



Affiliated to CBSE

HARYANA
PUBLIC SCHOOL

Affiliation No. 530645

संस्कार से सफलता तक



THE
VENKATESHWAR
SCHOOL
GURUGRAM

AN ISO 9001 : 2015 Certified

1ST ALL INDIA BRAIN LEAGUE EXAM 2026

Class -VIII

Time: 60 Minutes

M.M =45

General Instructions:

1. The duration of the examination is 60 minutes. Question paper contains 45 questions with maximum 45 marks
2. There will be negative marking in Phase - II, i.e. $\frac{1}{4}$ mark will be deducted for each incorrect answer.
3. Use of gadgets is not allowed.
4. Students must abide by the instructions issued during the examination by the invigilator or the centre incharge.
5. Before attempting the question paper ensure that it contains all pages & no question is missing
6. Immediately fill the particulars on this page of the test booklet and OMR with BLACK ballpoint pen only. Use of pencil is strictly prohibited.
7. Fill and darken the bubbles completely. Do not put a tick or a cross.
8. Half-filled or over-filled bubbles will not be read by the software & liable to be rejected.

Correct Method



Student's Signature

Wrong Method



Invigilators's Signature

English

1. Identify the part of the sentence that contains an error:
Neither of the students are ready to present their project today.
a) Neither of the students
b) are
c) ready to present
d) today
2. Choose the sentence in which the collective noun are used correctly:
a) The jury have reached a verdict after hours of discussion.
b) The team are winning the match.
c) The furniture are made of oak.
d) The flock of birds is flying in the sky.
3. Identify the sentence where passive voice cannot be used correctly: (Voice)
a) Someone has stolen my bag.
b) They built this temple in the 16th century.
c) He is going to market.
d) They are painting the house.
4. Choose the correct sentence: (Tense)
a) By the time we reached, the movie had started.
b) By the time we reached, the movie has started.
c) By the time we reached, the movie was starting.
d) By the time we reached, the movie starts.
5. Had he known about the traffic jam, he _____ earlier.
a) leaves
b) would leave
c) would have left
d) left
6. Each of the students, along with their teacher, _____ going to the exhibition tomorrow.

Physics

9. A boy pushes a box on a rough floor with a constant horizontal force of 50N. The box moves with constant speed. What is the frictional force acting on the box, and why?



A. Exactly 50N, because the net force must be zero for constant speed

B. Less than 50N, because friction always opposes motion but can never fully balance the applied force

C. More than 50N, because friction increases with speed and exceeds the applied force at constant speed

D. Zero, because once the box is in motion, friction disappears



10. A child charges a plastic comb by rubbing it on dry hair and then brings it near tiny bits of paper. The bits first jump towards the comb and sometimes fall away after touching it.



Consider the statements below:

- The comb becomes electrically charged and induces opposite charges on the nearer sides of the paper bits, causing an attractive force.
- Gravitational force always acts between the comb and the paper bits, but here the electric force is much stronger than gravity.
- The comb and the hair acquire charges such that their charges are same, and the comb can also transfer some charge to the paper bits on contact.

Which of the above statements are correct?

- I and II only
- II and III only
- I and III only
- I, II and III

11. A tall tree stands alone in an open field during a thunderstorm. A boy is standing under the tree holding an umbrella with a metal frame and plastic handle, while another boy is sitting inside a closed car parked a few metres away.

Which safety assessment is most accurate if lightning strikes the region?

- Both boys are equally safe because rubber tyres of car and plastic of umbrella provide perfect insulation.
- The boy under the tree is at higher risk; the boy inside the closed car is relatively safer due to the metal body acting as a shield.
- The boy under the tree is safe because the tree takes all the charge; only the car is at risk.
- Both are in extreme danger and should stay exactly where they are.

12. A boy listens to four different sounds and tries to match what he hears with the correct description of loudness, pitch and timbre. Study the tables and answer the question.

