

General Science 9th

Chapter 1: Introduction and Role of Science

Question 1: What is the literal meaning of science?

- Or: Praise science.
- Or: What do you mean by science?
- Or: What language word is science and what does it mean?

Answer: Science is derived from the Latin word "Scientia" which literally means to study facts regularly in real form. The basic principle of science is observation and reasoning.

Question 2: What is meant by scientific method?

- Or: Praise the scientific method.

Answer: The basic principle of science is observation and reasoning. Formulating scientific law in the light of experiments is called the scientific method.

Question 4: What is the basic principle of science?

Answer: The basic principle of science is observation and reasoning.

Question 5: How was the burning process discovered?

Answer: When man got fire by burning wood for the first time, the process of natural burning was discovered. With this process man also discovered that wood burns but stones do not burn.

Question 6: What was the Greek view of science?

- Or: What four elements do the ancient Greek philosophers think all things in the world are made up of?
- Or: According to the Greeks, what elements led to life on earth?
- Or: What was the belief of the native Greek philosophers about science?

Answer: The Greeks were not convinced of the empirical confirmation of the theories. He believed that all things in the world are made up of four elements i.e. air, water, soil and fire, and that with different proportions of these four elements, one thing can be converted into another.

Services of Muslim Scientists

Question 7: What is the era of Islamic chemistry?

- Or: Write two important features of the era of Islamic chemistry.
- Or: What do you know about the era of Islamic chemistry?

Answer: The period from 600 to 1400 AD is called the era of Islamic chemistry. During this period, many research-minded people observed the properties of matter. New experiments were conducted and new elements such as arsenic were discovered.

Question 8: What elements were discovered during the time of Muslim scientists?

Answer: Arsenic was discovered during the reign of Muslim scientists. In addition, a large number of compounds were made and many experimental instruments such as Retort etc. were made and processed.

Question 9: Which rulers harmed the World of Islam in the field of knowledge?

Answer: As a result of the destruction of the Islamic world at the hands of Genghis Khan and Hulagu Khan in the 13th century, the Muslims, who had been the imams and leaders of the scholars for the last seven centuries, started retreating and were replaced by western scientists.

Question 11: Write the names of four Muslim scientists.

Answer:

- Jabir ibn Hayyan
- Muhammad bin Zakariya al-Razi
- Ibn al-Haytham
- Al-Biruni

Question No. 12: Write the names of two Muslim scientists and the service of each.

Answer:

- **Jabir bin Hayyan:** Sulphuric acid, nitric acid and hydrochloric acid were first prepared by Jabir bin Hayyan.
- **Muhammad bin Zakariya al-Razi:** Al-Razi was the first scientist who developed alcohol through taqmir.

Question 13: Which scientist is called the founder of chemistry?

Answer: Jabir bin Hayyan is said to be the founder of chemistry. Jabir bin Hayyan was the first chemist to have a regular chemical laboratory.

Question 14: What acids did Jabir bin Hayyan prepare?

Answer: Jabir bin Hayyan developed sulfuric acid, nitric acid and hydrochloric acid.

Question 15: Who was the first to prepare sulfuric acid, nitric acid and hydrochloric acid?

Answer: Sulphuric acid, nitric acid and hydrochloric acid were first developed by Jabir bin Hayyan.

Question 16: What methods and compounds did Jabir bin Hayyan develop?

- **Or: Write two deeds of Jabir bin Hayyan.**
- **Or: Write four achievements of Jabir bin Hayyan in the field of science.**

Answer:

- Jabir bin Hayyan found ways to melt and clean raw metals, produce steel, dye leather, protect iron from rust.
- Sulfuric acid, nitric acid and hydrochloric acid were first developed by Jabir bin Hayyan.
- Jabir bin Hayyan was also the inventor of many compounds besides them and he also knew the methods of making varnish.
- Jabir ibn Hayyan was the first chemist to have a regular chemical laboratory.

Question 17: What books did Jabir bin Hayyan write?

- **Or: Write the names of two famous books of Jabir ibn Hayyan.**
- **Or: Write the names of the three books of Jabir ibn Hayyan.**

Answer: Jabir bin Hayyan wrote many books in Arabic on chemistry and similar topics, including "Al-Kitab", "Al-Khals", and "Al-Qaemia".

Question 18: Who translated the books of Jabir bin Hayyan?

Answer: Jabir bin Hayyan's book "Alchemy" was translated into Latin by an Englishman, Robert of Chester, in 1144. In 1892, Mr. Au Holmes translated nine books by Jabir bin Hayyan into French.

Question 19: When and where was al-Razi born?

Answer: Muhammad bin Zakariya al-Razi was born in Ray, Iran in 865.

Question 20: What knowledge was Muhammad bin Zakariya al-Razi an expert on?

- **Or: Muhammad bin Zakariya al-Razi discovered the symptoms and treatment of which diseases?**
- **Or: Write the services of Muhammad bin Zakariya al-Razi in research on diseases.**
- **Or: Write two important achievements of Muhammad bin Zakariya al-Razi.**

Answer: Al-Razi was fully aware of the principle of medicine of his time. He was the head of the Hospital in Baghdad and a specialist surgeon. He used opium for the first time to make him unconscious. Muhammad bin Zakariya al-Razi was the first to elaborate on the causes, symptoms and treatment of smallpox and measles.

Question 21: How did which scientist use opium?

Answer: Muhammad bin Zakariya al-Razi used opium for the first time to make him unconscious.

Question 22: How many groups did Muhammad bin Zakariya al-Razi divide chemical compounds into?

Answer: Muhammad bin Zakariya al-Razi divided various chemical compounds into four groups: mineral, plant, animal, and derivative.

Question 23: What is the reason for Ibn al-Haytham's fame?

- **Or: Write two scientific achievements of Ibn al-Haytham.**
- **Or: Write two achievements of Ibn al-Haytham in the field of science.**
- **Or: Write two lines on Ibn al-Haytham's research on light.**
- **Or: Write ibn al-Haytham's services to light.**

Answer:

- Ibn al-Haytham is considered to be the first expert on the laws of the inertia of matter.
- The pinhole camera was also invented by Ibn al-Haytham.
- Ibn al-Haytham took the name of reflection and refraction in addition to mirror and lens.

Question 24: Who invented the pinhole camera?

Answer: Pin Hole camera was invented by Ibn al-Haytham.

Question 25: What book did Ibn al-Haytham write?

Answer: The name of Ibn al-Haytham's book is "Kitab-ul-Darshak", which is a comprehensive, experimental and mathematical book about the properties of light.

Question 26: What experiments did Ibn al-Haytham make about light?

Answer: Ibn al-Haytham is considered to be the first expert on the laws of reflection and refraction in addition to Mirror and Lens.

Question 27: To what extent was Roger Bacon influenced by the work of Ibn al-Haytham?

- **Or: What do you know about Roger Bacon?**

Answer: Roger Bacon invented the telescope using the observations of Ibn al-Haytham. Roger Bacon repeatedly mentioned Ibn al-Haytham in his works.

Question 28: Where did al-Biruni receive his early education?

Answer: Al-Biruni received his early education from Abu Nasr Mansur, a well-known mathematician and mathematician of Khwarazm.

Question No. 29: Write any two services of Al-Biruni in the field of science.

Answer:

- Al-Biruni discovered that light is faster than sound.
- While touring the subcontinent, al-Biruni calculated the fort of Nandana (then called Tila Balanath), a town in Pind Dadan Khan tehsil of Jhelum district in Pakistan, and told that half the diameter of the earth is 6,338 kilometers. The modern estimate is 6353 kilometers, that is, there is a difference of only fifteen kilometers between al-Biruni's estimate and the exact half diameter of the earth.

Question 30: Where did al-Biruni find half the diameter of the earth?

Answer: During his tour of the subcontinent, al-Biruni calculated half the diameter of the earth by calculating the fort of Nandana (then called Tila Balanath) in Pind Dadan Khan tehsil of Jhelum district, about 100 kilometers from Islamabad, the capital of Pakistan.

Question 31: What is the difference between the half diameter of the earth described by al-Biruni and the real half diameter?

Answer: Al-Biruni calculated that half the diameter of the earth is 6338 kilometers. The modern estimate is 6353 kilometers. That is, there is a difference of only 15 kilometers between al-Biruni's estimate and the exact half diameter of the earth.

Question 32: What was al-Biruni's view of the formation of the Indus Valley?

Answer: Al-Biruni was the first person who proposed the theory that the Indus Valley was once a sea, later the Sand and Mud gradually accumulated and the Indus Valley came into existence. Modern geologists think so too.

Question 33: How many books did al-Biruni write? Write the name of his famous book.

- **Or: write the name of al-Biruni's famous book.**

Answer: Al-Biruni has written more than 150 books on mathematics. Al-Biruni's famous book is called Tahrir al-Amakan.

Question 34: What was the full name of Bo Ali Sina and by what name is he known in Europe?

Answer: Shaykh Al-Rais Bo Ali Sina's full name is Abu 'Ali al-Husayn ibn 'Abd Allah, he is known in Europe as Avicenna.

Question 35: Describe the two scientific achievements of Bo Ali Sina?

- **Or: Write two services of Bo Ali Sina in the field of science.**

Answer: Bo Ali Sina is considered to be the Aristotle of the Muslim world. He wrote a research paper on about 760 herbs. Bo Ali Sina has authored more than 100 books on philosophy, science, jurisprudence, literature, as well as medicine.

Question No. 36: What is Bo Ali Sina's famous book on the subject of philosophy?

Answer: In the field of philosophy, Ibn Sina's masterpiece is "Kitab al-Shifa". In addition to physics, chemistry, mathematics, subjects like biology and music have also been discussed a lot in this famous book.

Question 37: Which book of Bo Ali Sina is very popular in the field of medicine?

- **Or: Write two lines on Bo Ali Sina on the subject of medicine.**

Answer: Ibn Sina's encyclopedia on medicine, "Al-Qanoon fi al-Tabaab", is a certificate which consists of fourteen volumes. In this book, the structure and structure of organs have been described. This book was taught in all medical schools in Europe until the 17th century.

Question No. 38: Write the names of two books of Boali Sina.

- **Or: Write the names of two famous books of Ibn Sina.**

Answer:

- Kitab al-Shifa
- Law in Medicine

Question No. 39: Write the names of any of the four Pakistani scientists.

- **Or: Write the names of any four scientists of the present time.**

Answer:

- Dr. Abdus Salam
- Dr. Abdul Qadeer Khan
- Dr Munir Ahmed
- Dr. Ata-ur-Rehman

Question 40: When and where was Dr. Abdus Salam born?

Answer: Dr. Abdus Salam was born on January 29, 1926, in Santok Das, District Sahiwal.

Question 41: Where did Dr. Abdus Salam serve in Pakistan?

Answer: In 1951, he was appointed president of the Mathematics Department of Government College Lahore. He was a member of the Pakistan Atomic Energy Commission from 1958 to 1974. From 1961 to 1974, he was scientific advisor to the President. In 1961, SPARCO was founded and appointed chairman.

Question 42: When and who founded SPARCO?

Answer: SPARCO was founded by Dr. Abdus Salam in 1961.

Question 43: What did Dr. Abdus Salam propose at the Second Islamic Summit?

Answer: At the 2nd Islamic Summit in Lahore in February 1974, he proposed the establishment of the Islamic Science Foundation.

Question 44: Which Pakistani scientist has won the Nobel Prize?

Answer: Pakistan's only Nobel Prize winning scientist is Dr. Abdus Salam.

Question 45: Why was Dr. Abdus Salam awarded the Nobel Prize?

- **Or: Write a short note on the Nobel Prize-winning Pakistani scientist.**
- **Or: Write the scientific achievements of Dr. Abdus Salam.**
- **Or: What is the role of Dr. Abdus Salam in making Pakistan the first Islamic nuclear power?**
- **Or: What theory did Dr. Abdus Salam put forward?**

Answer: Dr. Abdus Salam proposed the idea of combining two basic forces i.e. weak nuclear force and electromagnetic force. Therefore, in 1979, he was awarded the Nobel Prize along with Weinberg and Glosso for his outstanding research in the field of theoretical physics.

