

SCIENCE QUEST 2023 (6,7&8)

Sky's not the limit anymore.



Date – 25th April, 2023

Organized by – Science Club

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Questions –

BIOLOGY

1. Bacterial infections in humans can be treated with....

Ans. Antibiotics

2. DNA stands for.....

Ans. Deoxyribonucleic Acid

3. A single piece of coiled DNA is....

Ans. Chromosome

4. The area of biology devoted to the study of Fungi is.....

Ans. Mycology

5. A change of DNA in an organism that results in a new trait....

Ans. Mutation

6. Movement of cell against concentration gradient is.....

Ans. Active Transport

7. Plants synthesize Proteins from.....

Ans. Amino acids

8. Prokaryotic cell lacks.....

Ans. Nuclear membrane

9. Photosynthesis takes place faster in.....

Ans. White light

10. Nucleus, the genetic material containing rounded body in each cell, was first discovered in 1831 by.....

Ans. *Robert Brown*

11. Other than spreading Malaria, Anopheles Mosquitoes are also vectors of.....

Ans. Filariasis

12. Plants that grow in saline water are.....

Ans. Halophytes

13. Pyorrhoea is a disease of

Ans. Gums

14. Plant hormones which induces cell division is.....

Ans. Kinins

15. Phloem is the tissue found in.....

Ans. Plants

16. Prothrombin which helps in the clotting of blood is released by....

Ans. Blood Platelets

17. A nuclear reaction where the nucleus of an atom splits into smaller parts.....

Ans. Nuclear Fission

18. The process of pasteurization is named after famous French microbiologist...

Ans. *Louise Pasteur*

19. Most of the red, blue and purple colors of plants are due to the pigment

Ans. Anthocyanin

20. Plants developing in dry conditions are .

Ans. Xerophytes

21. Plants growing on sand are called as.

Ans. Psammophytes

22. Our skin, when exposed to excess sunlight, becomes dark .This is because of our skin pigments called.....

Ans. Melanin

23. On which plants did *Gregor Mendel* Perform his classical experiment.

Ans. Pea

24. The nuclear particles which are assumed to hold the nucleons together are.

Ans. Mesons

25. The inherited traits of an organism are controlled by

Ans. DNA molecules

26. The Vitamin found in fish is.

Ans. Vitamin D

27. Who was the first to find about scurvy diseases?

Ans. *James Lind*

28. Who gave the structure of chromosomes.

Ans. *Walther Fleming*

29. What is known as the power house of the cell.

Ans. Mitochondria

30. Insulin and testosterone are the types of.

Ans. Hormones

31. What is the full form of SARS.

Ans. Severe Acute Respiratory Syndrome

32. Loosening of teeth is caused by the deficiency of.

Ans. Vitamin C

33. Who is known as the Father of Biology ?

Ans. Aristotle

34. Who noted the circulation of blood for the first time?

Ans. *William Harvey*

35. Which vitamin is originally called Retinol?

Ans. Vitamin A

36. In what process does *Lactobacillus Acidophilus* help?

Ans. Digestion of food

37. Rickets is caused by the deficiency of.

Ans. Vitamin D

38. What is shedding of scales and skins known as?

Ans. Moulting

39. The plant hormones are known as.

Ans. Pytohormones

40.Study of Tumor is known as.

Ans. Oncology

41.Who did the first open heart surgery?

Ans. *Walter Lillehal*

42.Cholera is caused by.

Ans. Vibrio Cholera

43.Chicken pox is caused by.

Ans. Virus

44.Which fruit is used to reduce cancer?

Ans. Apple

45.Which Vegetable is derived from the Latin word "Bracium".

Ans. Broccoli

46.What is the structure and arrangement of teeth known as?

Ans. Detention

47.Which insect's excreta is used for increasing soil fertility?

Ans. Earthworm

48.Which is the acid secreted in stomach.

Ans. Hydrochloric Acid

49.Name the flower having fused petals.

Ans. Gamopetalous

50. Which apparatus is used to measure the blood pressures.

Ans. Sphygmomanometer

CHEMISTRY

1. Who discovered the phenomenon of radioactivity?

Ans. *Antoine Henri*

2. Who discovered fundamental particles?

Ans. *J. J. Thomson*

3. Who proved that Earth and other planets move around the Sun?

Ans. *John Kepler*

4. Who is the first scientist who used symbols for elements?

Ans. *John Dalton*

5. Who was the Indian sage who developed Atomic Theory 2600 years ago?

Ans. *Acharya Kanada*

6. Who discovered Neutron and in which year?

Ans. *James Chadwick* in 1932

7. Who discovered Fundamental particles?

Ans. *J. J. Thomson*

8. Who suggested that matter is made up of 4 elements?

Ans. *Empedocles*

9. Who is the first and the only person to win two noble prizes in Science?

Ans. *Marie Curie*

10. Who won the noble prize in chemistry in 1908?

Ans. *Lord Ernest Rutherford*

11. Who discovered protons?

Ans. *Eugen Goldstein*

12. Who discovered the phenomenon of radioactivity?

Ans. *Antoine Henri Becquerel*

13. Who proposed a new atom Model?

Ans. *Neil Bohr*

14. What is the meaning of *Acharya Kanada*?

Ans. Teacher of small particles

15.What is the circular orbits in which electrons revolve round the nuclear called?