Column I (Situation heard by the boy)	Column II (Property description)
I. A big drum is beaten hard; he hears a loud, deep sound.	a) Same loudness and pitch, but different quality
II. A small whistle is blown gently; he hears a soft, thin sound.	b) Loud sound with high pitch
II. The same whistle is blown very strongly; he hears a loud, sharp sound.	c) Soft sound with high pitch
V. A flute and a violin play the same note with same loudness, and he can tell them apart.	d) Loud sound with low pitch

- I-c, II-a, III-b, IV-d
- I-a, II-c, III-b, IV-d
- I-a, II-b, III-d, IV-c
- I-d, II-c, III-b, IV-a

13. A wooden block is kept on the floor. Consider the following statements:

- The thrust exerted by the block on the floor equals the weight of the block.
- If the block is placed on its smaller face, it exerts more pressure on the floor.
- If the same block is taken to the Moon, its thrust on the Moon's surface becomes smaller, but its pressure on a given face remains the same as on Earth.

Which statements are correct?

- I and II only
- I and III only
- II and III only
- I, II and III

Chemistry

14. The lowest temperature at which a substance catches fire is called its:
A. Melting point
B. Critical temperature
C. Ignition temperature
D. Boiling point

15. When an electric current is passed through acidified water, bubbles of gas are formed at the electrodes. Which gas is produced at the positive electrode (anode)?
A. Hydrogen gas
B. Chlorine gas
C. Oxygen gas
D. Carbon dioxide

16. Coal is formed from the remains of vegetation buried deep under the earth millions of years ago. This slow process of conversion of dead vegetation into coal is called:
A. Distillation
B. Gasification
C. Refining
D. Carbonization

17. Which constituent of petroleum is used as a fuel for jet aircraft?
A. Petrol
B. Paraffin wax
C. Kerosene
D. Diesel

18. Which zone of a candle flame is used by goldsmiths for blowing with a metallic blowpipe to melt gold and silver?
A. Outermost zone
B. Innermost zone
C. Luminous zone
D. Middle zone

20. A student adds yeast to warm sugar solution. After some time bubbles appear. This shows that yeast:
a. Releases oxygen
b. Performs respiration and releases carbon dioxide
c. Produces nitrogen
d. Absorbs sugar without change

21. Why is food preserved by adding salt or sugar?
a. It improves taste only
b. It allows microbes to grow
c. It removes moisture needed by microbes
d. It changes colour of food

22. Which gland controls the onset of puberty by regulating other endocrine glands?
a. Thyroid gland
b. Adrenal gland
c. Pituitary gland
d. Pancreas

23. Which of the following is NOT an emotional change during adolescence?
a. Increased sensitivity
b. Desire for independence
c. Sudden mood swings
d. Complete emotional stability

Mathematics

24. The value of x in $\frac{3x+8}{16} - \left[\frac{12x-6}{15x-30} \right] + \frac{x}{3} = \frac{7x}{12} - \left[\frac{2x-16}{32} \right]$

a. 8
b. 9
c. 10
d. 11

Biology

19. Which method is most suitable to prevent the spread of water-borne diseases?

25. The average of 100 numbers is 44 and the average of 100 and four other new numbers is 50. So the average the four new numbers is..

- 350
- 300
- 150
- 200

26. If $\sqrt{14} = 3.7417$, then the value of $\sqrt{\frac{2}{7}}$ is....

- 0.534
- 0.334
- 0.584
- 0.386

27. A cylindrical vessel of base radius 14cm is filled with water till some height. If the rectangular solid of dimension 22cm x 7cm x 5cm is immersed in it, the rise in water level is...

- 150cm
- 100cm
- 125cm
- 200cm

28. At the end of the 20th century, the world's population was approximately 6.125×10^9 . The population in its usual form is...

- 6.125×10^{10}
- 6125×10^{10}
- 6.1250000×10^3
- 6125000000

29. By what number should $(-15)^{-2}$ be divided so that the quotient is equal to $(-15)^{-3}$?

- 15
- 18
- 18
- 15

30. The perimeter of base of a cuboidal conference hall is 60 m. The cost of white Washing its four walls at the rate of ₹12.50 per m² is ₹5250. The height of the hall is

- 5cm
- 7cm
- 9cm
- 11cm .

31. The ratio of the volume of the cubes are 216:125. The ratio of their sides are

- 6:5
- 4:7
- 7:9
- 3:5

32. The length , breadth and height of cuboidal swimming pool is 3:2:1. If its total surface area (excluding) top) is 64000cm², the dimensions are...

