

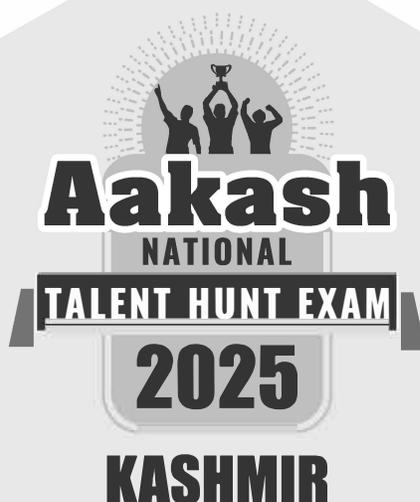
# Sample Paper

FOUNDATIONS



**Aakash**

Medical | IIT-JEE | Foundations



**(Class VII Studying Moving to Class VIII)**

## Science, Mathematics & Mental Ability

### INSTRUCTIONS FOR CANDIDATE

1. Duration of Test is 1 hr.
2. The Test Booklet consists of **40** questions. The maximum marks are **90**. There is **no negative marking** for wrong answer.
3. Pattern of the questions are as under:
  - (i) The question paper consists of three parts *i.e.*, **Science, Mathematics and Mental Ability**. Each part has **two sections**.
  - (ii) **Section-I**: This section contains **35** multiple choice questions, which have **only one** correct answer. Each question carries **+2 marks** for correct answer.
  - (iii) **Section-II**: This section contains **5** multiple choice questions, in which **one or more than one** choice(s) is(are) correct. Each question carries **+4 marks** for correct answer.



# Aakash National Talent Hunt Exam (Kashmir)-2025

## Sample Paper

(Class VII Studying Moving to Class VIII)

(The questions given in sample paper are indicative of the level and pattern of questions that will be asked in ANTHE (Kashmir)-2025)

Time : 1 Hour

MM : 90

### SCIENCE

#### SECTION-I : SINGLE CORRECT ANSWER TYPE

This section contains 18 multiple choice questions. Each question has 4 choices (1), (2), (3) and (4) out of which **ONLY ONE** choice is correct.

- A lamp is connected in a circuit with a cell and a switch. If the switch is in on position, then the lamp glow because
  - The current flows from the negative to positive terminal of the cell in the circuit
  - The current flows from the positive to negative terminal of the cell in the circuit
  - The cell stops supplying power
  - The circuit is broken
- The metal utensils are used for cooking because
  - Metals are good insulator
  - Metals are good conductor of heat
  - Metals do not melt
  - Metals reflect heat
- Which of the following correctly match their respective process in the water cycle?
  - Water vapour turning into clouds → Evaporation
  - Water falling as rain or snow → Precipitation
  - Water seepage into the ground → Condensation
  - Water vapour turning into liquid in clouds → Infiltration
  - (B) only
  - (A) and (C) only
  - (B) and (C) only
  - All (A), (B), (C) and (D)

4. A car moves with a uniform speed of 72 km/h for 10 minutes. The distance covered by the car is
- (1)  $1.2 \times 10^4$  m
  - (2)  $7.2 \times 10^3$  m
  - (3)  $2 \times 10^3$  m
  - (4)  $2.4 \times 10^3$  m
5. Which of the following is not a unit of time?
- (1) Day
  - (2) Hour
  - (3) Second
  - (4) Millimetre
6. Which of the following symbols represents a battery in an electric circuit?
- (1) 
  - (2) 
  - (3) 
  - (4) 
7. Material 'X' can be beaten into sheets. 'X' and the property by virtue of which it can be beaten into sheets respectively are
- (1) Mercury and ductility
  - (2) Aluminium and malleability
  - (3) Copper and ductility
  - (4) Sulphur and ductility
8. Study the following table carefully.

Element	Type	Appearance	Hardness
A	B	C	Soft
D	E	Dull	Soft

Which of the following can replace 'A', 'B', 'C', 'D' and 'E' respectively to complete the above table?

