

Duration : 60 min.  
Class : 10th

Maximum Marks : 180  
Subject : SCIENCE



## International Talent Search Examination - 2022-23

अंतराष्ट्रीय प्रतिभा खोज परीक्षा - २०२२-२३

Organized by

Savitri Skill Development Institute, Training Partner with  
Ministry of Micro Small & Medium Enterprises (MSME), Govt. of India.



### TEST BOOKLET

Name : .....

Class : ..... School: .....

Father's Name : ..... Father's Occupation : .....

Mother's Name : ..... Mother's Occupation : .....

Categories : Gen  OBC  SC  ST

Correspondence Address : .....

Date of Birth :

Father's Contact No :

Home/Mother's Contact No. :

WhatsApp No. :

#### Basic Instructions:

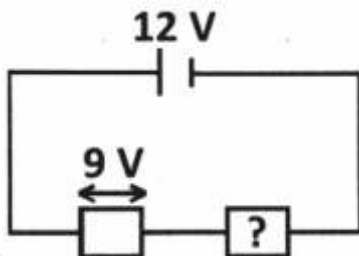
- Ensure that your personal data has been entered correctly.
- Immediately after opening the test booklet verify that all the pages are printed properly and are in order. If there is a problem with your test booklet, immediately inform the invigilator. You will be provided with the replacement.
- All questions are compulsory.
- For every correct answer you will be awarded with 4 marks and for all incorrect answer 1 mark will be deducted.
- Directions for answering the questions are given. Read those directions carefully and answer the question by circling the bubble in the OMR Sheet Provided to you. Test booklet/OMR Sheet will be submitted at the end of the examination.
- Follow the instructions given by the invigilator. Students found violating the instructions will be disqualified.
- Rough work can be done separately or on the Question paper.
- Please fill the bubbles in OMR sheet with Blue or Black pen only.
- Do not tear the question paper or OMR sheet else you will be disqualified in the examination.

## CLASS-10 (SCIENCE)

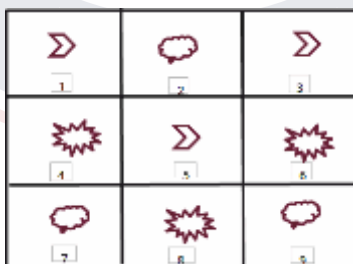
- Q.1 Fermentation of East to alcohol is:  
a) aerobic respiration      b) natural process      c) anaerobic respiration      d) none of these
- Q.2 The brown hair of Seem is an:  
a) acquired trait      b) natural trait      c) Darwin's trait      d) inherited trait
- Q.3 What would happen if all the producers are diminished?  
a) Herbivore will starve to death      b) All organisms will start to death  
c) Carnivore will starve to death      d) Producers will starve to death
- Q.4 Washing soda is:  
a) sodium carbonate      b) sodium hydrogen carbonate      c) sodium hydroxide      d) calcium carbonate
- Q.5 Which among the following protects us from the harmful UV radiations of sun?  
a) Oxygen      b) Ozone      c) Carbon dioxide      d) Carbon monoxide
- Q.6 Which country has many power plants of geothermal energy?  
a) Japan      b) USA      c) China      d) Denmark
- Q.7 If the first and second letters in the word ENTHUSIASM are interchanged, also the third and fourth letters, the fifth and the sixth letter and so on, which of the following would be the sixth letter from the right?  
a) U      b) A      c) S      d) T
- Q.8 Which among the following can be used as an additive in petrol?  
a) ethanol      b) ethyl      c) ethnic acid      d) ethane
- Q.9 Why should we conserve forest and wildlife?  
a) To protect biodiversity      b) To maintain the ecosystem      c) To maintain balance      d) To continue food chain
- Q.10 The SI unit of resistance is:  
a) metre      b) ohm      c) joule      d) kilogram
- Q.11 What causes the redness of a red coloured object?  
a) The object absorbs red colour.      b) The object allows red colour to pass through.  
c) The object absorbs and refracts red colour.      d) The object reflects red colour.
- Q.12 Which of the following statements is true of Faraday's laws of electromagnetic induction?  
a) Whenever magnetic flux linked with a circuit changes, induced e.m.f is produced  
b) The induced e.m.f lasts as long as the change in the magnetic flux continues  
c) The magnitude of the induced e.m.f is directly proportional to the rate of change of the magnetic flux linked with the circuit.  
d) All of the above
- Q.13 Two teams 'X' and 'Y' are playing football under flood lights that emit yellow light. Players of team 'X' are dressed in white shirts and black shorts and players of team 'Y' are dressed in yellow shirts and blue shorts. Which of the following is true of the colour change appearing in their dresses?  
a) Team X: White shirts, blue shorts  
Team Y: White shirts, black shorts  
b) Team X: Yellow shirts, blue shorts  
Team Y: Yellow shirts, blue shorts  
c) Team X: Yellow shirts, black shorts  
Team Y: Yellow shirts, black shorts  
d) Team X: White shirts, blue shorts  
Team Y: White shirts, blue shorts
- Q.14 Which of the given reactions is an odd one?  
a) Carbon + Oxygen  $\rightarrow$  Carbon dioxide      b) Hydrogen + Chlorine  $\rightarrow$  Hydrogen chloride  
c) Glucose  $\rightarrow$  Carbon dioxide + Water      d) Sulphur + Oxygen  $\rightarrow$  Sulphur dioxide

- Q.15 Why are the red danger signals visible even though there is thick fog or smoke?  
 (i) It has the least wavelength.  
 (ii) It has a longer wavelength.  
 (iii) It scatters the least.
- a) Only (ii)                      b) Only (i) and (ii)                      c) Only (i) and (iii)                      d) Only (ii) and (iii)

- Q.16 A battery connected with two resistors in series is shown below.  
 If the voltage of one resistor is 9 V. What is the voltage across the other resistor?