Question No. 46: Write about the birth and early education of Dr. Abdul Qadeer Khan.

Dr. Abdul Qadeer Khan was born on April 1, 1936 in Bhopal, India. Dr. Abdul Qadeer Khan received his early education in Bhopal. In 1952, he migrated from Bhopal to Karachi and enrolled in DJ Science College and obtained a BSc degree.

Question 47: When and where was Dr. Abdul Qadeer Khan born?

Dr. Abdul Qadeer Khan was born on April 1, 1936 in Bhopal, India.

Q.48: What is the great achievement of Dr. Abdul Qadeer Khan?

- **Or: Write the services of Dr. Abdul Qadeer Khan.**
- **Or: Write two lines on Dr. Abdul Qadeer Khan.**

Answer:

- Dr. Abdul Qadeer Khan, in collaboration with other Pakistani scientists, conducted successful nuclear tests at Chaghi in Balochistan on May 28, 1998, which resulted in Pakistan becoming a nuclear power.
- In recognition of the services of Dr. Abdul Qadeer Khan, "Kahuta Research Laboratories" was later renamed as "Dr. A.Q. Khan Research Laboratories" in his honor.

Question 49: When and where was Dr. Munir Ahmed Khan born?

Dr. Munir Ahmed Khan was born in Kasur in 1926.

Question 50: When and where was Dr. Ata-ur-Rehman born?

Answer: Dr. Ata-ur-Rehman was born in Delhi in 1942.

Question No. 51: Write the services of Dr. Ata-ur-Rehman in science.

Answer:

- He made valuable contributions to medicine science.
- Dr. Atta-ur-Rehman has published more than 250 research papers so far and many scientists have used them to further their research.
- Dr. Ata-ur-Rehman has received dozens of national and international awards.

Question 52: When and where was Dr. Samar Mubarakmand born?

Answer: Dr. Samar Mubarakmand was born on September 17, 1941 in Rawalpindi.

Question No. 53: Write two services of Dr. Samar Mubarakmand.

- **Or: When and how many nuclear tests did Pakistan conduct?**

Answer: On the special performance of Dr. Samar Mubarakmand, the Prime Minister of Pakistan sent a team of nuclear scientists headed by him to Chaghi, where he conducted 6 nuclear tests for Pakistan. These six nuclear tests were successfully conducted on May 28 and 30, 1998. In addition, as DG, National Development Complex, he not only designed and developed shaheen medium range missiles but also successfully tested them on April 15, 1999.

Question No. 54: Why is Dr. Ashfaq Ahmed famous?

Answer: Dr. Ashfaq Ahmed joined the Pakistan Atomic Energy Commission in 1960. In 1991, he was made chairman of the commission. At the Pakistan Atomic Energy Commission, he has been actively engaged in all stages of research, development, training and production. Dr. Ashfaq Ahmed has been associated with Pakistan's peaceful nuclear program for more than 25 years and is considered one of the top architects of our nuclear capability.

Branches of Science

Question No. 55: Write the names of the four branches of science.

Answer: Physics, Chemistry, Biology, Mathematics.

Question 56: What is Physics? Write the names of its two branches.

- **Or: Define physics.**
- **Or: write the names of the four branches of physics.**

Answer: Physics is the knowledge that is specifically related to material objects and their energy. Physics is also called the science of measurement because this knowledge is mostly related to measurement. Mechanics, heat, light, sound and electricity are its main branches.

Question 57: What is meant by chemistry?

- **Or: What knowledge is chemistry?**
- **Or: Praise chemistry.**
- **Or: What do you mean by the study of chemistry?**

Answer: Chemistry is the branch of science in which the nature, composition and chemical properties of various objects are studied. Many chemical reactions are happening all the time in the world. Many chemical reactions are taking place within our own existence, such as digestion of food, formation of blood, cleansing of blood, etc. Physical, organic and inorganic chemistry are the main branches of chemistry.

Question 58: What is the difference between Chemistry and Biochemistry?

Answer:

- **Chemistry:** Chemistry is the branch of science in which the nature, composition and chemical properties of various objects are studied. Many chemical reactions are happening all the time in the world. Many chemical reactions are taking place within our own existence, such as digestion of food, formation of blood, cleansing of blood, etc. Physical, organic and inorganic chemistry are the main branches of chemistry.
- **Biochemistry:** This involves the study of biology keeping in mind the principles of chemistry, such as the role of various chemicals in the digestion of food, etc.

Question 60: Give examples of some chemical factors in the human body?

Answer: Many chemical reactions occur inside the human body, such as digestion of food, formation of blood, cleansing of blood, etc.

Question 61: What is meant by Biology?

- **Or: Praise biology. Write the names of its two large branches.**

Answer: Biology is derived from two Greek words Bios and Logos. Bios means "life" and logos means "debate." The knowledge of studying organisms in scientific ways is called biology. It has two major branches: (i) Botany (ii) Zoology.

Question 64: What is meaning of Botany?

- **Or: Define Botany.**

Answer: The knowledge of plants is called botany. In this, let's discuss about the structure, growth and environment of plants.

Question 65: What is meant by Zoology?

- **Or: Define Zoology.**

Answer: The knowledge of animals is called zoology. It discusses the size and environment of animals and humans.

Question 67: What is the relationship between chemistry and biology?

Answer: Chemistry and biology are closely related. In biology, biological factors, the function of different organs and their structure are described. But all the chemical reactions that occur in different living bodies are related to chemistry, which is called biochemistry or biochemistry.

Question 68: Explain the difference between biology and geography.

Answer:

- **Biology:** Biology is derived from the two Greek words bios and logos. Bios means "life" and logos means "debate." The knowledge of studying organisms in scientific ways is called biology.
- **Geography:** Geo means earth and graphy means graphy. As if under geography, different parts of the earth i.e. land and land areas are graphed.

Question 69: What is meant by Astronomy?

Answer: Knowledge of celestial bodies such as the sun, moon, stars and planets is called astronomy.

Question 71: What is meant by knowledge of mathematics?

- **Or: What do you mean by mathematics?**
- **Or: Define mathematics and write down the names of two mathematicians.**

Answer: Mathematics is the knowledge of numbers and measurement properties. This includes mathematics, algebra and geometry. Newton and Einstein are two mathematicians.

Question 72: What is meant by Agriculture?

- **Or: Write three lines on agriculture.**
- **Or: What progress has science made in the field of agriculture?**
- **Or: What is agriculture?**
- **Or: What do you know about agriculture?**

Answer: Farming methods, the knowledge of rearing meat and dairy animals is called agriculture. Diseases of crops, methods of prevention, equipment used in agriculture, manufacture of machines, fertilizers and pesticides etc. are included in this science.

Question 73: What is meant by knowledge of medicine?

- **Or: Praise medicine.**
- **Or: Define medicine as a branch of science.**

Answer: Medicine is a branch of science that deals with the structure of living bodies, diagnosis of diseases, methods of treatment, preparation of medicines, and knowledge of the tools and machines used in diagnosis and treatment.

Question 75: What is the relationship between the different branches of science?

Answer: Different branches of science are closely related. Be it physics or chemistry, biology or mathematics, all these branches help each other for the study of science. For example, mathematical help is taken for the mathematical solution of different quantities of chemistry and physics.

Question 76: What do you mean by biophysics?

Answer: It involves the study of biology keeping in mind the principles of physics, such as the movement of the human body, etc.

Question 77: What is meant by Biochemistry?

Answer: It involves the study of biology keeping in mind the principles of chemistry, such as the role of various chemicals in the digestion of food, etc.

Question 78: Write the difference between biophysics and biochemistry.

- **Or: Praise biophysics and biochemistry.**

Answer:

- **Biophysics:** This involves the study of biology keeping in mind the principles of physics, such as the movement of the human body, etc.
- **Biochemistry:** This involves the study of biology keeping in mind the principles of chemistry, such as the role of various chemicals in the digestion of food, etc.

Question 79: What do you mean by geophysics?

- **Or: Define geophysics.**

Answer: The internal structure of the Earth and other earth phenomena explained by the laws of physics is called geophysics.

Question 80: What do you mean by astrophysics?

- **Or: Explain astrophysics.**
- **Or: Define astrophysics.**

Answer: The explanation of physics about celestial bodies is called astrophysics.

Question 81: Definition of biophysics and geophysics.

- **Or: Explain the difference between biophysics and geophysics.**
- **Or: Write the difference between biophysics and geophysics.**

Answer:

- **Biophysics:** This includes the study of biology keeping in mind the principles of physics.
- **Geophysics:** The internal structure of the Earth and other earth phenomena explained by the laws of physics is called geophysics.

Question 82: Define geophysics and astrophysics.

- **Or: What is the difference between Geophysics and Astrophysics?**

Answer:

- **Geophysics:** The internal structure of the Earth and other earth phenomena explained by the laws of physics is called geophysics.
- **Astrophysics:** The explanation of physics about celestial bodies is called astrophysics.

Question 83: What do you mean by technology? Give an example as well.

- **Or: What role does technology play in our lives?**

Answer: Knowledge of industrial arts is technology. The items used in our daily life such as potter's chalk, blacksmith's furnace, weaver's pillow, farmer's plow and roost, chipper-powered boats, etc. all contain ancient knowledge and technology based on it.

Question 84: Give some examples of ancient technology?

Answer: The items used in our daily life such as potter's chalk, blacksmith's furnace, weaver's spindle, farmer's plough and chariot, chipper-powered boats are all examples of ancient knowledge and its technology.

Question 85: Give some examples of modern technology?

- **Or: Write short notes on existing communication systems.**
- **Or: write the names of six discoveries and inventions that took place in the present century.**

Answer: Various discoveries made in the current century have led to endless developments in the communication system. Wireless, telephone, radio, television, computer and communication planets have pro-in an array of systems around the world. Man has made traveling in space possible.

Question 86: Write three lines on the Internet.

Answer: With the help of internet, you can get domestic and foreign information sitting at home because all computers can be connected to each other through the internet. These information can be recorded and later heard and understood correctly and printed as needed.

Question 87: What is the importance of computers in today's modern era?

- **Or: How has computers revolutionized our lives? Write briefly.**

Answer: Today is the era of computers. It Is An Important Invention Of The Modern Era Which Has Revolutionized Every Field Of Life. Computer-assisted e-mail messaging has become much faster. With the help of computers, you can get domestic and foreign information sitting at home. All computers can be connected to each other via the Internet. These information can be recorded and later heard and understood correctly and printed as needed.

Question 88: What role has science and technology played in agriculture?

Answer: In agriculture, high yielding seeds, pesticides, chemical fertilizers, agricultural machines, etc. are all due to science.

Question 89: What role has science and technology played in industry?

- **Or: What role does technology play in our lives?**

Answer: Automatic mechanical and electric machines that revolutionized the industry, high-flying aircraft at the speed of sound in communication, high-speed trains are all the achievements of science and technology.

Question 90: How did science and technology improve human life?

Answer: With the help of science and technology, man has made many inventions to provide better facilities to his life. The revolutionary inventions in the fields of agriculture, industry, communication and medicine are all due to scientific research and the revolutionary inventions in technology.

Question No. 91: Describe the use of genetic engineering in the medical field.

Answer: In the medical field, genetic engineering has developed a vaccine against hormones and various incurable diseases, but genetic diseases are still incurable.

Question 92: What role has science played in the field of medicine?

Answer: In the medical field, life-saving medicines and diagnostic devices are all due to scientific research and the revolutionary inventions in technology due to it.

Question 93: What role has science played in space exploration?

Answer: Science has also played an important role in space exploration. There is no limit to space exploration; the moon's conquest is still the first stage, followed by Mars and other planets in the solar system. Then we have to go beyond that. All this research is possible only because of science.

Question 94: Has man solved all his problems with the help of science?

Answer: Despite all the research and development, many natural disasters could not be controlled, such as earthquake disasters. Similarly, human beings are helpless in the face of other natural disasters.

Question 95: What are the limits of science?

Answer: In modern times, the boundaries of science are getting wider and wider. In the last half century, science and technology have progressed rapidly. New inventions are taking place day by day. What seemed impossible yesterday, today it seems to be a minor phenomenon. But despite all these successes, there are many cases in which science seems helpless. Human knowledge, however, cannot be complete. Science also has its own compulsions and limitations, which it is not possible for it to cross at present.