Ans. Shells or Energy levels.

16.What are the rays emitted from cathode to anode called?

Ans. Cathode Rays

17.What are the rays emitted from anode to cathode called?

Ans. Anode Rays.

18.What is Thomson's model also called?

Ans. Plum pudding model or watermelon model.

19.Which the smallest part of compound?

Ans.. Molecule.

20.Who was a pioneer of radioactivity and discovered two new elements polonium and radium?

Ans. *Marie Curie*

PHYSICS

1. In which state, the molecules can move anywhere in space?

Gas

2. Among solids, liquids and gases ,which is highly compressible?

Gas

3. Name the substance that occupies space and has mass.

Matter

4. What is the boiling point of water?

100⁰ C

5. Name the force of attraction between the particles of the same substance

Force of Cohesion

6. What is the speed of light in vacuum?

3x10⁸ m/s

7. Name a substance that can attract iron.

Magnet

8. What is the normal temperature of a human body?

37⁰C or 98.6⁰F

9. Name the class of lever found in pair of scissors.

Class one levers

10. Name the SI unit of work.

Joule

11. Name the SI unit of frequency.

Hertz

12. In which state sound travels faster.

Solids

13. What is the SI unit of current?

Ampere

14. From which material are electromagnets made?

Soft iron

15. What determines the pitch of a sound?

Frequency

16. Name the unit in which the loudness of sound is expressed.

decibel

17. Name the three primary colours.

Red, blue, green

18. What is the SI unit of temperature

Kelvin

19. Name the fourth class of matter.

Plasma

20. What is the approximate diameter of molecule.

10^{-10}m

21. What kind of image is formed by a plane mirror

Virtual and of same size

22. In which medium, the speed of light is maximum.

Air

23. Name a liquid metal used in thermometers.

Mercury

24. What is the name of the voice box present in our throat.

Larynx

25. What is the frequency range of infrasonic sound?

Below 20Hz

26. What is the speed of sound in iron?

5000m/s

27. What is the distance of reflecting surface to hear an echo?

16.5 m

28. In which medium sound cannot travel.

Vacuum

29. What is the apparent weight of a floating body?

Zero

30. What is the unit of thrust?

Newton

31. Name the unit of pressure.

Pascal

32. What is the atmospheric pressure on earth surface?

10^5Pa

33. Which mirror always forms a virtual image?

Convex

34. What is the SI unit of power?

Watt

35. Which image cannot be obtained on a screen?

Virtual image

36. Name the kind of energy energy, possessed by a rolling ball.

Kinetic energy

37. Which energy is stored in an electric cell?

Chemical energy

38. In which state the intermolecular forces are the strongest.

Solids

39. Name the class of lever found in a bottle opener.

Class

two lever

40. Name the class of lever found in a knife.

Class three levers

41. What is the density of ice?

0.9 gcm^{-3}

42. What is the relationship between time-period and frequency?

$T=1/F$

43. What is the full form of MCB?

Miniature

circuit breaker

44. The switch is connected to which wire.

Live wire

45. In which unit, we pay the cost of electricity.

KWh

46. How many poles does a magnet have?

Two

47. In torch, what is the source of electricity?

Dry cell

48. Which is the darkest position of a shadow?

Umbra

49. Which substances allow current to pass through them.

Conductor

GENERAL SCIENCE

1. Which disease is caused by improper disposal of sewage

Cholera

2. What are the products of anaerobic respiration in yeast

carbon dioxide and ethanol

3. what records the distance travelled by a vehicle

odometer

4. Which mirror shows a lateral inversion of light

plane mirror

5. Acids taste sour

ion concentration

hydrogen

6. Which mirror is used for side view in vehicles

convex mirror

7. Standard international unit of speed is

meter/second

8. A merry go round is an example of what kind of motion

rotary motion

9. Which is the biggest planet in our solar system

Jupiter

10. What is the chemical symbol for the element oxygen

O

11. What is the 7th element on the periodic table of elements

nitrogen

12. Is the compound HCl an acid or base

an acid

13. Which famous scientist was awarded the 1921 Nobel prize in physics for his work

on theoretical physics

albert einstein

14. Pure water has a ph level of around

7

15. It is a form of renewable energy

solar energy

16. Which parts of human body has involuntary muscles

intestine

17. What enables us to swing our arms

socket joint

ball and

18. Global warming is the result of

pollution

air

19. Which gas in air is present mostly
nitrogen
20. The layer of atmosphere where the jet plane fly is the
stratosphere
21. Which protect us from the harmful rays of the sun
ozone layer
22. Birds that swim in water have
webbed feet
23. Travelling long distances to avoid hardships of winter is called
migration
24. The hump of a camel helps in storing
fat
25. Birds can fly due to light body weight. this is due to
hollow bones

WHO IS KNOWN AS?

