

CHINMAYA VIDYALAYA, TARAPUR

P-201, MIDC Indl. Area, Saravali, Boisar

ISO 9001-2008 Certified

SCIENCE TALENT SEARCH EXAMINATION

Sample Paper



CLASS - VII

Please fill the following details immediately

Name: _____

Hall Ticket No.: _____

❖ 100 Questions ❖

❖ Time Allowed : 120 Minutes ❖

- ❖ Do not open this question paper until the signal is given.
- ❖ Please check the CLASS printed on the cover page and the inside is same when you open the booklet.

General Instructions:

- 1) All questions are compulsory and carry equal marks.
- 2) There is no negative marking.
- 3) There is only one correct answer hence write one choice only.
- 4) Please avoid cutting/overwriting etc.
- 5) Return the answer sheet to the invigilator at the end of the examination.
- 6) The question paper can be retained by the student.

PHYSICS [30]

- 1) When we touch a steel rod and a paper simultaneously, we feel that the rod is colder because
 - a) iron being a good conductor conducts more heat from our body
 - b) paper being a good conductor conducts more heat from our body
 - c) more heat flows from the iron to our body
 - d) more heat flows from the paper to our body
- 2) Which of the following letters will be seen without any change in a plane mirror?
 - a) S
 - b) T
 - c) L
 - d) P
- 3) Shadows are formed because
 - a) opaque bodies allow the light to pass through them
 - b) light can bend around the opaque bodies
 - c) light rays cannot pass through the opaque bodies
 - d) light shows the phenomenon of diffraction around large objects.
- 4) Light
 - a) requires a material medium to travel from one place to another
 - b) does not require a material medium
 - c) light has mass but it is negligible
 - d) light waves are longitudinal wave
- 5) Transparent objects
 - a) do not let light to pass through them
 - b) allow light to pass through them
 - c) absorb some amount of light and allow the remaining to pass through them
 - d) reflect all the amount of light falling on them
- 6) As the distance of source increases
 - a) intensity of light increases
 - b) intensity of light decreases
 - c) intensity of light remains the same
 - d) intensity of light may decrease or increase.

- 7) Radiation depends on
- a] the temperature of the substance
 - b] the colour of the substance
 - c] both the above
 - d] the size of the substance
- 8) In solar cooker
- a] electricity is used to cook food
 - b] chemical energy is converted to electrical energy
 - c] radiation from the sun is used to cook food
 - d] heat energy is converted light energy
- 9) When you heat a bowl of water, we can observe that water starts circulating. This demonstrates
- a] conduction
 - b] convection
 - c] radiation
 - d] evaporation
- 10) The liquid which is a good conductor of heat is
- a] mercury
 - b] water
 - c] hydrogen
 - d] kerosene
- 11) More energetic molecules of a body transfer some of their energy to other molecules, without any change in their position in
- a] conduction
 - b] convection
 - c] radiation
 - d] none of these
- 12) Which of the following expands most of heating?
- a] Solids
 - b] Liquids
 - c] Sand
 - d] Gases
- 13) The C.G.S unit of speed is
- a] cm/g
 - b] m/s
 - c] m/g
 - d] cm/s
- 14) With what speed should a car travel so that it can cover a distance of 5 km in 5 min?
- a] 1 km/h
 - b] 5 km/h
 - c] 12 km/h
 - d] 60 km/h
- 15) Aman runs 10 km in 30 min. What is his speed?
- a] 5 km/h
 - b] 10 km/h
 - c] 15 km/h
 - d] 20 km/h
- 16) The speed at which the light travels in vacuum is
- a] 3×10^6 m/s
 - b] 3×10^8 m/s
 - c] 3×10 m/s
 - d] 3×10^{12} m/s

- 27) A solar eclipse occurs on
a] all new moon days b] a particular new moon day
c] all full moon days d] a particular full moon day
- 28) Which type of mirror is used in car head lights?
a] convex mirror b] concave mirror
c] plane mirror d] biconvex mirror
- 29) The speed of wind can be measured by
a] wind vane b] anemometer
c] barometer d] hygrometer
- 30) White light is composed of
a] five colours b] six colours
c] seven colours d] two colours

CHEMISTRY [30]

- 31) Phenolphthalein turns acidic and neutral solutions
a] colourless b] pink c] red d] green
- 32) Phosphoric acid is formed when phosphorus pentoxide reacts with:
a] oxygen b] carbon dioxide
c] alcohol d] water
- 33) $\text{Zn} + \text{H}_2\text{SO}_4 \rightarrow$ a gas.
If we bring a burning splinter near the gas produced in the given reaction, it burns with a pop sound. The gas is
a] O_2 b] N_2 c] H_2 d] CO_2
- 34) The acid used in the making of vinegar is
a] formic acid b] acetic acid
c] sulphuric acid d] nitric acid
- 35) Which of the following is not a physical change?
a] Tearing a paper b] Bending an iron
c] Freezing water into ice d] Burning a paper
- 36) Non metallic oxides react with water to form
a] Acids b] Bases c] Salt d] None of these
- 37) Sea and land breezes are caused because of
a] convection b] cyclones c] rains d] conduction