Question 96: What do you mean by technology?

Answer: The knowledge of industrial arts, the study of the evolution of the arts, and the practical application of experimental scientific sciences is called technology.

Question 97: What are the benefits of using electricity?

Answer: In the mid-19th century, the widespread production and transmission of electricity has given rise to numerous inventions for domestic and industrial use. Electricity not only provides lighting, but it also operates thousands of different machines in homes and factories. This Has Significantly Increased Industrial Production.

Question 98: Write down two names of the fastest communication channels.

Answer: Wireless, telephone, radio, television, computer.

Chapter 2: Our Life and Chemistry

Question 1: What is allotropy?

Answer: Allotropy: When an element is found in more than one different physical condition, this process is called allotropy.

Question 2: Name the three elements that are found very much in the human body?

Answer: (i) Carbon (ii) Hydrogen (iii) Oxygen

Question 1: What are the basic architectural elements of life? Write their names or: Which three bodies are of great importance in the bodies of living beings?

Answer: Many elements are found in different quantities in the bodies of living organisms. Three of these elements are of primary importance, which are as follows: (i) Carbon (ii) Hydrogen (iii) Oxygen

Question 2: What are archaic compounds and to what extent are they important to human life?

Answer: Organic compounds refer to those compounds in which carbon is added as an essential component. Their examples are proteins, carbohydrate races, and lipids. They act as building materials for all living bodies. For example, meat, pulses, fatty edible oils, sugar and grains, etc.

Question 3: Write the definition of carbon.

Answer: Carbon is an element that is an integral of organic compound.

Question 4: Under what conditions is carbon naturally found?

Answer: Carbon is the main component of all living things found on Earth. Carbon is present in the form of naturally occurring compounds such as natural gas, petroleum and coal.

Question 5: What is the relationship between photosynthesis and respiration?

Answer: Without basic actions such as photo-thesis and keys and respiration, the concept of life is impossible. Because respiration is the process of providing energy for all organisms, while photosynthetic green is a source of food for direct or indirect organisms.

Question 6: What is meant by respiration?

Answer: Respiration is a process in which organisms get oxygen from plants so that the body can be given energy by oxidation of glucose in the food.

Question 7: What is meant by Photosynthesis?

Answer: Photosynthesis is a process in which green plants produce carbohydrates (glucose) by obtaining carbon dioxide from the atmosphere and water from the ground in the presence of sunlight.

Question 8: What is meant by anabolic interaction?

Answer: Anabolic interaction refers to a constructive chemical process, i.e. new cells are formed during this process. An example of this is photosynthesis during which plants prepare food for themselves.

Question 9: What is meant by catabolic interaction?

Answer: Catabolic refers to a destructive chemical process i.e. during this time the already existing cells are broken down, an example of which is respiration.

Question 10: What is carbon? Explain its importance.

Answer: Carbon is an element. Very small amounts of carbon are found in the earth crust in free hulls. It is part of about a million different types of compounds. A unique ability of carbon is that carbon atoms combine together to form ringed compounds with long chains and rounded rings.

Question 11: What is meant by allotropy and what are the allotropic forms of carbon?

Answer: Allotropy. When an element is found in more than one different physical state, this process is called allotropy. The different physical states present in the allotropy of an element are called allotropic forms. Diamond, Graphite, and BuckyBalls are The Aloe True Pick Farms of the Car Bin.

Question 12: In what state does the diamond exist?

Answer: It is the colorless, transparent and crystalline state of carbon that is formed due to too much heat and pressure in the depths of the earth. It is the toughest object in the universe, so it is used to cut glass and polish precious stones.

Question 13: In what condition is graphite found?

Answer: This is also the pen state of carbon found in nature in a free state or obtained by heating coal in an electric furnace. It is a soft, dark, and solid state. Whose surface feels shiny and slippery when touched.

Question 14: Describe the use and structure of graphite.

Answer: Usage: Graphite is used in high number pitcher tolerant crucibles, dry cell electrodes, lead pencil, as libre cant and coloring. Structure: Graphite is the pen state of carbon found in nature in a free state or obtained by heating the clay in an electric furnace. It is a soft, dark, and solid state. Whose surface feels shiny and slippery when touched.

What are the balls of question 15? Write two uses of it.

Answer: This is the third allotropic form of carbon that is found naturally. Bucky balls are used as semiconductors and brilliants.

Question No. 16: Non-Allotropic Forms of Carbon (What are the Forms of Carbon?)

Answer: Charcoal and soot have ribbon states but are not found naturally, so they are non-allotropic forms of carbon.

Question 17: What do you know about Coke and Charcoal?

Answer: (1) Coke is a non-elutro-pick form of carbon found in the form of evaporation in a non-existent state of air at about 1300 temper buckles. Charcoal and soot are also carbon states, but they are not found naturally, but they are obtained by burning animal bones, nut shell, sugar, blood and coal in limited amounts of oxygen.

Question No. 18: Write one use each of charcoal and coke?

Answer: 1- Four coals are used to absorb dangerous gases. 2 - Coke is also used as a fuel and as a radiosig agent in various chemical industries.

Question 19: What is charcoal?

Charcoal and soot are also carbon states but they are not found naturally, but they are obtained by burning animal bones, nuttail, sugar, blood and coal in limited amounts of oxygen.

So: No. 20: What is meant by organic compounds?

Answer: Compounds that contain carbs as an essential component are called organic compounds.

What is Organic Chemistry 21?

Answer: Organic chemistry is the chemistry of carbon compounds. Most of these compounds contain hydrogen and many compounds also contain oxygen.

Question No. 22 Give two examples of organic compounds.

Answer: Proteins, carbohydrate raisins and lead are examples of organic compounds.

Question 23: What is meant by Fossils Fuels?

Answer: Fossils refer to the structures of organisms and plants that have been buried in the earth for centuries. The fuel obtained from them is called fossil fuel i.e. petroleum, coal and peat are examples of this.

Q.24 Write down the names of naturally occurring organic compounds?

Answer: Carbonate is a very important class of naturally occurring organic compounds. Proteins tennis and oils are very important in naturally occurring organic compounds.

Question 25: What do you mean by hydrocarbons?

Answer: Hyde rocker buns are the simplest organic compounds that consist of only two elements i.e. carbon and hydrogen, these hydrocarbons are naturally found in fossil fuels i.e. petroleum, coal and peat.

Question 26 Which compound naturally exists in all three physical states?

Answer: Water is the only naturally occurring compound found in all three states of solid, liquid and gas, in the solid state it is found in the form of ice, in the liquid state in the form of water and in the gas state in the form of vapor.

Question 27: What is the importance of water in our lives?

Answer: The importance of water in human life can be assessed in the following ways: (1) Water is the most commonly found compound on Earth. (2) Three-fourths of the earth is surrounded by oceans. (3) Water is the only compound that is naturally found in all three states of matter, liquid solid (ice) and gas (water vapor). (4) Water is not only used in our industries, laboratories and homes but also plays an important role in our lives. (5) A molecule of water contains one atom of oxygen and two atoms of hydrogen. (6) Two-thirds of the human body consists of water. (7) Water is abundant in our various food items.

Question 28: Describe the two physical properties of water?

Answer: 1. Water is a colorless, odorless liquid. 2 Water is naturally found in the form of solids, liquids, and gases.

Question 29: What is the amount of water in human blood by weight?

Answer: The amount of water in human blood is 90.

Question 30 How much is the freezing point and boiling point of water?

Answer: The freezing point of water is 0 °C and the boiling point is 100 °C.

Question 32: Explain the reason why ice floats on the surface of the water?

Answer: Because ice is lighter than water, it floats on the surface of the water, as the temperature increases, the ice turns into water. Its density continues to increase.

Question 33: Why does water spread when frozen?

Answer: Water expands when it is frozen i.e. its volume increases during the process of freezing water, this is because the water molecules are closer to each other than ice in the liquid state, but as the water moves from the liquid state to the frozen state, its molecules move away from each other and the volume of water increases. it goes on and on. This characteristic of water causes it to expand when it is frozen.

Question 34: How do aquatic organisms survive under ice?

Answer: The maximum density of water is at 4°C. Therefore, countries where rivers and seas freeze in winter. This quality of water guarantees the survival of fish and other aquatic life. As the water cools down, its density begins to increase. It even reaches its peak at 4°C. At 4°C, the water goes into the bottom due to being heavy. While with the increase in cooling, the upper surface of the water turns into ice due to the decrease in density. And density remains up due to low density, so even after the upper surface of the water turns into ice, the water below remains in a liquid state. And the air dissolved in the water under the ice layer is used for the breathing of marine life.

Question 35: How much air does a person use every day?

Answer: A person inhales about 15,000 to 20,000 liters of air every day.

Question 36: Describe the benefit of ozone gas?

Answer: Oxygen produces ozone gas, which protects living organisms by blocking ultraviolet rays coming from the sun.

Question 37: What is the role of nitrogen gas in the air?

Answer: Nitrogen is found in the atmosphere in a molecular state. The presence of nitrogen in the air reduces the process of commissioning and rusting.

Question 38: What is meant by nitrogen cycle?

Answer: Plants get their nitrogen from the ground in the form of nitrous through the roots. Directly or indirectly, this nitrogen reaches animals from plants. The decay of animals and plants converts their proteins into ammonium compounds. Eventually, these compounds are converted into nitrates and nitrogen by the process of bacteria. Nitrous remain in the ground while nitrogen gas goes into the air. This frequent and continuous process in nature, in which nitrogen is transferred from organisms to the soil and from the soil to organisms, is called the nitrogen cycle. And this nitrogen cycle keeps the amount of nitrogen in the air constant.

Question 39: Why nitrogen is necessary for plants?

Answer: Plants get their nitrogen from the ground in the form of nitrous through the roots. Directly or indirectly, this nitrogen reaches animals from plants.

Question 40: What is meant by kar bin chakra?

Answer: This amount of carbon dioxide gas in nature is almost constant through two factors. The process of photosynthesis in which carbon dioxide is used in the atmosphere and carbon dioxide returns to the atmosphere through the process of respiration, burning and decay, this cycle is called the car bin chakra.

Question 41: What is meant by greenhouse effect?

Answer: Due to the excessive increase in the amount of carbon dioxide gas in the atmosphere, the carbon cycle can become unbalanced. If this amount increases too much, it will also increase the temperature of the earth dangerously. This process is called the greenhouse effect.

Question No. 42: Describe the disadvantages of the greenhouse effect?

Answer: Due to the greenhouse effect, more tempers can raise the sea level by melting the snow on the mountains, which will cause flooding, which will greatly affect the weather conditions of our planet.

Question 43: What is meant by noble gas or noble gas?

Answer: Gases that are found in very small quantities in the atmosphere are called rear or noble gases. E.g. Neon, Argon, Kriptan, Redan, etc.

Question No. 44: Write the names of the two nerve gases.

Answer: Neon, Argon, Kriptan, Redan

Question No. 45 Write the use of krypton gas in daily life.

Answer: Krypton is used in fluorescent lights and photographic flashlamps.

Q.46 Describe some of the industrial-scale uses of iron?

Answer: Iron has a name in metals due to its economic and industrial importance all over the world. It is used in engineering for various purposes such as making car bodies, railway lines, steel pipes and tools, etc.

Question 47: Describe the importance of iron in human life.

Answer: Iron is an essential element for all living beings. It is found in hemoglobin and myoglobin, which causes oxygen to be transferred to the body.

Question 48: Write down two uses of sodium cyanide.

Answer: (1) Sodium is used in the extraction of cyanide. (2) It is also used to make tetraethyl lead, which acts as an anti-knocking agent in gasoline.

Question 49: What do you know about magnesium and dura alumina?

Answer: (1) Meconium is essential for all living beings. (ii) It is present in chlorophyll. (iii) Due to low density, menisium is a light but strong alloy such as magalium which is of aluminum and tansium. Butte is an orphan and distributive device and is used to make Duralumin, a mixture of aluminum, copper, manganese and technesium.

Question 50: Write the use of phosphorus?

