

**Science and Technology Marathon of 2024-2025****Class 7**

- 1) What is dry ice? [Solid  $\text{CO}_2$ ]
- 2) Which instrument is used to measure atmospheric pressure? [Barometer]
- 3) What is the normal human body temperature? [ $37^\circ\text{C}$  or  $98.6^\circ\text{F}$ ]
- 4) What is an association of two or more different organisms which are mutually interdependent called? [Symbiosis]
- 5) What is a chemical reaction called in which energy is absorbed? [Endothermic reaction]
- 6) Name a device that detects electric charge. [Electroscope]
- 7) What is the unit of power? [Watt/Kilowatt/Megawatt / Horse power]
- 8) How many chromosomes are there in each human cell? [46 or 23 Pairs]
- 9) Name a unicellular animal, which has chloroplast. [Euglena]
- 10) What is the unit of heat or energy? [Joule]
- 11) Which mineral is necessary for the formation of hemoglobin? [Iron]
- 12) Which muscles make up the heart? [Cardiac muscles]
- 13) What is the smallest unit of Nervous system? [Neuron]
- 14) Name an instrument that stops bleeding by clamping a blood vessel. [Hemostat]
- 15) Which cell organelles are called power house of the cell? [Mitochondria]
- 16) Which nutrient forms most of our body weight? [Water]
- 17) What does lack of vitamin C cause? [Scurvy]
- 18) What is the height of mercury column in a barometer at sea level? [76 cm or 760 mm]
- 19) What are the hereditary units called? [Genes]
- 20) Which plastid in a plant cell contains chlorophyll? [Chloroplast]
- 21) What is the full form of ATP? [Adenosine Tri phosphate]
- 22) Which cell organelles are called suicidal bags? [Lysosomes]
- 23) Name a protein substance produced in the blood or tissues of animals or humans which destroys or weakens bacteria or neutralizes the poison they produce. [Answer: Antibody]
- 24) Name the smallest human cells. [Granite cells]
- 25) Who invented electric bulb and gramophone? [Thomas Alva Edison]
- 26) Who invented the electric generator and the electric motor? [Michael Faraday]
- 27) What is the chemical formula of common salt? [ $\text{NaCl}$ ]
- 28) Name one tetravalent element. [Carbon]
- 29) What is the upper fixed point of Fahrenheit scale? [ $212^\circ\text{F}$ ]
- 30) What are substances called which do not allow light to pass through them at all? [Opaque substances]
- 31) Which acid does an apple contain? [Malic acid]
- 32) What is the symbol of mercury? [Hg]
- 33) Name a base which does not have a metal in its molecule. [Ammonium hydroxide [ $\text{NH}_4\text{OH}$ ]]
- 34) What are water soluble bases called? [Alkalis]
- 35) What is the electricity which does not flow called? [Static electricity]
- 36) Which portion of a shadow does not receive light at all? [Umbra]
- 37) Name the smallest human bone. [Stapes[bone in the ear]]
- 38) What is the distance travelled by light in one year called? [Light year]
- 39) What is the study of extraterrestrial life in space called? [Exobiology]
- 40) What is a constellation? [A group of stars with a certain shape]
- 41) Which is the nearest star from the Earth? [Proximacentauri]
- 42) What is Hygrometer? [An instrument for measuring the humidity of air]
- 43) What is the full form of CFCs ?[Chlorofluorocarbons]
- 44) Name the female part of a flower.[Gynoecium]
- 45) Name the male part of a flower. [Androecium]
- 46) What is the fusion between male and female gametes called? [Fertilization]
- 47) What is a cell formed by the fusion of male and female cells called? [A zygote]
- 48) Which digestive gland secretes an enzyme trypsin? [Pancreas]
- 49) What is the medium of food in the stomach like? [Acidic]
- 50) What is the medium of food in the duodenum? [Chyme]