- 38) What is the best thing to do when strong winds are blowing over a hut ,having a weak thatched roof?
- a] Open the doors and windows
 - b] Close all the doors and windows
 - c] Make holes in the roof
 - d] Burn wood inside
- 39) Metals react with water to form
- a] oxides and hydroxides
 - b] oxides and chlorides
 - c] hydroxides and carbonates
 - d] oxides and sulphides
- 40) Common name of H_2SO_4 is
- a] oil of vitriol
 - b] muriatic acid
 - c] blue vitriol
 - d] green vitriol
- 41) The chemical formula of Hydrogen Peroxide is
- a] H_2
 - b] O_2
 - c] H_2O
 - d] H_2O_2
- 42) While drinking a soft drink with the help of a straw the pressure in the straw is _____ and the pressure in the bottle is _____ .
- a] high, less
 - b] high, high
 - c] less, less
 - d] less, high
- 43) Which of the following is the most important factor in balancing the amount of fresh water on earth?
- a] water cycle
 - b] greenhouse effect
 - c] WWTP
 - d] Transpiration
- 44) An anemometer is an instrument that is most similar to a:
- a] accelerator
 - b] speedometer
 - c] flag
 - d] electric meter
- 45) _____ is called the king of chemicals.
- a] Nitric acid
 - b] Sulphuric acid
 - c] Boric acid
 - d] Hydrochloric acid
- 46) A blacksmith beats up a piece of iron to change its
- a] physical properties
 - b] chemical properties
 - c] weight
 - d] colour

- 47) Surface of a cut brinjal becomes black is an example of
a] chemical change b] reversible change
c] physical change d] psychological change
- 48) If water is added to a strong acid, then the result is a
a] hot neutral solution b] cold dilute acid
c] cold neutral solution d] strong dilute acid
- 49) Plants like lady's finger grow well in _____.
a] slightly acidic soil b] neutral soil
c] alkaline soil d] any soil
- 50) Which of the following is made from coconut fibres?
a] Sweaters b] Shoes c] Sarees d] Mattresses
- 51) Ruhi observed formation of the green patina on a copper statue in her home. It is due to _____.
a] chemical change b] physical change
c] periodic change d] both [b] and [c]
- 52) _____ is used in making explosives.
a] Hydrochloric acid b] Sulphuric acid
c] Nitric acid d] Carbonic acid
- 53) Which of these gas is poisonous?
a] O₂ b] He c] CO d] Ar
- 54) Which of the following will evaporate faster?
a] water b] coffee c] petrol d] curd
- 55) The symbol of potassium is
a] P b] Po c] K d] Pt
- 56) Which one is a compound?
a] Air b] Ammonia c] Mercury d] soil
- 57) The valency of aluminium is
a] 2 b] 3 c] 4 d] 8
- 58) Which salt is formed when nitric acid combines with a base?
a] carbonate b] sulphate c] nitrate d] acetate

- 59) Which one of the following types of medicine is used for treating indigestion?
a) Antibiotic b) Analgesic c) Antacid d) Antiseptic
- 60) The formula of ferrous chloride is
a) FeCl_2 b) FeCl_3 c) Fe Cl_2 d) Fe Cl_3

BIOLOGY [30]

- 61) Amoeba moves with the help of
a) pseudopodia b) flagella
c) cell wall d) cilia
- 62) The tiny pores present on the leaves of plants are called
a) Stomata b) Cells c) Chlorophyll d) Grains
- 63) The function of haemoglobin is to transport
a) water b) food c) wastes d) oxygen
- 64) The part of a plant that provides anchorage is
a) root b) stem c) leaf d) flower
- 65) The animals which have six jointed legs and two pairs of wings are called
a) reptiles b) insects c) mammals d) amphibians
- 66) Hollow bones are present in
a) lizards b) crow c) frog d) deer
- 67) Insulin is produced in our body by
a) Liver b) Pancreas c) Kidney d) Heart
- 68) The teeth adopted for cutting and biting of foodstuffs
a) canines b) premolars c) molars d) incisors
- 69) Vermi composting is done with the help of _____
a) insects b) silkworm c) earthworms d) ants
- 70) Which of the following is a winged seed?
a) Drum stick b) Xanthium
c) Aak d) Castor
- 71) Digested food is absorbed through
a) villi b) blood c) blood platelets d) amylase

- 92) Name the largest platform in India?
a) Rameshwaram b) Kharagpur
c) Chandigarh d) Kolkatta
- 93) The dance drama of Kerala is
a) Kathak b) Kathakali
c) Kuchupudi d) Mohiniattam
- 94) What is the young one of a zebra called?
a) Pup b) Zorro c) Colt d) Lamb
- 95) Which country is known as the Land of White Elephants?
a) Thailand b) South Africa
c) Ireland d) Malaysia
- 96) Which is the highest gallantry award in India?
a) Param Vishishtat Chakra b) Param Veer Award
c) Padmashree Award d) Param Vir Chakra
- 97) Which city is known as 'Electronic City of India'?
a) Mumbai b) Hyderabad
c) Guragon d) Bangalore
- 98) Which gas is known as laughing gas?
a) Nitric oxide b) Carbon dioxide
c) Nitrous oxide d) Nitrate oxide
- 99) What is the capital of Argentina?
a) Brassilia b) Rome c) Paris d) Buenos Aires
- 100) Who is the first person to receive Nobel prize for literature?
a) Rene Sully Prudhomine b) Henri Dunant
c) Robindranth Tagore d) Mother Teresa