

Question 1: Which reagent is commonly used to test for the presence of reducing sugars (Benedict's test)?

- a) Benedict's reagent
- b) Biuret reagent
- c) Tollen's reagent
- d) Universal indicator

Question 2: Assertion(A): The Earth's revolution around the sun causes day and night Reason: the Earth takes about 24 hours to complete one rotation on its axis.

- a) Both A & R are true and R is the correct explanation of A.
- b) Both A & R are true but R is not the correct explanation of A.
- c) A is true but R is false
- d) A is false but R is true

Question 3: Which is the hottest planet in our solar system?

- a) Mars
- b) Jupiter
- c) Venus
- d) Earth

Question 4: Which planet has longest day.

- a) Saturn
- b) Venus
- c) Mars
- d) Jupiter

Question 5: Titan is the largest satellite of which planet?

- a) Saturn
- b) Neptune
- c) Jupiter
- d) Earth

Question 6: A high Biological oxygen Demand (BOD) indicates that?

- a) Low level of microbial pollution
- b) High level of microbial pollution
- c) Absence of microbial action
- d) Water is pure.

Question 7: Which of the followings are responsible for Acid Rain?

- a) Sulphur Dioxide (SO₂)
- b) Nitrogen Dioxide (NO₂)
- c) Both (a) & (b)
- d) None of these

Question 8: The removal of top layer of soil leads to

- a) Deforestation
- b) Desertification
- c) Rainfall
- d) Snow fall

Question 9: Kaziranga national park is located at

- a) Uttarakhand
- b) Assam
- c) Kolkata
- d) Tamil Nadu

Question 10: A species that is at risk of extinction is called

- a) Extinct species
- b) Endangered species
- c) Endemic Species
- d) Migratory Species

Question 11: Gir National park is famous for which animal?

- a) Tiger
- b) Lion
- c) Rhinoceros
- d) Elephant

Question 12: Momentum of a body depends upon

- a) Mass
- b) Velocity
- c) Both (a) & (b)
- d) Force acting on an object

Question 13: Why are the soles of the shoe treaded

- a) To reduce friction
- b) To increase friction
- c) To give the shoes more protection
- d) To increase life of the shoe

Question 14: A train accelerates from 18 Km/h to 72 km/h in 10 sec. The distance travelled by train?

- a) 355 m
- b) 325m
- c) 255m
- d) 125m

Question 15: Motion of a needle of a sewing machine

- a) Periodic motion
- b) Circular motion
- c) Rectilinear motion
- d) None of the above

Question 16: The coloured organelles which are found in plants only are

- a) Chlorophyll
- b) Plastids
- c) Vacuoles
- d) WBC

Question 17: The process of copying genetic information from one strand of DNA into RNA is termed as _____

- a) Transcription
- b) Translation
- c) Replication
- d) Genetic code

Question 18: Genetic material of bacteria is found in

- a) Cell Membrane
- b) Ribosome
- c) Cytoplasm
- d) Nucleus

Question 19: Study of fossils is known as.

- a) Histology
- b) Mycology
- c) Paleontology
- d) Osteology

Question 20: The tendency of an offspring to resemble its parents is known as

- a) Resemblance
- b) Inheritance
- c) Heredity
- d) Variation

Question 21: How many goals designed under united nations sustainable development

Goals(SDGS)

- a) 15
- b) 21
- c) 18
- d) 17

Question 22: Which of the following sustainable Development Goals ensures availability and sustainable management of water & sanitation for all?

- a) SDG 6
- b) SDG 5
- c) SDG 7
- d) SDG 8

Question 23: A jet engine works on the principle of conservation of

- a) Mass velocity
- b) Angular momentum
- c) Energy Mass
- d) Linear momentum

Question 24: Which element is used for atomic energy production

- a) Thorium
- b) Lithium
- c) Goldenium
- d) Uranium

Question 25: Asteroids are found between the orbits of

- a) Saturn & Uranus
- b) Mars & Jupiter
- c) Saturn & Jupiter
- d) Earth & Mars

Question 26: Largest satellite in our solar system

- a) Phobos
- b) Deimos
- c) Titan
- d) Ganymede

Question 27: Amoeba & paramecium belongs to which category of organism?

- a) Bacteria
- b) Protozoa
- c) Algae
- d) Fungi

Question 28: Which organism are known as suicidal bag

- a) Lysosome
- b) Mitochondria
- c) Endoplasmic reticulum
- d) Golgibody

Question 29: Which type of reaction is used in black & white photography?

- a) Decomposition Reaction
- b) Combination Reaction
- c) Displacement Reaction
- d) Oxidation Reaction

Question 30: Fatly foods become rancid due to the process of

- a) Corrosion
- b) Reduction
- c) Oxidation
- d) Hydrogenation

Question 31: Which of the following used as a moulding and vesting agent for decorative elements

- a) $\text{CaSO}_4, \text{H}_2\text{O}$
- b) $\text{CaSO}_4, \frac{1}{2} \text{H}_2\text{O}$
- c) $\text{CaSO}_4, 2\text{H}_2\text{O}$
- d) CaSO_4

Question 32: Which of these is not a vestigial organ in human being?