- 500cm, 300cm , 100cm
- 400cm, 300cm , 200cm
- 600cm, 400cm , 200cm
- 800cm, 600cm , 300cm

33. Radika can walk $(2-50x^2)$ steps to cover distance of $(1-5x)$ m. Number of steps he covers 1 metre distance is..

- $2 + 10x$
- $2 + 5x$
- $2 - 5x$
- $2 - 10x$

34. The product of The value of the expression $25x^2 + 9y^2 + 30 xy$, when x= 8 and y=10 is.

- 8700
- 6900
- 3500
- 4900

35. If $s = 2 + \sqrt{2}$ and $t = 2 - \sqrt{2}$, then the value of $s^2 - t^2$ is..

- $6 - 8\sqrt{2}$
- $8\sqrt{2}$
- $6 + 8\sqrt{2}$
- 6

36. A chord is composed of notes whose frequencies are in the ratio of 10:12:15. If the first note of a minor chord A with the frequency of 220 Hertz, the frequency of other two notes are...

- 264 Hz and 330 Hz
- 164 Hz and 230 Hz
- 284 Hz and 340 Hz
- 254 Hz and 430 Hz

37. The dimensions of a room are 10 m x 8 m x 3.3 m. How many men can be accommodated in this room if each man requires 3 m³ of space? ...

- 99
- 88
- 77
- 75

38. The difference between the outer and inner curved surface areas of a cylindrical iron pipe 21cm long is 66 cm², If the pipe is made up of 99 cm³ of metal, the outer and inner radii of the pipe are

- Outer : $\frac{7}{4}$ inner : $\frac{5}{4}$
- Outer : $\frac{6}{5}$ inner : $\frac{5}{4}$
- Outer : $\frac{3}{4}$ inner : $\frac{6}{4}$
- Outer : $\frac{7}{4}$ inner : $\frac{5}{4}$

Aptitude

39. If A is the brother of B, and C is the daughter of B, then how is C related to A?

- Aunt
- Sister
- Cousin
- Niece

40. If X Rita walks 5 km north, then turns right and walks 3 km, then turns left and walks 2 km. In which direction is she now from her starting point?

41. In a certain code language, the word FIRE is written as GJSF. Using the same rule, how will CAMP be written?

- DBNQ
- DBCQ
- DBNR
- DCRQ

42. If 1st January 2023 was a Sunday, what day of the week will 31st December 2023 be?

- Sunday
- Monday
- Tuesday
- Wednesday

43. In a set of numbers, the rule is “All numbers are either multiples of 3 or multiples of 5”. Which number does not belong to the set?

- 12
- 20
- 27
- 34

44. Study the combined pattern below:
A1, B2, C4, D8, ?, F32
Which option correctly replaces the question mark?

- E12
- E16
- E24
- E3

45. If a triangle is to a hexagon as a square is to _?

- Octagon
- Rectangle
- Pentagon
- Circle

Answer key:**Section A- English**

1. b) are
2. d) The flock of birds is flying in the sky.
3. c) He is going to market
4. a) By the time we reached, the movie had started.
5. c) would have left
6. b) is
7. b) confuse
8. b) If I were you, I would apologize.

Section B- Physics

- 9.
- 10.
- 11.
- 12.
- 13.

Section C- Chemistry

14. c. Ignition temperature
15. c. Oxygen gas
16. d. Carbonization
17. c. Kerosene
18. a. Outermost zone

Biology

19. b. Using boiled or purified water
- 20 . b. Performs respiration and releases carbon dioxide
21. c. It removes moisture needed by microbes
22. c. Pituitary gland
23. d. Complete emotional stability

Section D- Mathematics

24. a 8
25. d 200
26. a 0.534
27. c 125cm
28. d 6125000000
29. d -15
30. b 7cm
31. a 6:5
32. c 600cm, 400cm , 200cm
33. a $2 + 10x$
34. d 4900
35. b $8\sqrt{2}$
36. a 264 Hz and 330 Hz
37. b 88
38. d Outer : $\frac{7}{4}$ inner : $\frac{5}{4}$

Section E- Aptitude

39. d
40. a
41. a
42. a
43. d
44. b
45. a