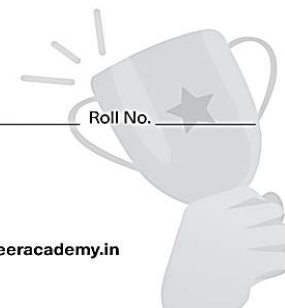


**TALENT SEARCH EXAM****INSTRUCTIONS**

1. Immediately fill in the particulars on this page of the Test Booklet with Blue/Black Ball Point Pen. Use of pencil is strictly prohibited.
2. Test duration is ONE HOUR (60MINUTES)
3. The Test Booklet consists of 40 questions of 4 marks each. The maximum marks are 160.
4. There are four sections in the question paper. The distribution of question, subject wise in each part is mentioned below.

SCIENCE	-	10 Questions
SOCIAL SCIENCE	-	10 Questions
MATHEMATICS	-	10 Questions
MENTAL ABILITY	-	10 Questions
5. Candidates will be awarded Four marks (+4) each for indicated correct response of each Question & One mark (-1) deduct for indicated incorrect response. No deduction from the total score will be made if no response is indicated.
6. No candidate is allowed to carry any textual material, printed or written, bits of papers, mobile phone, any electronic device etc.
7. After the completion of the test, the candidate must hand over the Answer Sheet to the Invigilator on duty in the Room/Hall. However, the candidates are allowed to take away this Test Booklet with them.
8. Do not fold or make any stray marks on the Answer sheet.

Name : _____ Class : _____ Roll No. _____

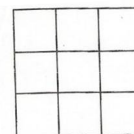


SCIENCE

- What is the momentum of an object of mass m , moving with a velocity v ?
 (a) $(m v)^2$
 (b) $m v^2$
 (c) $\frac{1}{2} m v^2$
(d) mv
- Relative density of a substance is
 (a) $\frac{\text{Density of substance}}{\text{Density of water}}$
 (b) $\frac{\text{Density of water}}{\text{Density of substance}}$
 (c) Density of substance
 (d) None of these
- Unit of speed is
 (a) m/s
 (b) m/s^2
 (c) m
 (d) $m^2 s^2$
- Atomicity of $K_2Cr_2O_7$
 (a) 9
(b) 11
 (c) 10
 (d) 12

- All noble gases molecules are
(a) Monoatomic
 (b) Diatomic
 (c) Triatomic
 (d) Both a and b
- Which among the following is not a postulate of Dalton's Atomic Theory
 (a) Atoms can't be created or destroyed
 (b) Atoms of different elements have different sizes, masses and chemical properties.
(c) Atoms of same element can combine in only one ratio to produce more than one compound.
 (d) Atoms are very tiny particles which can't be further divided.
- Which of the following is non-living part of the cell?
 (a) Cell membrane
 (b) Cytoplasm

- How many squares are present in the given figure?
 (a) 9
 (b) 10
 (c) 11
(d) 14



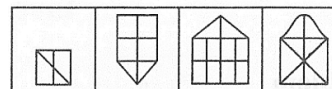
- In the given question, you are given a figure (X) followed by four figures (a), (b), (c) and (d) such that (X) is embedded in one of them. Trace out the correct alternative.

Problem Figure



(X)

Answer Figure

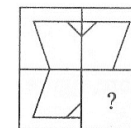


(a) (b) (c) (d)

- In this question, problem figure is given on the left side of the line, which is incomplete. One, out of the four answer figures (a), (b), (c) and (d) can complete the same. You

have to locate the answer which if inserted in the problem figure without changing the direction completes the same.

Problem figure

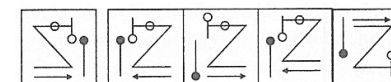


Answer figure



(a) (b) (c) (d)

- Choose the correct mirror image of the figure (X) form amongst the four alternatives (a), (b), (c) and (D) given along with it.



