

# MOTION OPEN SCHOLARSHIP TEST

## SESSION - 2020-21

**MOVING CLASS : 8<sup>th</sup>**

**SAMPLE PAPER**

CANDIDATE'S NAME : \_\_\_\_\_

**DURATION: 90 MINUTES**

**TOTAL QUESTIONS: 60**

**MAXIMUM MARKS : 120**

**INSTRUCTION:**

- The paper consists of Five sections :- Science (30 Questions), Mathematics (10 Questions), Social Studies (10 Questions), English (5 Questions) and Mental ability (5 Questions).
- All questions are compulsory and carry 2 marks each.
- There is only one correct answer hence mark one choice only.
- Darken your choice in OMR Sheet with Blue/ Black Ball Point Pen.
- Return the OMR Sheet to the invigilator at the end of the exam.

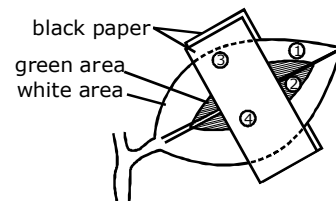
**SCIENCE**

- The lower fixed point on the Celsius scale is  
(A) melting point of ice  
(B) boiling point of water  
(C) melting point of mercury  
(D) mean of melting point and boiling point of water
- The measure of degree of hotness or coldness of a body is called  
(A) Heat energy (B) Celsius  
(C) Kelvin (D) Temperature
- Which of the following shows a motion in a straight line?  
(A) Train moving on a straight bridge  
(B) Tree swaying  
(C) Child on a merry-go-round  
(D) None of these
- Riaz takes 20 min to travel to his school with a speed of 3 m/s. How far is the school?  
(A) 2 km (B) 3.2 km  
(C) 3.6 km (D) 4.1 km
- The longer, thinner line in the symbol of a cell denotes  
(A) the positive terminal  
(B) the negative terminal  
(C) the direction of current  
(D) none of these
- Which of the following is an electrical conductor?  
(A) Silver  
(B) Cork  
(C) Silver-coloured plastic  
(D) Wood

7. On holding a stainless steel spoon near our face, we see  
 (A) Our inverted image on outer side of the spoon  
 (B) Our erect image on inner side of the spoon  
 (C) Our inverted image on inner side of the spoon  
 (D) Our laterally inverted image on inner side of the spoon
8. Which one shows lateral inversion?  
 (A) Plane mirror (B) Concave mirror  
 (C) Convex mirror (D) None of these
9. The center of cyclone is called  
 (A) Radius (B) Eye  
 (C) Head (D) None of these
10. Moving air creates  
 (A) high pressure area  
 (B) low temperature area  
 (C) low pressure area  
 (D) high temperature area
11. Hydrochloric acid can be neutralised by  
 (A) nitric acid  
 (B) sulphuric acid  
 (C) citric acid  
 (D) sodium hydroxide
12. .... acid is present In an ant's sting.  
 (A) Carbonic (B) Formic  
 (C) Maleic (D) Acetic
13. The natural indicator among the following is  
 (A) phenolphthalein (B) methyl orange  
 (C) methyl red (D) litmus
14. On heating green copper carbonate turns to  
 (A) Yellow (B) Pink  
 (C) Orange (D) Black
15. During which of the following changes are new substances formed ?  
 (A) Melting (B) Sublimation  
 (C) Evaporation (D) Rusting

16. Opposite reactions of exothermic are –  
 (A) Condensation reactions  
 (B) Endothermic reaction  
 (C) Reversible reaction  
 (D) Substitution reaction
17. Eri is a type of:  
 (A) Silk (B) Wool  
 (C) Cotton (D) None of these
18. The process of taking out silk fibres from the cocoons for manufacturing silk is called  
 (A) Shearing (B) Carding  
 (C) Reeling (D) Sorting
19. Pure water is  
 (A) an element (B) a compound  
 (C) a mixture (D) None of these
20. Water harvesting is done to  
 (A) store water underground  
 (B) store water in fields  
 (C) distribute water in fields  
 (D) None of these

21. The diagram shows a destarched, variegated leaf, partly covered by black paper. The plant is placed in bright light for several hours.