Answer: This element is widely used as a fertilizer in the form of superphosphate and triple phosphate. Phosphoric acid and its salts are used in the food industry to make detergents and baking powders. Phosphorus is used in making matches.

Question 51: What is the role of phosphorus in the body?

Answer: This element is an integral part of the DNA .RNA present in our body, bones, teeth, a few shell members, phospholipids, adenosine diphosphate and ad-sinocene triphosphate.

Question No. 52: Write the names of the two compounds of phosphorus.

Answer: (1) Superphosphate (2) Triple Phosphate

Question 53: What is the role of phosphate compounds in plants?

Answer: This element is widely used as fertilizer in the form of superphosphate and triple phosphate. When phosphates break down, a lot of energy is released. Plants use this energy for various purposes.

Question 54: Two uses of chlorine.

Answer: (1) It is used to disinfect drinking water and water from bathing ponds. (2) PVC i.e. polyvinyl chloride is a common plastic mixture of chlorine. It has a lot of uses. Especially it is used in making waterproof materials.

Question 55 What is meant by PVC pipe?

Answer: PVC i.e. polyvinyl chloride is a common plastic compound of chlorine. It has a lot of uses. Especially it is used in making waterproof materials.

Answer: The light solution of iodine in scymbals is called nature of iodine, which is commonly used as a disinfectant.

Question 57 What disease does iodine deficiency cause?

Answer: It is an essential element for many animals. A decrease in iodine intake is the cause of gallbladder disease. In which the human neck swells.

Question 58: Write the benefits of iodine?

Answer: (1) This element is used in color photography and pharmaceuticals. (2) The mild solution of iodide in ethanol is called iodine puncture. Which is commonly used as a disinfectant. (3) It is an essential element for many organisms. (4) Decreased iodine diet is the cause of Goiter disease. Iodine. 131 is also usable for the treatment of thyroid glands. (5) Although iodine has no significant role in the functions of plants, a very small amount of it causes the process of growth in plants to accelerate.

Question 59 What is the role of iodine in plants?

Answer: Although iodine does not have a significant role in plant functions, a very small amount of it causes the process of growth in plants to accelerate.

Chapter 3: Biochemistry and Biotechnology

Question 1: What do you mean by biochemistry?

Answer: The study of all biological and chemical factors in organisms is called biochemistry. These chemical factors are both anabolic and catabolic.

Question 2: What is meant by biotechnology?

Answer: The term biotechnology was introduced in 1970. It is a branch of biology with the help of which genetic engineering of microscopic organisms is obtained from them on an industrial scale. E.g. enzymes and hormones etc.

Question 3: What is meant by metabolism?

Answer: The combination of anabolic (energy users) and catabolic (energy emitters) factors is called metabolism. Apart from this, hundreds of chemical factors occur in all organisms such as plants, animals, fungi and bacteria. Which are collectively called metabolism. Metabolism involves both constructive and destructive factors.

Question 4: What is the difference between Annabolism and CataBolism?

Answer: Catabolism: Catabolism is a destructive chemical process that results in complex organic compounds breaking down into simple cuppinds. This process results in the release of energy and is used to perform many functions of male organisms. Explanation: Catabolic interactions result in oxidation of carbohydrates, proteins and leads in the presence of different enzymes atminor. Compounds break down step by step and emit energy in the form of small packets. Own Bolism: This is a constructive chemical process. The formation of carbohydrate rates in plants during which new cells are formed is an example of this.

Question 5: What is meant by documentation and emulsification?

Answer: Digestion: It is the process of breaking down or dividing food components into small molecules. In which food components are converted into their units. Asmillation: The absorption of food components into the body is called body-made amelation.

Question 6: What is the last gain of carbohydrates?

Answer: The ultimate sources of carbohydrate digestion are simple sugars such as glucose, fructose, and galactose.

Question No. 7 What are the animal means and means of obtaining fats?

Answer: Animal sources of fats include ghee butter, upper, fatty meat and fish oil. Botanical sources: Botanical sources include mustard, olive, coconut, corn, soybean, banola, sunflower and peanuts.

Question 8 What benefits do fats give to the human body?

Answer: (1) Fats provide energy to our body. (ii) They contain more energy than carbohydrates and proteins. (iii) They provide vitamins and fatty acids soluble in fat to the body. (iv) Fats J Fats accumulate under the skin and help maintain the body's temper pitcher. (7) The heart, kidney and other organs, such as the intestines, gather around and protect them from injury.

Question 9: What do you mean by eddie positshows?

Answer: Excess fats or fats are stored in the body's fat storage tissues, which are called adiposes. Such tissues are found in the body above the kidneys in the stomach and under the skin. In the case of severe hunger, when there is a lack of glucose in the body, fats are used instead of glucose in the process of rejection.

Question 10 Where are fats digested?

Answer: The ultimate result of fat digestion is glycerol and fatty acids. They are digested and absorbed in the small intestine. Excess fats or fats are stored in the body's fat-storing tissues, which are called adiposes.

Question 11: How does protein metabolism occur?

Answer: The process of digestion of protein starts in the stomach. Undigested proteins are digested by enzymes and converted into amino acids. Amino acids are used to make a variety of new proteins. In addition, in case of lack of carbohydrates, they also become a source of energy.

Question 12: What do you mean by Catalyst?

Answer: Catalyst refers to an object that changes or accelerates a chemical reaction without chemically changing its state.

Question 13: What are enzymes?

Answer: Enzymes are used as catalysts in biochemical interactions and are proteins in their nature. Enzymes accelerate various catabolic and anabolic reactions. Enzymes are required in very small quantities. They are specific in their actions. For example, Amai can follow the lease starch. You can't use it for fats and protein.

Question 14: What is meant by substrate?

Answer: The things on which an enzyme acts are called substrates. The specificity of any enzyme is due to its specific form.

What do you mean by enzyme number 15?

Answer: Some enzymes need some other compounds called co-enzymes to pay for the catabolic process. Co-amines are protein substances.

Question 16 What is the role of enzymes in daily life?

Answer: Enzymes are very important in our daily life: Moisture is very important in our daily life. Enzymes have proved to be very useful in the chemical and pharmaceutical industry. They are used in the preparation of cheese. Enzyme use is very common in the food processing industry. The pyne enzyme is derived from the papaya ma plant and is used to soften meat.

Question 17: What is blood? How do you get plasma from it?

Answer: Blood is the river of life. It transmits food and oxygen to individual cells in all parts of the body and brings excess substances from all parts of the body to the kidneys and liver. Blood is a complex liquid. It consists of plasma and blood cells. Red blood cells, white cells, and blood platelets are floating in the plasma. If blood cells are separated from the blood, then the rest of the plaque goes away.

Question 18: How many parts of blood are there and which are they?

Answer: Blood has two parts, plasma and blood cells.

Question 19: What is meant by plasma?

Answer: Blood red cells, white cells and blood platelets are floating in plasma.

Question 20: What is meant by Serum?

Waab: If you separate the blood-clotting protein from plasma, then the rest of the serum remains.

Question 21: What is the difference between plasma and serum?

Answer: Blood red cells, white cells and blood platelets are floating in plasma plasma. Serum: If you separate the blood-clotting protein fiber nanojin from plasma, the rest of the serum remains.

Question 22: What is plasma?

Answer: Blood red cells, white cells and blood platelets are floating in plasma.

Question 23: How do you get serum?

Answer: If you separate the blood-clotting protein from plasma, then the rest of the serum remains.

Question 24: What is the function of red cells and white cells in the blood?

Answer: Red cells of blood are essential for the transmission of gases and white cells are necessary for the immune system of the body.

Question 25: What is the role of red blood cells in our body?

Answer: Red blood cells are necessary for the delivery of gases to the body.

Question 26: Do you write two functions of blood in the body?

Answer: (1) Blood transports food and oxygen to individual cells in all parts of the body. (2) Blood brings excess substances from all parts of the body to the kidneys and liver.

Question no. AB0:27 What is blood group system? Write the names of blood groups.

Answer: Although the blood of all human beings appears to be the same, it is chemically different from one person to another. This difference is due to the difference between the different chemicals present on the surface of the red bodies of the blood. These chemicals are called antigens. On the basis of antigen and antibody, human blood can be divided into A and groups, this is called the ABO system of blood .

Question 28 What do you mean by antigens?

Answer: Antigens are different chemicals present on the surface of the red bodies of the blood. These chemicals are called antigens. Antibodies are important molecules that make up our immune system so that our body can compete against bacteria and viruses. Antibodies can also form as a reaction to different groups.

Question 29: What is meant by blood ABO system?

Answer: Human blood is divided into ABB A and groups based on antigen and antibody. This is called the ABO system of blood .

Question 30: Are global donors?

Answer: People who have blood group O can give blood to a person with all types of blood groups. Such individuals are called global donors.

Question 31: Who are the global recipients?

Answer: People in the AB blood group are called global recipients because they contain both A and B antigens and can draw blood from people of all types of blood groups.

Question No. 32: Write three lines on blood group Rh stem.

Answer: In addition to the Blood Group ABO system, there is another blood group system Rh system. The Rh system consists of two groups.

Question 33: What is DNA and whose abbreviation is it?

Answer: Information about a person's inherited characteristics is present on his genes. These genes consist of a special type of chemical compound called DNA, which is an abbreviation for deoxyribonucleic acid. DNA consists of four types of nucleotides. A nucleotide is made up of a base, sugar, and phosphate group. These nucleotides combine into specific pairs to form a long-lived bileux molecule.

Question 34 Describe the chemical composition of nucleotides?

Answer: DNA is made up of four types of nucleotides. The nucleotide is made up of us, sugara, and the phosphate group. These nucleotides combine into specific pairs to form a long double helice molecule.

Question 35 What is New Cleotide?

Answer: DNA is made up of four types of nucleotides. The nucleotide is made up of us, sugara, and the phosphate group. These nucleotides combine into specific pairs to form a long double helice molecule.

Question 36 What do you mean by genes?

Answer: Specific parts of DNA are hidden in different directions, these parts are called genes.

Question 37: What are James? Answer: Genes are made up of a special sequence of pieces in DNA.

Question 38: What is meant by DNA replication?

Answer: B. When a DNA molecule forms another DNA molecule like itself, this process is called DNA replication.

Question 39: Write down the function of DNA.

Answer: DNA is an integral part of all living organisms. It is an inherited substance. A child gets DNA from both parents. Individual characteristics such as skin color, height, features, etc. are transmitted to the child through chromosomes (which contain DNA). DEFECTS in DNA lead to certain diseases (diabetes and hemophilia) that can be passed on from the parents as inherited.

Question 40: What diseases are caused by dna defects?

Answer: Defects in DNA lead to certain diseases (diabetes and hemophilia) that can be passed on from parents as inherited.

Question 41: What do you mean by genome?

Answer: All the genes inside a cell are called genomes. There are 3.2 billion pairs in the human genome, 99.9% of the human genome has been mapped or sequenced.

Question 42 What is meant by genetic engineering?

Answer: A technique by which different genes from one organism are inserted into the inherited material of another organism in a selected place is called genetic engineering. Method: In this, the required genes are obtained from the

animal's bull and inserted into the cells of another organism. Genes obtained from different sources are mixed in a test tube and transferred to other living cells in the laboratory. This whole process is called genetic engineering.

Question 43 What are transgenic organisms?

Answer: Any organism that receives an external chain is called a transgenic organism.

Question 44 What steps are required to prepare an organism with genetic change?

Answer: Preparation of organisms with genetic changes requires the following steps: 1- Identification of relevant good genes. 2. Separation of genes from donor organisms. 3- Transfer of separated genes into dna. Transfer of 4-gene chromosomes within the corresponding mile.

Question 45 What revolution has genetic engineering brought about in the field of agriculture?

Answer: 1. Preparation of high yielding varieties. 2. Improvement in the nutritional viability of plant edible ingredients. 3. Immunity against herbicides and pesticides. 4. Increased late storage capacity of fruits and vegetables. 5. Transfer of nitrogen-fixing genes to non-legume varieties. 6. Increased fruit quality.

Question 46 What is meant by cloning? Illustrate by example.

Answer: Cloning is a method by which animals and plants are copied to their parents. For example, through cloning, sheep have been created that are exactly like their parents.