- (1) Phosphorus, non-metal, dull, aluminium and metal
  - (2) Potassium, metal, dull, carbon and non-metal
  - (3) Sulphur, non-metal, shiny, phosphorus and non-metal
  - (4) Sodium, metal, shiny, sulphur and non-metal
9. Acid 'A' is found in curd. 'A' is identified as
- (1) Oxalic acid
  - (2) Citric acid
  - (3) Lactic acid
  - (4) Formic acid

10. Which of the following metals is found in liquid state at room temperature?
- (1) Potassium (2) Sodium  
(3) Copper (4) Mercury
11. Radheshyam is a village farmer. On testing the soil sample of his field, he was advised to add lime in the soil. The nature of the soil before adding lime was
- (1) Basic  
(2) Acidic  
(3) Neutral  
(4) Salty
12. Aadyant performed an activity to detect four indicators 'A', 'B', 'C' and 'D' with the help of lemon juice. He took lemon juice in four different test tubes and added few drops of indicators one by one. Which of the following sets of conclusions is correct?
- (i) 'A' is red hibiscus indicator because on adding 'A', the contents of the test tube became magenta in colour.  
(ii) 'B' is turmeric paste because on adding 'B', the contents of the test tube became reddish brown in colour.  
(iii) 'D' is red litmus because on adding 'D', the contents of the test tube became blue in colour.  
(iv) 'C' is blue litmus solution because on adding 'C', the contents of the test tube became red in colour.
- (1) Only (i) and (ii)  
(2) Only (ii) and (iii)  
(3) Only (i) and (iv)  
(4) (ii), (iii) and (iv)
13. Our lungs are protected by the
- (1) Rib cage (2) Food pipe  
(3) Gizzard (4) Alveolus
14. In human females, menstruation generally ends by the age of
- (1) 10 – 20 years (2) 20 – 25 years  
(3) 30 – 35 years (4) 45 – 55 years
15. In our body, hormones are released at an appropriate time in response to signals from the
- (1) Diaphragm  
(2) Brain  
(3) Nostril  
(4) Oesophagus
16. Select the **incorrect** statement amongst the following.
- (1) During adolescence, the body prepares for infancy  
(2) Acne occurs due to an increase in oily secretions from the skin  
(3) Menstrual cycle is a sign of good reproductive health  
(4) Adolescence leads to emotional and behavioural changes

17. Large intestine is
- (a) About 1.5 metres in length.
  - (b) Longer than the small intestine.
- Select the correct option.
- (1) Only (a) is true
  - (2) Only (b) is true
  - (3) Both (a) and (b) are false
  - (4) Both (a) and (b) are true
18. Select the correct order for journey of food through the different parts of our alimentary canal.
- (1) Mouth cavity → Oesophagus → Stomach → Small intestine → Large intestine
  - (2) Mouth cavity → Stomach → Large intestine → Oesophagus → Small intestine
  - (3) Mouth cavity → Small intestine → Stomach → Large intestine → Oesophagus
  - (4) Mouth cavity → Large intestine → Oesophagus → Small intestine → Stomach

---

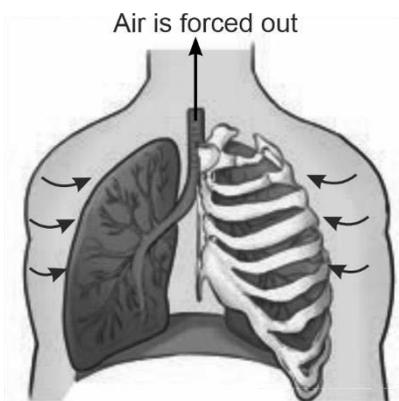
**SECTION-II : ONE OR MORE THAN ONE CORRECT ANSWER TYPE**

This section contains 3 multiple choice questions. Each question has 4 choices (1), (2), (3) and (4) out of which **ONE OR MORE THAN ONE** choice(s) is(are) correct.

---

19. A girl goes on morning walk with her father. She starts from a point  $P$  and reaches to point  $Q$  in one-fourth of an hour and returns to her starting point in 30 minutes. If the separation between points  $P$  and  $Q$  is 3 km, then choose the correct statement(s) regarding her entire journey.
- (1) Her motion is uniform
  - (2) Her motion is non-uniform
  - (3) Her average speed is 8 km/h
  - (4) Her average speed is  $\frac{20}{9}$  m/s
20. Consider the following statements and choose the correct option(s) based on them.
- (i) Magnesium burns in air to produce 'X'.
  - (ii) Iron forms a layer of 'Y' when exposed to moist air.
  - (iii) 'X' dissolves in water to form 'Z'.
- (1) 'X' is magnesium oxide which is obtained as powdery ash by the complete burning of magnesium ribbon
  - (2) 'Y' is rust and its formation can be prevented by galvanisation
  - (3) 'X' is acidic whereas 'Y' is basic in nature
  - (4) 'Z' turns red litmus blue

21.