- Four discs are then cut from the leaf in the positions shown and are tested for starch. Which disc contains starch?  
 (A) 1 only (B) 1 and 2 only  
 (C) 2 only (D) 3 and 4 only
22. Which of these processes is not a part of nutrition?  
 (A) Digestion (B) Absorption  
 (C) Egestion (D) Locomotion
23. Which of the following adaptation of penguins is not meant to protect them from cold?  
 (A) Subcutaneous fat  
 (B) Dense feather cover  
 (C) Huddling together  
 (D) Streamlined body

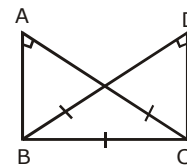
- 24.** The temperature of a day is measured in  
 (A) metres (B) seconds  
 (C) degree celsius (D) kilograms
- 25.** Humus and the smallest particles of rock form the  
 (A) A-horizon (B) B-horizon  
 (C) C-horizon (D) bedrock
- 26.** At the time of exhalation, the diaphragm  
 (A) moves downwards  
 (B) moves upwards  
 (C) does not move  
 (D) both (A) and (B)
- 27.** Select the correct statement out of the following.  
 (A) Normally we breathe 16-18 times per minute  
 (B) Breathing rate increases during physical activity  
 (C) Breathing rate remains same under all conditions  
 (D) Both (A) and (B)
- 28.** Fruit usually develops from  
 (A) thalamus (B) ovary  
 (C) ovule (D) none of these
- 29.** Transpiration pull helps in  
 (A) digestion of food  
 (B) transportation of water and minerals  
 (C) circulation of blood  
 (D) removal of wastes
- 30.** The instrument shown in the given figure is used to measure



- (A) blood pressure (B) breathing rate  
 (C) heart beat (D) pulse rate

**MATHS**

- 31.**  $\left\{ \left(\frac{1}{3}\right)^{-3} - \left(\frac{1}{2}\right)^{-3} \right\} \div \left(\frac{1}{4}\right)^{-3} = ?$   
 (A)  $\frac{19}{64}$  (B)  $\frac{64}{19}$   
 (C)  $\frac{27}{16}$  (D)  $\frac{16}{27}$
- 32.** If an expression is taken away from  $3x^2 - 4y^2 + 5xy + 20$  to obtain  $-x^2 - y^2 + 6xy + 20$ , then the expression is \_\_\_\_\_  
 (A)  $4x^2 - 3y^2 - xy$  (B)  $2x^2 - 5y^2 + xy + 40$   
 (C)  $3y^2 - xy - 4x^2$  (D)  $4x^2 + 3y^2 + xy$
- 33.** In a parallelogram ABCD, diagonal AC measures 34 m and the perpendicular distance of AC from either of the vertices B and D is 12 m. Area of parallelogram is \_\_\_\_\_  
 (A)  $204 \text{ m}^2$  (B)  $408 \text{ m}^2$   
 (C)  $816 \text{ m}^2$  (D)  $402 \text{ m}^2$
- 34.** Which of the following options are equivalent rational numbers?  
 (A)  $\frac{1}{4}$  and  $-\frac{4}{-16}$  (B)  $-\frac{2}{3}$  and  $\frac{8}{12}$   
 (C)  $\frac{12}{15}$  and  $\frac{10}{18}$  (D)  $\frac{27}{54}$  and  $\frac{3}{2}$
- 35.** A man sells two horses for Rs. 4000 each, neither losing nor gaining in the deal. If he sold one horse at a gain of 25% then the other horse is sold at a loss of \_\_\_\_\_  
 (A)  $33\frac{1}{3}\%$  (B)  $16\frac{2}{3}\%$   
 (C) 50% (D) 47%
- 36.** In the given figure, triangles ABC and DCB are right angled at A and D respectively and  $AC = DB$ , then  $\triangle ABC \cong \triangle DCB$  by \_\_\_\_\_ criterion.