Question 47: What are every B-sides?

Answer: Every b-side is a chemical compound that is used to control unnecessary plants such as weeds in crops. Sometimes each of these b-sides destroys herbs as well as the original crop, such as the less powerful cyanamide.

Question No. 48: Describe the benefits of B.T Gene?

Answer: 1 - The Bten gene induces immunity in plants against insects and pests (small animals). 2. The transfer of this gene protects cotton plants from pest attacks. 3- This gene has been transferred to cotton plants. By transferring this gene, cotton plants are protected from pest attacks.

Question 49: What is meant by antibiotics?

Answer: Compounds that kill bacteria or stop their growth are called antibiotics. Penicillin, tetracycline and erythromycin are just a few examples of antibiotics.

Answer: Penicillin is derived from a phoenix called penicillium because it is effective against limited varieties of bacteria.

Question 51 When and who discovered penicillin?

Answer: Penicillin was discovered in 1928 by Sir Alexander Fleming and Sir Howard Florey.

Question No. 52: Describe the importance of Cephalosporins?

Answer: It is derived from Manlosporium, a type of mold, and was discovered in 1948. It is against bacteria that develop immunity against penicillin.

Question 53 How is tetracycline obtained?

Answer: Tetracyclines make streptamine bacteria, which can be used against many types of bacteria. That's why they're called broad spectrum antibiotics.

Question 54: What do you mean by vaccine?

Answer: The term vaccine is derived from the Latin word deka, which means cow. Vaccines are a mutated type of pathogenic microbe that is harmless and activates the human immune system.

Question 55: What is the literal meaning of vaccine?

Answer: The term vaccine is derived from the Latin word Vacca, which means cow.

Question 56 What is the difference between antibiotic and vaccine?

Answer: Antibiotics Compounds that kill bacteria or stop their growth are called antibiotics. Penicillin, tetracycline, and ethereumine, etc. are examples of antibiotics. Vaccine: The term vaccine is derived from the Latin word Vacca, which means cow. Vaccines are a mutated type of pathogenic microbe that is harmless and activates the human immune system.

Question 57 What is meant by recycling?

Answer: Recycling is called recycling to produce new and usable things again from used waste materials. Many items of daily use such as iron, glass, plastic and rubber etc. can be reused.

Question 58: Describe the benefits of recycling.

Answer: 1. This is a good way to control pollution by reducing waste. 2. This process can reduce the consumption of raw materials. 3. This method saves both energy and capital.

Question 59: What is meant by Maltose?

Answer: The sugar produced by the digestion of starch is called Maltose.

Question 60 What are Fatty Acids?

Answer: Chemical compounds made by the digestion of fats are called fatty acids.

Question 61 What do you mean by neuro-spectrum antibiotics?

Answer: Penicillin that is effective against limited types of bacteria is called neuro-spectrum antibiotics.

Question No. 62: Describe the benefits of vaccination.

Answer: Vaccination activates the body's immune system, which is very beneficial against diseases.

Question No. 63 Describe the importance of erythromy sinus?

Answer: These antibiotics are also useful against bacteria that develop immunity against penicillin. Antibiotics have an effect in two ways. Penicillin blocks the ability of bacteria to form cell walls, which destroys the immune system of the human body, while on the other hand tetracycles destroy the ability of bacteria to make proteins. Because of this, bacteria can divide and their growth stops.

Chapter 4: Human Health

Question 1: What are the basic components of food?

Answer: The basic ingredients of food are as follows: The basic components of the diet are water, carbohydrates and oils, proteins and vitamins.

Question 2: What is the role of vitamin B in the body?

Answer: This is the name of a combination of compounds. That's why it's also called vitamin B complex. Vitamin B12 is very important for the digestive and nervous system. Hemoglobin also helps in making. Lack of it affects the development of children.

Question 3: What is the role of iron in the human body?

Answer: Iron is the part of hemoglobin that carries oxygen from one place to another inside the body. Iron deficiency causes anemia.

Question 4: What diseases are likely to arise due to dog bites?

Answer: If a dog or kitten scratches a body, a dangerous type of bacteria enters the human body and makes the person sick. These diseases include diseases such as tetanus and tetanus.

Question 5: What is the role of insulin in the body?

Answer: Insulin reduces the amount of glucose in the blood and helps to bring it down to a certain limit. Due to lack of insulin, a person becomes a victim of diabetes.

Question 1: What is the meaning of diet? What are the basic components of food ?

Answer: Food is the most important need of human life. Scientifically, food is anything that provides energy to the body to perform different tasks after digestion. The basic components of the diet are water, carbohydrates, fats and oils, proteins and vitamins.

Question 2: What functions does water perform in the human body?

Answer: Water performs many functions in our body, it helps in maintaining physical temperature. It acts as such a tool. Which breaks down and dissolves nutrients, enzymes and other chemicals. Water acts as a supplier for transporting nutrients to cells and removing irregular substances from the body. It acts as a lubricant between joints and internal body parts.

Question 3: What do you mean by carbohydrates?

Answer: Carbohydrate rates are compounds of carbon, hydrogen and oxygen. They are abundant in all organisms and are found in almost all cells.

Question 4: Give some examples of carbohydrates?

Answer: Cellulose in wood, cotton and paper, starches in food grains and root tubers, glycogens in animal livers, lactose in milk and sucrose found in sugarcane are all examples of carbohydrate sources.

What are the main sources of carbohydrates of question ?

Answer: Carbohydrate rates are mostly obtained from botanical sources. Wheat, rice, pulses, sugarcane, potatoes, sugarcane and chandaran are just a few examples of botanical sources.

Question 7 What are fats?

Answer: Fats are pigments that are solid at normal temperatures Fats are usually obtained from animal sources.

Question 8: What are oils?

Answer: Oils are pigments that are liquid at normal temperatures. Oils are usually obtained from plants.

Question 9: What is the difference between Fats and Oils?

Answer: 1. Fats: Fats are pigments that are solid at normal temperatures Fats are usually obtained from animal sources. 2. Oils:- Oils are oils that are liquid at normal temperatures. Oils are usually obtained from plants.

Question 10: What is protein?

Answer: The body has the highest amount of protein after water. Muscles, tissues and blood are mostly composed of proteins. Due to proteins in our body, many such functions are driven which are impossible in its absence.

Question 11 What are protein blocks?

Answer: Amino acids are mixed in the form of China. These amino acids are also called protein building blocks because they play a central role in the construction of proteins.

Question 12: What are the animal and plant sources of protein?

Answer: Protein is obtained from both animal and plant sources. Meat, eggs, yogurt and milk are animal sources of proteins. While wheat, peas, pulses, lobia are vegetative sources.

Answer: Protein builds and supports the structure of cells and tissues. They are also important for the development of the body and the repair of the breakage.

Answer: Antibodies are proteins that give the body immunity against diseases.

Question 15: What are vitamins?

Answer: Vitamins are organic substances that the human body needs in very small quantities.

Question 16: How many groups can vitamins be divided into?

Answer: Vitamins are divided into two groups based on their solubility in water or fat. 1- Fat-soluble vitamins. These types of vitamins include vitamins such as E, D, A, and K2. Vitamins soluble in water. These include vitamins B and C.

Question No. 17 What is Night Blindness?

Answer: Night blindness is a disease caused by vitamin A deficiency. The patient suffering from this disease does not see at night.

Q18: How many amino acids does the human body need? Answer: The human body needs a total of 20 amino acids.

Question No. 18: What are the diseases caused by vitamin D deficiency?

Answer: Vitamin D deficiency makes the bones soft hollow and crooked. If this disease is in childhood, it is called rickets and if it is in adult age, it is called osteomyelia.

Question 19: Vitamin D is derived from which things?

Answer: The best way to get vitamin D is sunlight. Human skin makes vitamin D itself in sunlight. Apart from this, Mataman D can also be obtained from fish liver oil, milk butter, cream and egg yolk. Due to vitamin D deficiency, the bones become soft hollow and crooked. If this disease occurs in childhood, it is called Rickets and if it is in adult age, it is called Osteomyelia.

Question 20: What diseases do vitamin E deficiency cause?

Answer: Vitamin E deficiency in the blood causes muscle and nerve diseases. Apart from this, infertility can also occur.

Question No. 21: What harm does vitamin K deficiency cause to a person? Answer: Vitamin K deficiency reduces the ability to clot in the blood.

Question No. 22: How does Berry Perry's disease affect a person?

Answer: Due to lack of adequate amount of vitamin B1 in the diet, muscle weakness occurs. This disease is called BerryBerry's disease.

Question 23: What disease does vitamin B2 deficiency cause?

Answer: Lack of this vitamin leads to anemia. This vitamin is very important for digestion and nervous system. It also helps in making hemoglobin. Lack of it affects the development of children.

Question 24: What are the main sources of vitamin C?

Answer: Vitamins are found in fresh fruits such as malta orange, chakotra and lemon, besides guava, peaches, bananas and other fruits. It is also found in green chillies, tomatoes and other salads.

Question 25: How does scurvy affect a person?

Answer: Due to vitamin C deficiency, a person suffers from scurvy disease. In which the gums are damaged. Apart from this, lack of this vitamin can also cause bleeding, irritability, organ pain and heart disease.

Question 26 What is the role of calcium in the human body?

Answer: Calcium helps in blood clotting, transmission of messages, bone formation, and the spread and contraction of muscles.

Question 27: What is the role of iron in the human body?

Answer: Iron is the part of hemoglobin that carries oxygen from one place to another inside the body. Iron deficiency causes anemia.

Question No. 28 What disease does a person suffer from due to iodine deficiency? Answer: Due to iodine deficiency, a person becomes a victim of arthritis disease and his physical and mental development is destroyed.

Question 29: What do you mean by a balanced diet?

Answer: A diet that contains all the nutrients in proportion is called a balanced diet. The balance diet is tailored to each person's caloric needs, while heating needs depend on a person's weight, age, gender, and the nature of his work.

Question No. 30 Write a short note on the pituitary gland?

Answer: Pituitary is a small gland that is barely equal to a pea grain in size. This gland is connected to a part of the brain. Because it controls all gland functions. That's why it's called the master gland. This hormone controls the growth of the body and many other functions of it.

Question 31: What is the role of thyroid gland in body function?

Answer: The thyroid gland makes two types of hormones in the body. Both hormones are released in the presence of iodine. These hormones help in the proper development of the body and do not allow the amount of calcium to increase to a great extent.

Question 32: What do insulin and glucagon do?

Answer: Insulin reduces the amount of glucose in the blood and helps to bring it down to a certain limit. Due to lack of insulin, a person becomes a victim of diabetes. Glucagon acts opposite to insulin. This hormone increases the amount of glucose in the blood and helps to bring it down to a certain limit.

Question 33: Where do adrenal glands occur and what function do they perform?

Answer: These glands are located in pairs at the upper end of each kidney. They control the amount of glucose in the blood. They control the unintended functions of the body and prepare a person for accidental events such as anger, fear, fighting and grief.

Question 34 What is meant by Puberty?

Answer: The phase of 13 to 19 years acts as a bridge between childhood and adolescence, so signs of puberty begin to appear in the child. It's commonly called Pew Bertie.

Question 35: What is meant by Al-Jang (Aging)?

Answer: The process of negative changes in the human body in old age is called aging.

Question 36: Why is exercise important for the body?

Answer: Exercise maintains the flexibility of the body and due to this flexibility, the muscles and joints are protected from tension. Exercise plays an important role in strengthening muscles.

Q.37 Why do people become obese? Answer: Some people who do not exercise but eat more. In these, the surplus energy obtained from food is stored in their body in the form of fat and people become obese.

Question 38: What diseases can a person get from dog or cat bite?

Answer: Diseases such as rabies and tetanus are included.

Question 39: What first aid should a person be given after he is burnt?

Answer: If a person's body is burnt, remove the clothes immediately from the burnt part. Wash the water of the burnt part with water. Cover the wound with a clean cloth. If the injury is severe, take the patient to the hospital immediately.

Question 40: How should a person be given first aid after fainting?

Answer: If the patient is breathing, make him lie straight and do not place any pillow under the head. Lift the legs and arms towards the head and take the patient to the hospital immediately.