- a) Appendix
- b) Wisdom tooth
- c) Nictitating membrane
- d) Gall Bladder

Question 33: A person's observable characteristics like eye color are known as their

- a) Phenotype
- b) Homozygous
- c) Allele
- d) Genotype

Question 34: A cell without a cell wall is termed as

- a) Symplast
- b) Apoplast
- c) Tonoplast
- d) Protoplast

Question 35: What kind of eclipse can happen during New moon?

- a) Lunar Eclipse
- b) Solar Eclipse
- c) Planetary Partial Solar Eclipse
- d) None of the above

Question 36: What is the maximum number of solar eclipses that can occur during a calendar year?

- a) Three
- b) One
- c) Five
- d) Six

Question 37: Which of the following options are correct?

- a) Eutrophication refers to excessive enrichment of water bodies with nutrients, particularly
- b) Sewage discharge, agricultural runoff & industrial waste are common cause of eutrophication.
- c) Both a & b
- d) None of these

Question 38: Major petroleum deposits in India are found in sedimentary basins located in

- a) Gujarat
- b) Madhya Pradesh
- c) Maharashtra
- d) Telangana

Question 39: Nagercoil and Jaisalmer are well known for effective use of

- a) wind energy
- b) solar energy
- c) atomic energy
- d) tidal energy

Question 40: Magnetite is the finest iron ore with a very high content of iron up to

- a) 50 percent
- b) 70 percent
- c) 90 percent
- d) 30 percent

Question 41: Weathering due to the action of animals, plants and human beings is also known as

- a) Mechanical weathering
- b) Chemical weathering
- c) Physical weathering
- d) Organic weathering

Question 42: Melting of ice in polar regions has increased which kind of weathering?

- a) Mechanical
- b) Chemical
- c) Biological
- d) All of them

Question 43: Sudden contraction and expansion of the outermost layer of rocks is known as

- a) Hydration
- b) Exfoliation
- c) Solution
- d) Oxidation

Question 44: In a stretched rubber band the stored energy is in the form of

- a) Chemical energy
- b) Electrical energy
- c) Kinetic Energy
- d) Potential Energy

Question 45: Synapsis occurs in which of these phases of cell division?

- a) Leptotene
- b) Zygotene
- c) Pachytene
- d) Diplotene

Question 46: In which typical stage are lampbrush chromosomes observed?

- a) Meiotic Prophase
- b) Mitotic Metaphase
- c) Mitotic Prophase
- d) Mitotic Anaphase

Question 47: Which is also known as "oil of vitriol"?

- a) Nitric acid
- b) Hydrochloric acid
- c) Citric acid
- d) Sulphuric acid

Question 48: Which group of elements are known as halogens?

- a) Group-17
- b) Group-18
- c) Group-16
- d) Group-15

Question 49: Which of these elements is considered to be the largest source of commercial energy consumption in the world?

- a) Nuclear
- b) Oil
- c) Natural gas
- d) Coal

Question 50: Which of these days is celebrated in the form of World Environment Day all around the world?

- a) 5th July
- b) 10th June
- c) 20th October
- d) 5th June

Question 51: A body is thrown vertically upward with velocity v , the greatest height h to which it will rise is

- a) v/g
- b) $v^2/2g$
- c) v^2/g
- d) $v/2g$

Question 52: A ball is thrown vertically upward in a train moving with uniform velocity. The ball will

- a) Fall behind the thrower.
- b) Fall ahead of the thrower.
- c) Fall on the left of the thrower.
- d) Return back to the thrower.

Question 53: Which cells are known as phagocytic cells?

- a) Mast cells, macrophages
- b) Mast cell, antibodies
- c) Neutrophils, Mast cells
- d) Neutrophils, macrophages

Question 54: Why does a plant cell have a fixed shape and animal cell does not?

- a) Plant cells have higher larger vacuoles than animal cell.
- b) The cell membrane of a plant cell is surrounded by a cell wall.
- c) both a & b
- d) None of the above

Question 55: Which of the following structures between two adjacent cells is an effective transport pathway?

- a) Plasmalemma
- b) Endoplasmic Reticulum
- c) Plastodesmata
- d) Plasmodesmata

Question 56: Assertion(A): The sun appears to rise in the east set in the west.

Reason(R): The Earth rotates from west to east.

- a) Both A & R are true and R is the correct explanation of A.
- b) Both A & R are true but R is not the correct explanation of A.
- c) A is true but R is false
- d) A is false but R is true

Question 57: Which property is characteristic of covalent compounds?

- a) High melting point
- b) Conduct electricity in molten state
- c) Usually insoluble in nonpolar solvents
- d) Low melting/boiling points and poor electrical conductivity

Question 58: A child has blood type O. Parents have blood types A and B. Which genetic principle explains this possibility?

- a) Co-dominance
- b) Incomplete dominance
- c) Multiple alleles and recessiveness
- d) Epistasis

Question 59: A 2 kg object moves at 10 m/s. Its kinetic energy is

- a) 10 J
- b) 100 J
- c) 20 J
- d) 200 J

Question 60: Which RNA carries amino acids to the ribosome?

- a) rRNA
- b) tRNA
- c) mRNA
- d) snRNA

ROUGH WORK

(NOT TO BE EVALUATED)

DATE

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