- a) 2 V                      b) 6 V                      c) 3 V                      d) 12 V
- Q.17 What is the smallest resistance that can be obtained by using a 6  $\Omega$  resistor and a 12  $\Omega$  resistor respectively connected in parallel?  
 a) 4  $\Omega$                       b) 6  $\Omega$                       c) 8  $\Omega$                       d) 12  $\Omega$
- Q.18 How much current will flow through a resistor of resistance 12  $\Omega$  if a battery of 18 V is connected across it?  
 a) 3.0 A                      b) 4.5 A                      c) 1.5 A                      d) 6.0 A
- Q.19 What is the average refractive index of the material of the lens in our eyes?  
 a) 1.396                      b) 1.196                      c) 1.296                      d) 1.496
- Q.20 A current carrying wire in a magnetic field results in \_\_\_\_\_.  
 1. An electric force  
 2. Magnetic induction  
 3. A motor effect
- a) Only (I)                      b) Only (ii)                      c) Only (iii)                      d) None of the above
- Q.21 Which gas do acids evolve when they react with metals?  
 a) Neon                      b) Helium                      c) Hydrogen                      d) Oxygen
- Q.22 Copper oxide is:  
 a) basic                      b) acidic                      c) neutral                      d) slightly acidic
- Q.23 Identify the identical figures from the following options given.



- a) 1,3,7; 2,5,9; 4,6,8                      b) 1,3,6; 2,7,9; 4,5,8                      c) 1,3,9; 2,7,5; 4,6,8                      d) 1,3,5; 2,7,9; 4,6,8
- Q.24 Water harvesting is a method which \_\_\_\_\_.  
 a) Increase ground water level                      b) Not practiced in modern days  
 c) Decrease ground water level                      d) Has no relation with ground water
- Q.25 Which among the following is an amphoteric oxide?  
 a) Zinc oxide                      b) Copper oxide                      c) Magnesium oxide                      d) Sodium oxide

- Q.26 Rust is:  
 a) hydrated ferric oxide      b) ferric oxide      c) sodium chloride      d) calcium carbonate
- Q.27 What is the relation between my brother and his wife's mother-in-law's daughter?  
 a) sister-in-law      b) mother      c) father      d) sister
- Q.28 Which among the following waste product is not excreted by animals?  
 a) Uric acid      b) Urea      c) Caffeine      d) Carbon dioxide
- Q.29 The SI unit of heat is:  
 a) Celsius      b) kelvin      c) metre      d) joule
- Q.30 The compound used for white washing is:  
 a) Magnesium oxide      b) Sodium nitrate      c) Potassium iodide      d) Slaked lime
- Q.31 The organism that undergo photosynthesis is:  
 a) amoeba      b) blue green algae      c) protozoa      d) plasmodium
- Q.32 The SI unit of refractive index is:  
 a) dioptre      b) no unit      c) cm      d) m
- Q.33 The salts of which of the following metals can act as electrolyte?  
 a) K      b) Ag      c) Au      d) Cu
- Q.34 Which among the following is a sexually transmitted disease?  
 a) HIV      b) AIDS      c) syphilis      d) all of these
- Q.35 The full form of UV rays is \_\_\_\_\_  
 a) Ultra violet      b) Ultra violent      c) Ultra valve      d) Ultimate violet
- Q.36 When an object is placed at infinity of convex mirror, image formed will be:  
 a) large      b) point sized      c) inverted      d) same size
- Q.37 Which among the following protects us from the harmful UV radiations of sun?  
 a) Oxygen      b) Ozone      c) Carbon dioxide      d) Carbon monoxide
- Q.38 What is the elemental classification of krypton?  
 a) Transition Metals      b) Halogens      c) Semimetallic      d) Inert gas
- Q.39 What is the elemental classification of silver?  
 a) Noble gases      b) Transition metals      c) Alkali metals      d) None of the above
- Q.40 What is the best example for polychromatic light?  
 a) White light      b) Sodium light      c) Black light      d) Rainbow
- Q.41 On what did Mendel conducted his famous experiments?  
 a) Pisum Sativum      b) Abelia grandiflora      c) Asplenium spec      d) Baccharis viminea
- Q.42 What is called as the composition of genes in an organism?  
 a) Phenotype      b) Phonotype      c) Genotype      d) None of the above
- Q.43 The optic nerve takes the image from the eye to the brain in the form of what type of signals?  
 a) Sound signals      b) Electric signals      c) Noise signals      d) ECG signals
- Q.44 How are bats able to fly in the dark?  
 a) They produce infrasonic waves.      b) They can hear ultrasonic sounds.  
 c) They produce infrared waves.      d) They can hear infrared waves.
- Q.45 Which part of the eye is responsible for transmitting the images to the brain?  
 a) Ciliary muscles      b) Optic Nerve      c) Pupil      d) Retinal nerve