Select the correct option(s) w.r.t. above depicted mechanism of breathing.

- (1) It reduces space in our chest cavity
- (2) It represents the process of exhalation
- (3) It increases space in our chest cavity
- (4) It causes upward movement of diaphragm

## MATHEMATICS

### SECTION-I : SINGLE CORRECT ANSWER TYPE

This section contains 10 multiple choice questions. Each question has 4 choices (1), (2), (3) and (4) out of which **ONLY ONE** choice is correct.

22. Two lakhs thirty-four thousand five hundred and sixty-three can be written as

- (1) 2, 34, 5063
- (2) 20, 34, 563
- (3) 2, 03, 456
- (4) 2, 34, 563

23. If ten crores of Indian system is equal to  $x$  in American system, then  $x$  equals

- (1) 1 billion
- (2) 100 million
- (3) 1000 million
- (4) 1 million

24. Which of the following is smallest?

- (1)  $240 \div 3$
- (2)  $6 \times 12$
- (3)  $85 - 6$
- (4)  $55 + 23$

25. The value of  $15 - (10 - 8)$  is equal to

- (1)  $15 + 10 + 8$
- (2)  $15 - 10 - 8$
- (3)  $15 - 10 + 8$
- (4)  $15 + 10 - 8$

26. Which of the following is largest?

- (1)  $13\frac{5}{10}$
- (2)  $\frac{150}{10}$
- (3)  $\frac{142}{10}$
- (4)  $15\frac{2}{10}$

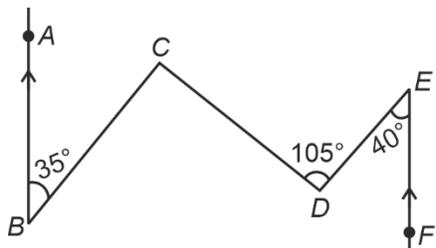
27. 5 units and 6 one-tenths and 3 one hundredths is written as

- (1)  $\frac{563}{100}$
- (2)  $\frac{5063}{100}$
- (3)  $\frac{5603}{100}$
- (4)  $\frac{563}{1000}$

28. A local train from Andheri to Borivali stops at 6 intermediate stations at equal distance along the way. The time taken in minutes to travel from one station to the next station is the same and is denoted by  $t$ . The train stops for 3 minutes at each of the 6 intermediate stations. If  $t = 8$ , then the time taken to travel from Andheri to Borivali is

- (1) 48 minutes
- (2) 74 minutes
- (3) 56 minutes
- (4) 66 minutes

29. The measure of  $\angle BCD$  in the given figure is

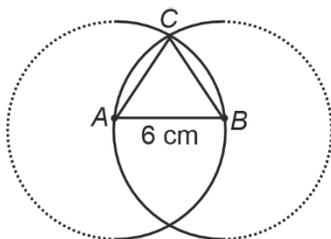


- (1)  $95^\circ$
- (2)  $90^\circ$
- (3)  $105^\circ$
- (4)  $100^\circ$

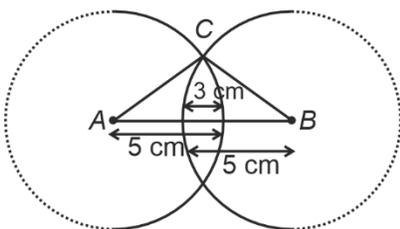
30. If  $\begin{array}{r} K \ 3 \\ + \ K \ 3 \\ \hline D \ N \ N \end{array}$ , then the sum of  $K$ ,  $D$  and  $N$  in the given cryptarithm is

- (1) 12
- (2) 8
- (3) 15
- (4) 14

31. In the given figures (a) and (b), construction of an equilateral and isosceles triangle is shown respectively. If  $x$  and  $y$  are perimeters of the triangles given in figures (a) and (b) respectively, then the incorrect option is