Q.41: How should a person be given first aid after being bitten by a snake?

Answer: 1 Tie this place to the pit so that the poison does not go forward. 2 Wash the wound immediately so that the poison is eliminated. 3 Put the patient down immediately so that he becomes silent and does not spread poison in the body.

Question No. 42 What are Fat Soluble Vitamins?

Answer: Vitamins that are easily dissolved in fat are called fat soluble vitamins such as vitamins A, E, D and K.

Question 43 What are endocrine glands?

Answer: Glands whose secretions reach all parts of the body through blood are called endocrine glands.

Question 44: What are hormones?

Answer: Chemical messengers that are released from a ductless gland and reach the place of their composition to the place of function through blood and create a connection between different bodily functions, are called hormones.

Chapter 5 Diseases, Causes and Prevention

Question 1: At what age does the child get the measles vaccine and why?

Answer: When the child is 9 months old, get vaccinated against measles. To protect children from measles, give them good nutritious food. Children are immunized against measles to protect them from measles.

Question 2: What is the name of AIDS disease virus?

Answer: AIDS virus is called HIV, which is an abbreviation for Human Immuno Deficiency Virus.

Question No. 3: D. What diseases does PT injection induce immunity against?

Answer: D. Injection of PT induces immunity against the following diseases (i) Diphtheria (ii) Tetanus

Question 4: How does malaria spread?

Answer: Malaria is spread in humans by the bite of female anopheles mosquito. In this disease, there is shivering from the cold first. Later, the body becomes hot with high fever (104°). If the fever is chronic, the patient's spleen increases. In the third stage, the patient sweats and the fever decreases.

Question 5: Write the names of the various sources of diseases?

Answer: Germs of diseases spread through different sources. Such as air, water, through animals, match fees, scratches or wounds, etc.

Question 6: What is meant by sterilization?

Answer: This method is the best way to kill germs. It heats milk, fruit juice and other foods to 148.9 degrees Celsius for a second or two. This kills not only the germs but also their plants. Sterilized food can be stored on a normal tamper pitcher without a fridge for several days but for several months.

Question 1: What are germs?

Answer: Microbes are microscopic living bodies that are present all the time in our earth, air and water. All epidemics are caused by microscopic bacteria and viruses called germs.

Question 2: What are the symptoms of smallpox?

Answer: Symptoms of this disease include sudden fever, headache, back pain, vomiting and sometimes especially shock in children. On the third day of fever, rash comes out on the arms and legs.

Question 3: How does the virus that spreads smallpox enter the body?

Answer: This virus enters the human through the respiratory tract, such as coughing, speaking, sneezing of the patient, the virus remains suspended in the air and enters the body through the breath of a healthy person and causes disease.

Question 4: How does the polio virus enter the human body?

Answer: Polio virus enters the nervous system through the mouth with food items in the patient and eventually attacks the patient's nervous system and destroys the nerves and causes paralysis.

Question 5: Describe the symptoms of polio?

Answer: This disease starts with fever, vomiting and muscle pain with cold, sometimes there is no stroke, but if the attack of the virus is more dangerous, then a part of the body becomes paralyzed or weak.

Question No. How is it possible to treat a polio patient?

Answer: Once the disease starts, no medicine can cure polio. Even antibiotics are not helpful. The child who is disabled due to polio should be given nutritious food so that he develops immunity.

Question 7: What is the most important method of polio prevention?

Answer: To prevent polio, give polio vaccine to the child at birth and then in six weeks, ten weeks, fourteen weeks and nine months.

Question 9: Describe the symptoms of influenza?

Answer: In this disease, the throat is bad. The patient has fever and cough. Water flows from the nasal membrane and eyes. There is a headache and severe muscle cramps. You feel tired after a little work.

Question 10: On what days do influenza attacks usually occur more?

Answer: Influenza attacks are usually more frequent during the winter and rainy seasons. In places where more people live together, it spreads rapidly.

Question 11: Describe the symptoms of measles?

Answer: Fever, cold, runny nose, visible red eyes and cough are among its symptoms.

Question 12: What damage can measles cause to the human body?

Answer: Measles spreads through invisible small rashes. In which viruses are present. The child's disease gradually increases. The mouth starts to look too much and it can have diarrhea, pneumonia, malnutrition, infection in the ears and eyes.

Question No. 13: When should a child get contracts to prevent measles?

Answer: When the child is 9 months old, get measles vaccination. To protect children from measles, give them good nutritious food.

Question 14: Aids is an abbreviation for which word?

Answer: AIDS virus is called HIV, which is an abbreviation for Human Immuno Deficiency Virus.

Question 15: Is AIDS an infectious disease?

Answer: AIDS is not an infectious disease. The disease does not spread by touching, sitting with the patient, shaking hands or working.

Question 16: Where is the AIDS virus found?

Answer: AIDS virus is found in human blood and sexual secretions. Apart from this, this virus is found in saliva, tears, urine and sweat.

Question 17: How is the AIDS virus transmitted from one person to another?

Answer: The virus is transmitted from the use of an infected person's syringe during the transfer of blood or blood components, from the pregnant mother to the baby and from the infected patient to her life partner.

Question No. 18: Write the symptoms of AIDS disease.

Answer: The patient has a minor cold in the beginning. After that the patient remains perfectly fine for several months and years. Gradually he becomes a complete AIDS patient. During this time weight loss is very fast. Diarrhea lasts for a month. Fever and pneumonia occur. Big spots form on the body.

Question 19: What precautions should be taken to prevent AIDS?

Answer: Always be limited to your life partner to avoid this disease. Follow the Qur'anic commands. Use an unused new syringe if it is necessary to inject. Get an HIV test done before taking and giving blood.

Question 20: What are the symptoms of hepatitis?

Answer: The main symptoms of this disease are loss of appetite, nausea and extreme liver inflammation. , includes jaundice, i.e. jandus.

Question 21 How is the hepatitis virus transmitted from one person to another?

Answer: Hepatitis A virus is released into the patient's stool and then enters other people through water and food and causes disease.

Question 22: How is it possible to treat hepatitis?

Answer: There is no vaccine for this disease, to prevent it, it is necessary to avoid mixing food and milk and check before giving blood (HAV).

Question 23 What is a carrier?

Answer: Career is a person who is apparently healthy himself but can cause the disease to spread to others.

Question No. 24: How does the (B) virus virus of hepatitis pass from one human to another?

HBV is transmitted from person to person through contaminated blood, tears, drinking, and various body substances.

Question 25 How is it possible to treat hepatitis ?

Answer: Protection from this disease is possible only through immunization. Two injections of the Hepatitis B vaccine are administered one month apart and one booster injection is administered six months after the first injection.

Question 26 What type of diet should be given to a hepatitis B patient?

Answer: The patient should drink a lot of water and juice etc. Sugarcane juice is very useful. Beans, meat, chicken and boiled eggs are perfect for this purpose.

Question 27 How does hepatitis C disease spread?

Answer: 1 - Hepatitis C)is a blood-borne virus such as injecting infected blood with a single syringe, accidental needle pricking in people working in the laboratory, etc.

Question 28: What are the symptoms of hepatitis C?

Answer: Symptoms of this disease include loss of appetite, vomiting, fatigue, weak headache, joint pain, cough and bad throat. There is also a mild fever.

Question 29: How is it possible to treat hepatitis C?

Answer: Isolate the patient for its treatment. There is no vaccine to avoid the patient's blood and other substances. It is better to wash them immediately. Wash your hands immediately after attending the patient.

Question 30: Which people usually fall prey to IB early?

Answer: Lung TB is a long-lasting infectious disease. Which can happen to everyone. Especially those who are weak, malnourished or live with a person who already has the disease.

Question 31: Is it possible to treat QIB?

Answer: TB is a treatable disease. Yet thousands of people die from the disease.

Question No. 32 What precautions should a person suffering from TP take?

Answer: A person infected with BB should keep a handkerchief on his mouth while coughing and never spit on the floor because when a TB patient coughs, sneezes or spits, these germs hang in the air with very small saliva droplets and reach the lungs with the breath of others and cause TB disease.

Question 33: What are the symptoms of TB?

Answer: This disease causes a persistent cough for a month or more. Sometimes the mucus is accompanied by blood. There is a constant fever. I sweat while sleeping at night. Hunger decreases. There is weight loss and fatigue after a little work.

Question 34: In which season is the disease more common?

Answer: Whipping cough is an infectious disease. The disease increases in winter and spring.

Question 35: What are the symptoms of whopping cough disease?

Answer: The infected patient coughs fast for a long time without breathing. Even while coughing, the mucus sticking to his mouth comes and the air goes back to his lungs with a loud sound. Due to lack of oxygen in the blood while coughing, the patient's nails and lips turn blue.

Question 36: What are the symptoms of erectile or chronic disease?

Answer: This disease starts with cold, fever, headache and sore throat.

Question No. 37 Describe the disadvantages of piles or diseases?

Answer: Diphtheria bacteria attack the throat and nasal membranes and cause inflammation. Before which the beige membrane forms in the back of the throat and sometimes inside the nose. The child's neck may even thicken.

Question No. 38: What kind of food should a person suffering from poverty consume?

Answer: Fluid diet should be used as much as possible. Lay the patient in a separate room from the others. Seek immediate medical attention for the patient. Gargle with salt water. Steam the patient with hot water. If the child starts suffocating, take him to the hospital immediately.

Question 39 How does bacteria enter the human body?

Answer: The germs of this disease usually spread from human and animal waste in the dust. I live. If a person gets a scratch in the skin due to an injury in the road or street, these germs reach the wound and start producing poisonous materials.

Question 40: What is meant by Lock Jaw?

Answer: In this disease, all the muscles of the body become stiff. Which remain stiff all the time and later cause severe muscle tremors. The muscles of the mouth become stiff and close the mouth, which is called lock jaw.

Q.41 Describe the symptoms of lock jaw?

Answer: While swallowing food, the jaw becomes stiff, then the neck and other parts of the body also become stiff. There are painful seizures. If the affected person is shaken or touched, then the condition of the seizure becomes as cramped.

Question 42: What are the common symptoms of typhoid disease?

Answer: There is a mild headache in this disease. Typhoid fever lasts for a long time. The disease is caused by drinking contaminated water and eating contaminated food.

Question 43 What are the symptoms of cholera disease?

Answer: Suddenly thin stools start like water, after which vomiting starts, due to which the patient's body starts dehydrated. There is a significant decrease in urine, the muscles of the body feel cramped.

Question No. 44 What are the sources of cholera disease?

Answer: Dirty water, bad diet and milk are the biggest sources of spreading cholera. The patient's direct contact with a healthy person also plays an important role in spreading the disease.

Question 45 What is Ring Worm?

Answer: The ring worm appears mostly in the form of a round circle. They often have itching. If you are in the part of the head, the hair of the head falls. If the fungus is in the nails, the nails become thick, rough and ugly.

Question 46: How does the germ of malaria spread in humans?

Answer: Malaria is spread in humans by the bite of female anopheline mosquitoes.

Q.47 Describe the symptoms of malaria?

Answer: In this disease, there is shivering from the first cold. Later, high fever (104 degrees Fahrenheit) warms the body. If the fever is chronic, the patient's spleen increases.

Question 48: What is the size of roundworm? Answer: They are thirty centimeters long. Their color is pink and the name of this insect is Skiers.

Question no. 49 What is meant by Malnutrition?

Answer: Lack of food in the patient's body is called nutrition, some children are also short in height due to this nutritional deficiency.

Question 50 Do you know about Trachoma disease?

Answer: Trachoma is eye disease. Spreads by touching an infected person and used items.

Question 51: And what is meant by the physical route?

Answer: Germs of the disease, emanating from the patient's stool, enter the body through soil, food, water and hands. This method of spreading diseases is called the vertical route.

Question 52 What is meant by sterilization?

Answer: This is the best way to kill germs. In this, milk, fruit juice and other food items are heated to 148.9 degrees Celsius for a second or two. This kills not only the germs but also their spores.

Question 53: What is rabies disease?

Answer: This disease is caused by a stray dog biting a human being. Diseases like rabies can be controlled by killing a stray dog.

Question 54: What are antibiotic drugs?