- (A) AAA (B) SAS  
 (C) ASS (D) None of these

- 37.** A tree is broken at a height of 5 m from the ground and its top touches the ground at a distance of 12 m from the base of the tree. Find the original height of the tree.  
(A) 20 m (B) 36 m  
(C) 18 m (D) 25 m
- 38.** If  $\frac{2}{5}(5x + 1) + \frac{3}{5} = 1$ , then what is the value of x?  
(A)  $-\frac{1}{5}$  (B) 1  
(C) 0 (D)  $\frac{1}{5}$
- 39.** Mean of 9 observations was found to be 35. Later on, it was detected that an observation 81 was misread as 18, then the correct mean of the observations is \_\_\_\_\_.  
(A) 40 (B) 41  
(C) 42 (D) 43
- 40.** The value of  $\left(1 - \frac{1}{2}\right)\left(1 - \frac{1}{3}\right)\left(1 - \frac{1}{4}\right) \dots \left(1 - \frac{1}{10}\right) =$  \_\_\_\_\_  
(A)  $\frac{10}{11}$  (B)  $\frac{1}{9}$   
(C)  $\frac{1}{10}$  (D)  $\frac{1}{2}$

**SOCIAL SCIENCE**

- 41.** Kimberley is famous for  
(A) diamonds (B) silver  
(C) platinum (D) copper
- 42.** Head of the state is known as  
(A) MLA (B) Chief Minister  
(C) Governor (D) Minister
- 43.** The third battle of Panipat was fought in  
(A) 1760 (B) 1761  
(C) 1762 (D) 1763

- 44.** Where is the one-horned rhinoceros found?  
(A) Brahmaputra plain  
(B) Delta area  
(C) Bhagirathi  
(D) Ganga basin
- 45.** In Western Himalayas lived the Shepherd tribe of  
(A) Balochis (B) Khokhar  
(C) Gaddis (D) None of these
- 46.** Where is Savannah grasslands found?  
(A) in Libiya (B) in East Africa  
(C) in West Africa (D) in Kanya
- 47.** Which one of the following is a most powerful organ in a democracy?  
(A) Chief Minister (B) Governor  
(C) People (D) Minister
- 48.** Aurangzeb annexed the following pairs of kingdom  
(A) Uzbegs and Afghans  
(B) Golconda and Hyderabad  
(C) Golconda and Bijapur  
(D) Agra and Delhi
- 49.** Chain of markets involves  
(A) Producer → Wholesaler → Retailer → Consumer  
(B) Producer → Retailer → Wholesaler → Consumer  
(C) Wholesaler → Retailer → Consumer  
(D) Producer → Consumer
- 50.** Mid-day meal was firstly introduced in  
(A) Kerala (B) Rajasthan  
(C) Tamil Nadu (D) West Bengal

**ENGLISH**

51. I have drunk \_\_\_\_\_ milk which was contained in the jug.  
 (A) little (B) the little  
 (C) a little (D) any
52. The leaves are falling \_\_\_\_\_ the tree.  
 (A) for (B) from  
 (C) at (D) over
53. Which of the following pronoun is possessive pronoun.  
 (A) your (B) his  
 (C) my (D) them
54. Rakesh \_\_\_\_\_ here for 2 hours.  
 (A) has been working  
 (B) is working  
 (C) was working  
 (D) have been working
55. Have you bought \_\_\_\_\_ book from the market?  
 (A) any (B) little  
 (C) some (D) many

**MENTAL ABILITY**

56. If **BOOK** is coded as 43, what will be the code number for **PENCIL** ?  
 (A) 53 (B) 33  
 (C) 59 (D) 43
57. From his house Madan moves 30 km in North-West direction and then 30 km in South West direction. Next he moves 30 km in South East direction. Finally he turns towards his house. In which direction is he moving?  
 (A) North-East (B) South-East  
 (C) North-East (D) South-East

1	2	3
11	7	5
120	45	?

58.  
 (A) 15 (B) 16  
 (C) 17 (D) 18
59. If  $\div$  means  $+$ ,  $-$  means  $\div$ ,  $\times$  means  $-$  and  $+$  means  $\times$ , then  $\frac{(36 \times 4) - 8 \times 4}{4 + 8 \times 2 + 16 \div 1} = ?$   
 (A) 0 (B) 8  
 (C) 12 (D) 16
60. Book : Author :: ?  
 (A) Rain : Flood  
 (B) Light: Switch  
 (C) Symphony : Composer  
 (D) Song : Music