(a)



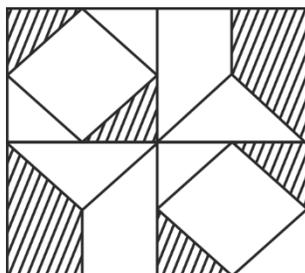
(b)

- (1)  $x = 18$  cm
- (2)  $y = 17$  cm
- (3)  $x - y = 2$  cm
- (4)  $x + y = 35$  cm

**SECTION-II : ONE OR MORE THAN ONE CORRECT ANSWER TYPE**

This section contains 1 multiple choice question, which has 4 choices (1), (2), (3) and (4) out of which **ONE OR MORE THAN ONE** choice(s) is(are) correct.

32. In the given figure, the fraction of shaded part of square is  $x$ , the fraction of unshaded part is  $y$  and  $z$  is the reciprocal of  $y$ . Which of the following option(s) is/are correct?



- (1)  $y - x = \frac{6}{16}$
- (2)  $x + z = \frac{311}{176}$
- (3)  $z > y > x$
- (4)  $y + z = \frac{377}{176}$

**MENTAL ABILITY**

**SECTION-I : SINGLE CORRECT ANSWER TYPE**

This section contains 7 multiple choice questions. Each question has 4 choices (1), (2), (3) and (4) out of which **ONLY ONE** choice is correct.

33. Prisha is standing on ground, such that she is facing towards south. She turns by  $45^\circ$  clockwise and then  $225^\circ$  anti-clockwise. Now, she is facing towards

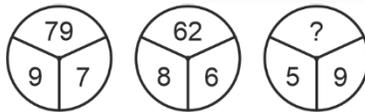
- (1) South
- (2) North
- (3) West
- (4) East

34. Find the next term of the given series.

27, 38, 51, 68, 87, ?

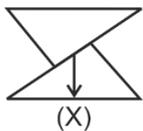
- (1) 107
- (2) 110
- (3) 105
- (4) 115

35. Find the missing term.



- (1) 82
- (2) 95
- (3) 59
- (4) 29

36. Choose the correct water image of the given figure (X).



- (1)
- (3)

- (2)
- (4)

37. Rohan has 5 pens, 3 pencils and 2 erasers. If the cost of a pen is ₹9, cost of a pencil is ₹4 and the cost of an eraser is ₹5. Find the total amount Rohan spent on stationery.

- (1) ₹77
- (2) ₹70
- (3) ₹87
- (4) ₹67

38. Choose the correct mirror image.

MNOS3695P

- (1) WNI023002P
- (2) 9500020NM
- (3) 9069020NM
- (4) 9000020NM

39. Find the wrong term.

PQH, RSK, TVN, VZQ, XFT

- (1) VZQ
- (2) XFT
- (3) TVN
- (4) RSK

---

### SECTION-II : ONE OR MORE THAN ONE CORRECT ANSWER TYPE

This section contains 1 multiple choice question, which has 4 choices (1), (2), (3) and (4) out of which **ONE OR MORE THAN ONE** choice(s) is(are) correct.

---

40. If  $8 @ 7 \# 5 = 51$ ,  $6 @ 9 \# 4 = 66$  and  $7 @ 8 \# 8 = 64$ , then which option(s) has(have) same relation?

- (1)  $6 @ 4 \# 9 = 10$
- (2)  $4 @ 5 \# 2 = 22$
- (3)  $9 @ 5 \# 4 = 29$
- (4)  $2 @ 8 \# 1 = 24$



37 Years Old Legacy of  
Delivering Outstanding Results



## OUR TOP PERFORMERS IN NEET(UG) 2025



## OUR TOP PERFORMERS IN JEE (Advanced) 2025



## Olympiads Results

899 Classroom Students  
Aakashians Qualified

in IOQM  
2024

161 Classroom Students  
Aakashians Qualified

in RMO  
2024-25

420 Classroom Students  
Aakashians Qualified

in NSEs  
2024-25

25 Classroom Students  
Aakashians Qualified

for OCSCs/IMOTC  
/APMO 2024-25

4902 Classroom Students  
Aakashians Qualified

in NSO (Level-I)  
2024-25