- | | |
|----------------------------------|-------------------------|
| 1. Father of Biology and Zoology | <i>Aristotle</i> |
| 2. Father of Physics | <i>Sir Isaac Newton</i> |
| 3. Father of Medicine | <i>Hippocrates</i> |
| 4. Father of Botany and Ecology | <i>Theophrastus</i> |
| 5. Father of Cytology | <i>Robert Hooke</i> |
| 6. Father of Genetics | <i>Mendel</i> |
| 7. Father of Nuclear Chemistry | <i>Otto Hahn.</i> |
| 8. Father of Pathology | <i>Rudolf Virchow</i> |
| 9. Father of Virology | <i>W.M. Stanley</i> |
| 10. Father of microbiology | <i>Louis Pasteur</i> |

WHO DISCOVERED THE FOLLOWING?

- | | |
|-----------------------------|--------------------------|
| 11. Oxygen | <i>Joseph Priestly</i> |
| 12. Hydrogen | <i>Henry Cavendish</i> |
| 13. Nitrogen | <i>Daniel Rutherford</i> |
| 14. X-rays | <i>William Roentgen</i> |
| 15. Incandescent light bulb | <i>Thomas Edison</i> |
| 16. Cell | <i>Robert Hooke</i> |
| 17. Airplane | <i>Wright Brothers</i> |
| 18. Diesel Engine | <i>Rudolf Diesel</i> |
| 19. Electric Battery | <i>Volta</i> |
| 20. Radioactivity | <i>Becquerel</i> |
| 21. Molecular Hypothesis | <i>Avogadro</i> |

22.Proton	<i>E. Rutherford</i>
23.Refrigerator	<i>James Harrison</i>
24.Submarine	<i>David Bushnell</i>
25.Telephone	Alexander Graham Bell
26.Vaccination	<i>Edward Jenner</i>
27.Jet engine	<i>Frank Whittle</i>
28.Helium	<i>Sir William Ramsay</i>
29.Periodic table	<i>Dmitri Mendeleev</i>
30.Clock	<i>Christian Huygens</i>

NAME THE FOLLOWING BRANCHES OF SCIENCE:

Concerning field	Branch
31.Study of reasoning	logic
32.Study of skulls	Craniology
33.Study of liver	Hepatology
34.Study of flower	Anthology
35.Study of languages	Philology
36.Study of snakes	Serpentology
37.Study of fruits	Pomology
38.Study of heart	Cardiology
39.Study of muscles	Mytology
40.Study of soils	Pedology

NAME THE IMPORTANT SCIENTIFIC INSTRUMENTS

41.To measure depth of the ocean	Fathometer
42.To measure humidity in air	Hygrometer
43.To measure electrical power	Dynamometer
44.To measure very high temperature	Pyrometer
45.To measure emission of radiant energy	Radiometer

Identify the discovery or the discoverer

Discovery	discoverer
46.Circulation of blood	<i>William Harvey</i>
47.Penicillin	<i>Alexander Fleming</i>
48. Vaccination	<i>Edward Jenner</i>
49.Yoga	Patanjali
50.Vitamin k	<i>Doisy dam</i>

51. RH-factor	<i>Karl Landsteiner</i>
52. Vitamin D	<i>Mc collum</i>
53. Vaccine polio	<i>Jonas salk</i>
54. Vaccine rabies	<i>Louis Pasteur</i>

Common names and chemical names of compounds

Common name	chemical name
55. Dry ice	solid carbon dioxide
56. Alcohol	ethyl alcohol
57. Sand	silicon oxide
58. Laughing gas	nitrous oxide
59. Baking powder	sodium bicarbonate
60. Washing soda	sodium carbonate
61. Heavy water	Deuterium oxide
62. TNT	Tri Nitro toluene
63. Marsh gas	methane

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Communicable disease

Diseases caused by virus

Disease	Pathogen responsible
64. Aids virus)	<i>HIV</i> (human immune deficiency
65. rabies	<i>rhabdo virus</i>
66. mumps	<i>paramyxo virus</i>
67. influenza flu	<i>orthomixo virus</i>
68. common cold rhino virus	

Diseases caused by bacteria

Disease	Pathogen responsible
69. pneumonia	<i>Diplococcus Pneumoniae</i>
70. cholera	<i>Vibrio cholera</i>
71. whooping cough	<i>Hemophilus Pertussis</i>
72. Plague	<i>Yersinia pestis</i>
73. leprosy	myco bacterium leprae