- 51) Name the bacteria which change milk into curd. [lactobacillus ]
- 52) Name the acid present in curd. [Lactic acid]
- 53) What is the smallest unit of Protein? [Amino acid]
- 54) What is a metabolic activity called which is destructive in nature? [Catabolism]
- 55) What is the process of evaporation followed by subsequent condensation called? [Distillation]
- 56) Name the process of separating different dyes of a colour. [Chromatography]
- 57) Which process is applied in separating butter from milk? [Centrifugation]
- 58) Name a barometer which does not use any liquid. [Aneroid barometer]
- 59) What are the cells called which do not have a nuclear membrane bound nucleus? [Prokaryotic cells]
- 60) Name the cell organelles which are called kitchen of the plant cells. [Answer:-Chloroplasts]
- 61) Which cells organelles are responsible for synthesizing, packing and secreting organic substances in the cells? [Golgi bodies]
- 62) Name the valves present in the human heart. [Answer:-Pulmonary Valve, Aortic Valve tricuspid valves]
- 63) Name the vein which carries oxygenated blood. [Answer: - Pulmonary vein.]
- 64) Name the main artery arcing from the heart. [Dorsal aorta ]
- 65) What is the scientific term for the voice box? [Larynx ]
- 66) Name an amphibian besides frogs and toads. [Salamander]
- 67) Which spherical mirror produces a real imaged? [A concave mirror]
- 68) What are biological catalysts? [Answer:-Enzymes]
- 69) What is the enzyme present in saliva? [Ptyalin]
- 70) What is intensity of sound measured in? [Decibel]
- 71) If the focal length of a spherical mirror is 10 cm, what will be the radius of curvature of that mirror?[20cm]
- 72) What is the temperature called at which solid changes into liquid?[Melting point]
- 73) What is the temperature called at which liquid changes to solid? [Freezing point]
- 74) What are vascular bundles in plants made of? [Xylem and Phloem]
- 75) What is cell wall made of? [Cellulose ]
- 76) Which instrument is used to measure weight? [Spring balance]
- 77) How much kilometers is 1mm? [0.000001 Km ]
- 78) Why do we feel cold when few drops of alcohol is put on our palm? [Alcohol evaporates taking heat from our body]
- 79) In a plane mirror, your left eye appears on the right. What is this property called? [Lateral inversion]
- 80) At what time can we see the lunar eclipse: at full moon night or at new moon? [Atfull moon night]
- 81) In a magnet or an Iron piece it is supposed that there are small magnets. What are these magnets called? [Electromagnet]
- 82) What is the size of a cell measured in? [Micron]
- 83) What is the full form of DNA? [Deoxyribonucleic]
- 84) What is the process called by which living beings obtain energy from food and drinks? [Respiration]
- 85) What is the stacks of thylakoids called? [Grana]
- 86) What is the fluid matrix in the chloroplast called? [Stoma]
- 87) What is a green plant called on which a parasite plant grows? [Host]
- 88) What is the process of obtaining nutrition by taking in complex food matter called? [Digestion]
- 89) What is the process called which is involved for elimination of undigested material? [Egestion, excretion]
- 90) Which is the largest compartment in ruminant stomach? [Rumen]
- 91) What is the type of nutrition in amoeba called? [Holozoic]
- 92) What is the material substance used in or obtained by a process in chemistry? [Chemical substance]
- 93) How much water is evaporated each day by Sun's heat? [A trillion tonnes of water]
- 94) What are the materials called which are woven from fibers? [Fabric]
- 95) What is the sheep called which is originally from Spain and gives the finest quality of wool? [Merino sheep]
- 96) What is the process of superficial removal of fur from the coat of an animal called? [Shearing]
- 97) What is the constriction in the tube near the bulb in a chemical thermometer? [Kink]
- 98) What is the weather conditions occurring over a long period of time in a place called? [Climate]
- 99) What is the vapour content in the atmosphere called? [Humidity]
- 100) What is the heating effect produced due to the presence of excess amount of greenhouse gases in the atmosphere called? [Greenhouse effect global warming]
- 101) What is the state of inactivity of animals in summer called? [Aestivation]
- 102) What is the thick layer of fat that deposits under the skin of some animals to keeptheir body warm? [Blubber]
- 103) What is the soil called that retains moisture and becomes very sticky when wet? [Clay soil]