Answer: Antibiotics are those that treat many diseases caused by bacteria. Penicillin and tetracycline are important examples of antibiotics.

Question No. 55: What are queen, tar and carbon monoxide?

Answer: Nicotine is a very toxic chemical substance, due to hankotin, it is difficult to give up the habit of smoking. Another major effect of nicotine is that it shrinks the blood vessels, making it difficult for blood to reach all parts of the body. Tar is a laced adhesive that accumulates around the lung cells of smokers, affecting the ability of the lungs to

function. Tar causes lung cancer. Carbon monoxide adds to the blood and reduces the amount of oxygen. This substance is present in cigarette smoke.

Question 56: What is meant by bronchitis or chronic worm?

Answer: Cigarette smoke causes infection and worms in the airways and lungs, which causes cough and phlegm. This disease is called bronchitis or chronic worm.

Question 57: Do you know about Amnesia disease?

Answer: Smoking damages the air sacs in the lungs, which reduces the amount of oxygen going into the blood. To make up for this deficiency, one has to breathe fast. This disease is called amnesia.

Question 58: Write down the names of two mental illnesses.

Answer: The names of two mental illnesses are as follows: 1- Psychosis 2- Neurosis

Question 59: Do you write about delirium disease?

Answer: This disease appears rapidly, which can be caused by many reasons such as intoxication, other diseases, lack of electrolytes in the body and lack of oxygen in the brain. This disease leaves different effects on the body. Such as bad speech, trembling, rapid movement of the eyes, two or two eyesight, lack of sleep, anxiety, nervousness, hallucinations, etc.

Question 60: Write a short note on depression disease?

Answer: In this disease, the nature of the person is always worried and less than normal, most of the morning the mood becomes dull. There is a decrease in thinking and a decrease in the ability to make decisions. The patient despises himself and feels guilty in everything. Sleep and appetite are reduced in this disease. There is pain in the head and back.

Q.61 Write the symptoms of hysteria?

Answer: This disease mostly occurs in women. Blindness or deafness, headache, ringing bells in the ears, numbness, paralysis, shivering, seizures and loss of appetite are the symptoms of this disease.

Question No. 62: Do you write the symptoms of phobia?

Answer: Unnecessary and inappropriate fear or fear that is related only to a person or thing in one place, such as just open space or closed space, etc. are symptoms of diseases such as phobia.

Question 63: What is a nervous breakdown?

Answer: Some people have a nervous breakdown when they enter an accidental phase of life. Isolation, illness, illness, financial difficulties can occur after someone's death or separation and divorce. In depression, patients become depressed. Sometimes they also get irritated.

Question 64 What is meant by drug?

Answer: Generally, drug usually means any kind of medicine that we use in the disease. Medicines are used to relieve pain, prevent diseases and save lives.

Question No. 65: What is medicine?

Answer: The type of medicine that is used in the treatment of diseases in a reasonable amount according to the advice of the doctor is called medicine.

Question No. 66 What are Pain Killers?

Answer: These are medicines that relieve pain. Aspirin and paracetamol eliminate pain.

Question 67: What is meant by Narcotics?

Answer: Medicines that relieve pain and induce sleep, drowsiness and intoxication are called narcotics. Opim, morphine are examples of this.

Question 68: What are sedatives?

Answer: Sedatives are those that doctors give in small quantities and for a short period of relief and pain relief and which help to sleep. Anti-drug laws are called drugs.

Question No. 69: What are Sedatives?

Answer: Medicines that satisfy the mind are called sedatives. Diazepam and lor-as-pym are important sedatives.

Question No. 70: What are Hello Sino Genes Medicines?

Answer: Medicines that have strange effects on the mind such as time, location, sound, color and other feelings are called hallucinogens, such as cannabis.

Chapter 6: Environment and Natural Resources

Question 1: Write a definition.

Answer:

(a) Pollution: Pollution refers to such unpleasant changes in the characteristics of air, land and water that adversely affect the life of humans and other living beings or are likely to occur in the future.

(b) Pollutants: All those irregular and wasteful substances that cause pollution of the environment are called pollutants.

(c) Recycling: The process of making new useful items from used items is called recycling.

(d) **And niger-dipped lions:** Animals (plants and animals) that are at risk of extinction are called and nigerd species.

Question 2: Write the names of the charts of the Atomic Sphere.

Answer: (i) Troposphere (ii) Strato Ambassador (iii) Table and Ambassador (iv) Thar Mosfer

Question 3: Write two effects of the greenhouse effect on the environment.

Answer: The greenhouse effect and global warming can have many unpleasant effects. Such as:

1. There may be changes in the earth's climate.
2. Due to melting of snow and excessive rains on the poles and mountains, sea levels will rise and many coastal areas will be submerged.

Question 4: Write down the names of any of the two ways to conserve natural resources.

Answer:

1. Recycling
2. Use of Substitutions

Question 5: Two benefits of wildlife. Write two.

Answer:

1. Wildlife maintains the balance of the environment.
2. Many natural products derived from wildlife are used in our homes, industry and agriculture. Food, building wood and medicine are just a few examples.

Question 1: Praise The Emma Ambassador? Or what do you mean by atomic sphere?

Answer: The atmosphere or the atomic ambassador is the cover of different gases. Which surrounds the earth . The thickness of the atomic sphere is about 200 kilometers. It maintains the earth's temper and protects it from the harmful rays of the sun.

Question 2: What is the composition of the atomic sphere?

Answer: The atomic sphere is composed of about 78% nitrogen, 21% oxygen and 1% water vapor and small amounts of gases (carbon dioxide, hydrogen, argon, helium, ozone, etc.).

Question 3: Write the names of the four legs of the Atomic Sphere.

Answer: The four layers of the atomic sphere are as follows:

1. The troposphere
2. Ster Yusufier
3. Table AndSphere
4. Thar Mosfer

Question 4: What do you know about the troposphere?

Answer: This layer starts from the surface of the earth and extends to an altitude of 18 kilometers. Most of the gases and water vapor present in the air are found in this layer. Winds, climate and weather also occur in this layer.

Question 5: What do you know about stratosphere?

Answer:

1. This layer is located above the troposphere and reaches an altitude of 50 kilometers above the earth's surface.
2. Jets fly at the bottom of this layer.
3. There is a special gas in the starsphere, which is called ozone. It is important for living beings because it prevents harmful ultraviolet rays of the sun from coming to earth.

Question 6: What is the height of the stratosphere?

Answer: This layer is located above the troposphere and reaches an altitude of 50 km above the earth's surface. Jets fly at the bottom of this layer.

Question 7: What is Ozone?

Answer: Ozone is a gas that is present in the upper part of the sternsphere. It is very important for living beings. Because it prevents harmful ultraviolet rays of the sun from coming to earth.

Question 8: Where is the table and ambassador located?

Answer: The third layer of the atomic sphere above the stratosphere and up to 85 kilometers above the surface of the earth is called the mesosphere. It is a cold layer with a temperature of minus 100 degrees Centigrade.

Question No. What is the temperature of the Thar Mosphere?

Answer: It is the top and hottest layer of the atomic sphere. The temperature here can be up to 2000 degrees Centigrade.

Question No. 10: Write the difference between the table and the thermosphere.

Answer: The table andsphere is a cold layer where the temper pitcher is -100 °C. While the thermosphere is the hottest layer of the atomic sphere. The temperature here is up to 2000 degrees Centigrade. Similarly, the bottom of the atomic sphere above the stratosphere and up to 85 kilometers above the surface of the earth is called the mesosphere. While the name of the top layer of the atomsphere is the Thar Mosphere.

Question 11: What factors are causing the destruction of ozone?

Answer: Some chemicals are released from refrigerators, air conditioners, spray containers and piling foam factories called chlorofluorocarbons (CFCs). These chemicals act with ozone to cause the destruction and subtlety of this layer. As a result, more ultraviolet rays can reach the earth. These rays can cause cancer and eye diseases.

Question 12: What do you know about acid rain?

Answer: Acid Rain is produced due to sulfur dioxide and nitrogen oxides. It damages plants, aquatic animals and buildings.

Question 13: What is the difference between smog and acidic rain?

Answer:

- **Smog:** The brown nitrogen peroxide gas present in the smoke combines with other gases in the light to form a compound called smog.
- **Acid Rain:** Sulfur dioxide and nitrogen oxides cause acid rain, which damages plants, aquatic animals and buildings.

Question 14: What are greenhouses?

Answer: Greenhouse is called a room made of glass. In which plants are grown.

Question 15: What is meant by greenhouse effect?

Answer: Rays coming from the sun can enter the greenhouse, but the rays of the living wavelength of heat cannot come out. Due to which the temper inside the greenhouse increases. This process is called the greenhouse effect.

Question 16: What is meant by global warming?

Answer: Due to the greenhouse effect, the temperature of the planet is increasing, it is called global warming.

Question 17: What could be the effects of greenhouse effects and global warming?

Answer: The greenhouse effect and global warming can have many unpleasant effects. Such as:

1. There may be changes in the earth's climate.
2. Due to melting of snow and excessive rains on the poles and mountains, sea levels will rise and many coastal areas will be submerged.

Question 18: Write the difference between greenhouse effects and global warming.

Answer:

- **Greenhouse Effect:** A greenhouse is a glass room in which plants are grown. Rays coming from the sun can enter the greenhouse, but the rays of the long wavelength of heat cannot come out, due to which the temperature inside the greenhouse increases. This process is called the greenhouse effect.
- **Global Warming:** Due to the greenhouse effect, the temperature of the planet is increasing, it is called global warming.

Question 19: Describe the adverse effects of human activities on the weather?

Answer:

1. In the second half of the 20th century, there has been a close relationship between the amount of rising earth's temper wedge and greenhouse gases.
2. According to some meteorologists, the heat will become unbearable in the future.
3. Deserts will increase.
4. Some areas will be flooded.
5. Melting of ice will raise sea levels and many species will disappear due to climate change.

Question 20: What is meant by pollution?

Answer: Pollution refers to such unpleasant changes in the characteristics of air, land and water that have a bad effect on the life of humans and other living beings or are likely to occur in the future.

Question No. 21: What is meant by polio tomatoes?

Answer: All the irregular and wasteful substances that cause pollution of the environment are called polioes. Such as garbage, dust, industry waste chemicals, etc.

Question 22: What is the difference between pollution and pollutants?

Answer: Pollution refers to such unpleasant changes in the characteristics of air, land and water that have a bad effect on the life of humans and living beings or are likely to happen in the future. Whereas all the irregular and extra substances that cause pollution of the environment are called pollutants.

Question No. 23: Write two steps to eliminate pollution.

Answer:

1. Do not throw objects around into the ground or water reservoirs. Dispose of the beak rashia properly.
2. Use resources sparingly and do not let them go waste.

Question 24: What factors are polluting the environment industrially?

Answer: Various gases such as carbon dioxide, carbon monoxide, sulfur dioxide and nitrogen dioxide from factories and vehicles are polluting the environment.

Question 25: What are the main types of pollution?

Answer: Pollution can be divided into three major categories due to the impact of a particular part of the environment:

1. Air pollution
2. Water pollution
3. Ground Pollution

Question 26: What factors are polluting the air?

Answer:

1. Fuel burning in factories, vehicles and energy generating units.
2. Discharge of chlorofluorocarbons from spray bins and during the preparation of piling foam.
3. Spraying of chemical fertilizers, pesticides and dust entering the air.

Question 27: What is meant by smog?

Answer: The brown nitrogen peroxide gas present in the smoke combines with other gases in the light to form a compound called smog.

Question 28: What is the difference between smog and acidic rain?

Answer:

- **Smog:** The brown nitrogen peroxide gas present in the smoke combines with other gases in the light to form a compound called smog. Smog causes lung diseases, apart from this, things are not clearly visible due to smog.
- **Acid Rain:** Sulfur dioxide and nitrogen oxides cause acid rain, which damages plants, aquatic animals and buildings.

Question No. 29: Describe the disadvantages of smog?

Answer: Smog causes lung diseases. Apart from this, things are not clearly visible due to smog.

Question 30: Why is drainage necessary?

Answer: A lot of attention should be paid to drainage so that the diseases caused by dirty water can be controlled. For example, mosquitoes lay eggs in dirty water while standing. Diseases like malaria can be controlled if the focus is on drainage.

