shelter
 - Water shed area
 - Range land
 - All of these
90. There are tow main layers in the wood
- Heart wood and sap wood
 - Hard wood and soft wood
 - White and green
 - Hard and pulpy
91. Forest is an area having predominantly
- Woody trees
 - Dense vegetation
 - Mixed vegetation
 - Having mountains covered with trees
92. One of the hazards to the conifer forests is
- Insect attack
 - Forest fires
 - Termites
 - Fungus
93. The branch of biology dealing with interactions among organisms and between organisms and their environment is called
- Economy
 - Modeling
 - Recycling
 - Ecology
94. All of the members of a particular species that live in one area are called a (an)
- Biome.
 - Population
 - Community
 - Ecosystem
95. What is the original source of almost all the energy in most ecosystems?
- Carbohydrates
 - Sunlight
 - Water
 - Carbon
-



Figure

96. The algae at the beginning of the food chain in above figure are
- Consumers
 - Decomposers
 - Producers
 - Heterotrophs
97. An organism that uses energy to produce its own food supply from inorganic compounds is called a(an)
- Heterotroph
 - Consumer
 - Detritivore
 - Autotroph
98. An organism that cannot make its own food is called a(an)
- Heterotroph
 - Chemotroph
 - Autotroph
 - Producer
99. What is an organism that feeds only on plants called?
- Carnivore
 - Herbivore
 - Omnivore
 - Detritivore
100. What animals eat both producers and consumers?
- Herbivores
 - Omnivores
 - Chemotrophs
 - Autotrophs