- 104) What is the dead and decayed plant and animals remains in the soil called? [Humus]
- 105) What is the respiratory process called that takes place in the absence of oxygen? [Anaerobic]
- 106) What is the tiny holes in leaves of plants called? [Stomata]
- 107) What is the process called by which food prepared in the leaves sent to all parts of the plant body? [Translocation]
- 108) What is the red pigment of the blood called? [Hemoglobin]
- 109) Which vein bring oxygenated blood to the heart? [Pulmonary vein]
- 110) What is the ripened ovule called? [Seed]
- 111) What is the flower called that contains both male and female gametes in it? [Bisexual]
- 112) What is the process by which living things multiply? [Reproduction]
- 113) What is the process called which is initiated by a small piece of tissue from the parent plant to grow a new plant? [Tissue culture]
- 114) What the distance travelled by an object in unit time called? [Speed]
- 115) What is a clock called consisting of a suspended weight? [Pendulum clock]
- 116) What is the motion called that repeats itself in equal intervals of time? [Uniform motion]
- 117) What is a diagram of an electrical circuit where the various components are represented by standard symbols? [Circuit diagram]
- 118) What is the safety device in an electrical circuit? [Fuse]
- 119) What is the movement of air, usually horizontal called? [Breeze]
- 120) What is a violent tropical storm typically shaped like a funnel, generally occurred over land called? [Tornado]
- 121) What is the bouncing off of light from a surface called? [Reflection]
- 122) What is a highly polished surface that forms an image called? [Mirror]
- 123) What is the phenomena called in which light travels in straight lines? [Rectilinear propagation]
- 124) What is the material called which allows almost all the light falling on them to pass through? [Transparent]
- 125) What is the water called present on the surface of the earth? [Surface water]
- 126) What is the short form of biological diversity? [Biodiversity]
- 127) What is the semi-digested food in human stomach called? [Chyme]
- 128) What is the fiber in hay and grains called? [Cellulose]
- 129) What does a silk worm transfer itself into when it is inside a cocoon? [Chrysalis]
- 130) What are the bases that dissolve in water called? [Alkali]
- 131) Acids react with bases to form salt. What is this reaction called? [Neutralization reaction, Acid Base reaction]
- 132) Which organ in the human body helps in inhalation and exhalation? [Lungs]
- 133) What is the continuous circulation of water in nature called? [Water cycle]
- 134) What is the uppermost layer of branches of tree in a forest called? [Canopy]
- 135) At which temperature water has maximum density? [ $4^{\circ}\text{C}$  or  $39^{\circ}\text{F}$ ]
- 136) What is the ratio of hydrogen and oxygen in water? [2:1]
- 137) What happens when electricity is passed through acidulated water? [Hydrogen gas and oxygen gas is formed]
- 138) What is the process of respiration that takes place in the presence of oxygen? [Aerobic respiration]
- 139) Which is the technique in which plants grow without soil? [Hydroponics]
- 140) Name the very common form of asexual reproduction in plants? [Fragmentation]
- 141) What is the name of the fusion of male and female gametes called? [Zygote]
- 142) What does anthrax bacteria cause? [anthrax or sorter's disease]
- 143) What is the instrument with which the speed of wind is measured in? [Anemometer]
- 144) What are the common respiratory organs in insect? [Tracheal]
- 145) What is the common disease caused by bacteria in teeth called? [Plague]
- 146) What is the rate of water exist in the soil is known as? [Percolation]
- 147) What is the excessive growth of algae in a lake with nutrients like phosphorous called? [Eutrophication]
- 148) What is the plant that gives quinine for malaria treatment? [Cinchona plant]
- 149) What is the full form of TNT? [Trinitrotoluene]
- 150) Which device is used as an electromagnet? [Solenoid]
- 151) What is the filament made up of in an electric bulb? [Tungsten]
- 152) Which is the only acid that attacks glass? [Hydrofluoric acid]
- 153) What is the designation of molecules in short hand notation using the different symbols of elements called? [Molecular formula]
- 154) What is the channel of pipeline that carries out sewage from our house called? [Sewer system]
- 155) What is the smallest particle that has all the properties of an element? [Atom]

- 156) What is the filament secreted by the silk worms made up of? [Proteins]
- 157) What is the process by which an unicellular animals transport required substances? [Diffusion]
- 158) What percentage of our body weight is constituted by blood? [7%]
- 159) What is the process by which diseased kidney is replaced? [Kidney transplant]
- 160) What is the process called by which toxic substances are removed from the blood by the help of a machine? [Dialysis]
- 161) What is the upper chambers of a heart called? [Auricles]
- 162) In which process of reproduction in plants stock and scion are involved? [Grafting]
- 163) What is the size of largest iceberg ever recorded? [1,668 square miles]
- 164) What is the process by which soil is formed? [Weathering]
- 165) What is the melting point of mercury? [-38.87°C]
- 166) What is the range of temperature in the laboratory thermometer? [-10°C to 110°C]
- 167) What is the suspended impurities in sewage called? [Contaminants]
- 168) What is the wood of trees that is cut for use as building materials called? [Timber]
- 169) What is the substance called with pH=7? [Neutral]
- 170) What is the byproduct in anaerobic respiration? [Carbon dioxide and ethyl alcohol]

## TECHNOLOGY

1. \_\_\_\_ key combination is used to make the text Italics. CTRL+ I
2. Printed copy is often called \_\_\_\_ Hard copy
3. Users use often \_\_\_\_ for access to mainframe or supercomputer. Hand held
4. A computer \_\_\_\_ is a set of program instructions that can attach itself to a file, reproduce itself, and spread to other files.  
Virus
5. What is Anupam? A supercomputer
- 6 What digits are representative of all binary numbers? 0 and 1
7. Which of the following protocol is used by Internet? TCP/IP
8. The engineers who developed the IBM PC were known as \_\_\_\_ Dirty Dozen
9. \_\_\_\_\_, originally, was a printed bookseller company, now sells more e-books than printed ones. Amazon
10. \_\_\_\_ was the first popular web browser which was released in 1993. Mosaic
11. \_\_\_\_ was the first electronic and commercial digital computer which can perform calculations at high speed. ENIAC
12. Another name for the address of a web page is URL
- 13 \_\_\_\_\_ is an example of mobile computer. PDA
14. What device is used for reading cheques in bank? MICR
15. What is the device used for checking multiple answer sheet? OMR
16. What do you understand by OCR? Optical Character Recognition
17. Which card contains a magnetic strip and can store information magnetically? Credit cards
18. Which is specially used for printing maps, chart and graphs? Plotter
19. When the user program is translated to machine language, it is called \_\_\_\_\_ Object code/program
20. Name the software that translates high level language to object code line by line. Interpreter
21. Which memory has the shortest access time? Cache memory
22. Processor is fixed on the \_\_\_\_\_ Motherboard
23. \_\_\_\_\_ is the highest speed slot. AGP
24. \_\_\_\_\_ is used in security system and criminal investigations Fingerprint Reader
25. \_\_\_\_ creates a link between a user and the computer. Operating system