Question 31: What is meant by water pollution?

Answer: Water pollution is caused by dumping industrial waste, urban waste and sewage into water bodies such as rivers, streams, ponds and oceans.

Question 32: What harm is water pollution causing to aquatic life?

Answer: Due to water pollution, the dissolved oxygen in the water decreases. As a result, the life of aquatic life, fish and aquatic plants is being badly affected.

Question No. 33: Write two effects of water pollution.

Answer:

1. The irregular substances released from the factories of leather, cloth, paper, plastic and other chemicals contain heavy metals such as chromium, lead, mercury, etc. and toxic substances that are added to the water. Heavy metals and toxins can enter the body of organisms and cause cancer and other diseases.
2. Water from homes and settlements and leftover food, detergents and human and animal waste are also included. By adding them to the water bodies, the amount of salts and organic matter in the water becomes high and the dissolved oxygen is reduced. As a result aquatic life (fish, aquatic plants, etc.) is affected.
3. Chemical fertilizers and pesticides used in crops flow with water and get added to rivers, drains and ground water.
4. During the filling and unloading of oil vessels or in the case of accidents, the oil flows and spreads on the surface of the sea.

Question 34: What are the major causes of ground pollution?

Answer: Wood scrap and garbage are usually burnt and disposed of, but these two methods are also not safe from the point of view of the environment. Germs and toxins fly from garbage dumps, flow into water or feed into the environment and food items, and cause many types of diseases. The plastic envelopes are seen flying all over and blocking the drainage drains due to non-decomposition.

Question No. 35 Why have the fish become extinct in the Ravi River?

Answer: The fish in the Ravi river have become extinct due to water pollution.

Q.36 Are corners causing ground pollution?

Answer: Municipal waste, sewage sludge, agricultural waste materials, surplus chemical materials of the chemical industry are major causes of ground pollution.

Question No. 37 How should wood scrap and garbage be disposed of?

Answer: Wood scrap and garbage are usually disposed of by burning or burying them. But these two methods are also not safe from the point of view of the environment.

Question 38: Describe any two ways to reduce pollution. Answer:

1. Do not throw things around in the ground or water reservoirs. Dispose of the beak rashia properly.
2. Use resources sparingly and do not let them go waste.

Question 39: What is meant by air pollution?

Answer: Air pollution refers to polluting the air. Air is considered polluted when there is a change in its composition or quality. This change occurs as a result of the addition of several gases, smoke and particles to the air.

Question 40: Write two effects of air pollution.

Answer: Air pollution affects plant, animal and human life in many ways.

1. Hydrocarbons, carbon monoxide, lead particles and asbestos fiber emitted from cars and factories cause cancer, eye and respiratory diseases.
2. The oxide gas on the brown nitrogen present in the smoke combines with other gases in the light to form a compound called smog. Smog causes lung diseases. Apart from this, things are not clearly visible.
3. Heavy metals and radioactive radiation have deadly effects on plants and animals.
4. Excess of carbon dioxide creates greenhouse effects, which increases the temperature of the earth.
5. Sulfur dioxide and nitrogen oxides cause acidic rain, which damages plants, aquatic animals and buildings.

Question 41: Write down two reasons for air pollution.

Answer:

1. Fuel burning in factories, vehicles and energy generating units.
2. During the production of goods, waste materials and particles such as asbestos fibre, zinc and lead particles from factories and furnaces.

Question No. 42: What is meant by resources?

Answer: The development and prosperity of a country depends on the presence and proper use of land, water, minerals, forests and wildlife etc. present there. All these things are called resources.

Question No. 43: Write a short note on coal.

Answer: Coal is an old and important source of thermal energy. Coal was produced millions of years ago due to the burial of trees and plant remains grown in hot wetlands. Most of the coal in Pakistan is currently used in brick kilns. However, it is also being used to generate electricity.

Question 4: What is the use of coal in Pakistan?

Answer: Most of the coal in Pakistan is currently used in brick kilns. However, it is also being used to generate electricity.

Question 45: What is meant by Fossil Fuels?

Answer: Coal, oil and gas are called fossil fuels. Most of the energy needed to meet the needs of transport, electricity generation, agriculture and industry comes from them. They are called fossil fuels because they are the remains of ancient plants and animals that were buried in the earth and over time turned into coal, oil and gas due to the heat and pressure of the earth.

Question No. 46: What products are produced from Petroleum?

Answer:

1. After removing raw petroleum from the ground, various products are prepared by cleaning it.
2. Gasoline, diesel, furnace oil and kerosene oil are all petroleum products that are used as fuel in cars, ships, power plants, factories and homes.

Question No. 47: Write the names of any four petroleum products.

Answer: Gasoline (petrol), diesel, furnace oil and kerosene oil (kerosene) are all petroleum products that are used as fuel in cars, ships, power plants, factories and homes. Some other products such as grease, wax, paraffin, petroleum jelly, tar, synthetic fibers such as nylon, polyester and plastic are also made from petroleum.

Question 48: What is natural gas?

Answer: Natural gas is a combination of various gases including methane, ethylene, propane etc. There are plenty of natural gas reserves in Pakistan.

Question No. 49: Natural Gas is a combination of which gases?

Answer: Natural gas is a combination of various gases including methane, ethylene, propane etc.

Question 50: What is natural gas? Explain its importance.

Answer: Natural gas is a combination of various gases including methane, ethylene, propane etc. There are plenty of natural gas reserves in Pakistan.

Importance:

1. Natural gas is the main source of energy.
2. It is used to generate electricity in power plants, manufacture cement and chemical fertilizers and burn stoves in homes.
3. Nowadays many vehicles are also run on gas.

Q.51: Describe the different uses of natural gas?

Answer: Natural gas is used to generate electricity in power plants, manufacture cement and chemical fertilizers and run other factories, as well as burning stoves in homes.

Question 52: What do you mean by minerals?

Answer: Minerals refer to all those elements such as gold, iron, copper and compounds such as body mica, which are naturally present in the earth in a solid state and are important for human use.

Question 54 What is the difference between Mineral and Sach Metal?

Ans: Minerals refer to all elements (e.g. gold, iron, copper) and compounds (e.g. jassim, mica) that are naturally present in the Earth Crust in a solid state and are important for human use. Most of the time minerals are found in rocks. Rocks from which minerals can be extracted are called (ore) i.e. raw metal.

Question 55: Write about any two uses of silicone. Answer:

1. Silicone comes in handy in glass making.
2. Nowadays silicone is used to make microprocessors of computers.

Question 56: What do you mean by renewable natural resources?

Answer: Natural resources that cannot be regenerated are called renewable natural resources. Sometimes it takes a long time for them to be born again. Fossil fuels, for example, take millions of years to form.

Question No. 57: Write two ways to conserve natural resources.

Answer: The following steps can be taken to conserve natural resources:

1. Recycling
2. Use of Substitutions
3. Reuse of Used Items

Question No. 58: Which modern-day elements have become involved in agriculture?

Answer: Mechanized cultivation is being promoted to take maximum yield. The use of tubewells for irrigation, tractors for ploughing, harvesters for harvesting and threshers for threshers is becoming common.

Question 59: What do you mean by wildlife?

Answer: All plants and non-domesticated animals in an area are called wild life.

Question 60: Write down the two benefits of wildlife.

Answer: Wildlife is important for the environment and human beings in many ways. Two of these benefits are as follows:

1. Wildlife maintains the balance of the environment.
2. Many natural products derived from wildlife are used in our homes, industry, and agriculture. Food, building wood and medicine are just a few examples.

Q61: How many species of animals, birds and fish are found in Pakistan?

Answer: There are about 200 species of mammals, 600 species of birds, 150 species of reptiles and 700 species of fish in Pakistan.

Question No. 62: What is meant by end-necked sassy shiz?

Answer: Animals (plants and animals) that are in danger of extinction are called peas.

Question No. 63: Which animals are in danger of extinction in Pakistan? Answer: The animals that are in danger of extinction in Pakistan. Among them are Rosh or Marco Polo Bheter, Nafa Deer, Snow Guldar, Haril, Suleiman Markhor, Urial of Punjab, Taloor, Crocodile, Blind Dolphin of Indus River, Balochistan Car Some Sea Turtle and Iranian Ghazal.

Question No. 64 What are benign parks?

Answer: National parks also play an important role in protecting wildlife. National parks are natural areas that are preserved in their natural state for future generations, including their natural flora and fauna. In addition to research work, all kinds of human intervention are prohibited.

Question 65: What is meant by fisheries?

Answer: Fish is a great source of high nutrition. Fish are found in streams, lakes, rivers and seas. Rho, bag and trout are among the fish found in our fresh waters, whose meat is delicious and nutritious. Due to advances in modern fisheries techniques, fish production has increased manifold.

Question 66 What is meant by population?

Answer: Population refers to the number of people living in a particular area at a particular time. For example, in 1998, There were 130.5 million people living in Pakistan, while the current population of Pakistan is more than 150 million.

Question No. 67: What is the growth rate of Pakistan's population?

Answer: The average growth rate of Pakistan's population is 2.6%. Rapid growth in population affects the environment in many ways and causes many physical, economic, social and environmental problems.

1. The basic needs of clean air, water, housing and food are not met.
2. Education and health facilities are not available to every individual and despite efforts for development, the standard of living falls.

3. Feelings of crime, violence, uncertainty, hunger and deprivation have a negative impact on society.
4. Poverty, low living standards, pollution, land degradation, deforestation, urban expansion, and migration, rising population-generated problems are environmental problems.
5. Due to the increase in population and lack of resources, the number of illiterate children is increasing.

Question 68: What are the problems that are arising out of population growth?

Answer: Rapid growth generally negatively affects the economic and social development of an area. Increasing population increases the pressure on resources and stops the process of development.

Question no. What do you mean by migration?

Answer: People migrate from one place to another in search of employment, education and better health facilities and political and social reasons. This process is called migration.

Question 70 How can the standard of living of a nation be estimated?

Answer: The quality of life of a nation is estimated by the provision of education, health, food, housing and other facilities such as clean water, electricity, etc.

Question 71: What is meant by recycling?

Answer: The process of making new useful items from used items is called recycling.

Question 72 What do you mean by chlorofluorocarbons?

Answer: The gas made from the combination of carbon, chlorine and fluorine, which is used to make refrigerators, spray boxes of opium, is called chlorofluorocarbons.

Question 73: What are the effects of deforestation on the environment?

Answer: Forests are cut to meet the needs of the population, which leads to unpleasant changes in the seasons. Soil erosion occurs and agricultural land becomes useless.

Question 74: What is meant by noise pollution?

Answer: Unpleasant, unpleasant loud and random sound which does not look good to the ears falls under the category of noise pollution.

Question 75: What are the disadvantages of noise pollution?

Answer: It affects the ability of the human brain and ears to hear. We should not hear too loud noises and create noise near residential areas.

Question No. 76 What damage are pesticides and fertilizers causing to the land?

Answer: Pesticides and fertilizers have caused the problem of barren land in different areas and many valuable land is not cultivable. Pollution from pesticides and fertilizers is also increasing.

Question 77 What are the disadvantages of fossil fuels?

Answer: If fossil fuel is a cheap and easily available source of energy, its increasing use day by day is causing environmental problems. Burning of fossil fuels produces a lot of gases and smoke that pollute the environment. In addition, many lands, forests and natural habitats of living organisms are lost during the extraction and oil exploration.

Question No. 78: How is the individual polluting the environment himself?

Answer: Substances emitted from the human body, leftover food and other waste materials are also included in the waste which are polluting the environment.

Question 79: Where is oxygen found in a free state?

Answer: Oxygen is found in the air in a free state. It is a major component found in the air.

Question No. 80 What are biodegradable items?

Answer: Items that can be broken down into their simple non-harmful components by the process of microorganisms are called biodegradable items.

Question No. 81: Write the symptoms of dengue fever.

Symptoms of dengue fever usually start four to six days after infection and last for 10 days. Symptoms of dengue fever include sudden high fever, severe headache, pain behind the eyes, severe pain in joints and muscles, nausea, vomiting, swelling of glands.