(x) (a) (b) (c) (d)

30. The expression $(3a + 2b + 3c)^2 - (2a + 3b + 2c)^2 + 5b^2$ is perfect square of the expression
- (a) $\sqrt{5}(a + b + c)$
 (b) $\sqrt{5}(a + b)$
 (c) $\sqrt{5}(a + c)$
 (d) $\sqrt{5}(a + c - b)$

MENTAL ABILITY

31. If 'FULFNHW' is the code for 'CRICKET', then 'EULGH' is the code for which word?
 (a) PRIDE
(b) BRIDE
 (c) BLADE
 (d) BLIND
32. 6, 36, 7, 49, 8, 64, ... 81, 10, 100
(a) 9
 (b) 8
 (c) 69
 (d) 66
33. If Mohan says that his mother is the only daughter of Shyam's mother, how is Shyam related to Mohan?

- (a) Son
 (b) Father
 (c) Sister
(d) Uncle

34. Insert the missing letter or numerical value in the given question

15	25	30
12	14	16
6	?	16

- (a) 60
 (b) 16
(c) 20
 (d) 10
35. Rajesh ranked 25th in the class of forty-one students. What is the rank of Rajesh from the end?
 (a) 15th
(b) 17th
 (c) 16th
 (d) 18th
36. If - means \times , \times means +, + means \div and \div means -, then the value of $14 - 10 \times 4 \div 16 + 8$ is
 (a) 241
 (b) 124
(c) 142
 (d) 412

- (c) Mitochondria
(d) Cell wall.

8. _____ is not found in xylem tissue.
(a) Sieve Tubes
 (b) Xylem parenchyma
 (c) Tracheids
 (d) Vessels.
9. Which of the following is not a viral disease?
 (a) Dengue
(b) Typhoid
 (c) AIDS
 (d) Influenza.
10. Which disease is not transmitted by mosquitos?
 (a) Dengue
 (b) Brain fever
 (c) Malaria
(d) Pneumonia

SOCIAL SCIENCE

11. What are the National colours of France?
 (a) Blue-Green-Red
 (b) Green-White-Red
 (c) Green-Yellow-Red
(d) Blue-White-Red
12. Russia and its empire was ruled in 1914 by
 (a) Alexander I
 (b) Alexander II
 (c) Nicholas I
(d) Nicholas II
13. The longitudinal extent of India is
 (a) 69° 7' E to 37° 25' E
 (b) 68° 7' E to 98° 25' E
(c) 68° 7' E to 97° 25' E
 (d) 69° 7' E to 37° 25' E
14. The Dhaula Dhar range is in
(a) Himachal
 (b) Nepal Himalayas
 (c) Kashmir Himalayas
 (d) none of these
15. What is an area drained by a single river system called?
(a) Drainage basin
 (b) Water divide
 (c) Drainage
 (d) Doab
16. In which of the following countries, legal framework order was passed in 2002?
 (a) China
 (b) India

- (c) Pakistan
(d) Myanmar

17. Who prepared the draft of a constitution for India in 1928?

- (a) **Motilal Nehru**
(b) B.R. Ambedkar
(c) Dr. Rajendra Prasad
(d) Jawaharlal Nehru

18. Which of the following does not include election procedure?

- (a) Voting
(b) Nomination of candidates
(c) **Booth capturing**
(d) Canvassing

19. The kind of activities performed for self consumption are

- (a) Market activities
(b) Primary activities
(c) **Non market activities**
(d) Secondary activities

20. For how many days NREGA provides employment

- (a) 70
(b) 80
(c) 90
(d) **100**

MATHEMATICS

21. The value of $(23 + 2^2)^{\frac{2}{3}} + (140 - 29)^{1/2}$ is

- (a) **20**
(b) 18
(c) 17
(d) 14

22. If $x + 2$ is a factor of $x^2 + mx + 14$, then $m =$

- (a) 7
(b) 2
(c) **9**
(d) 14

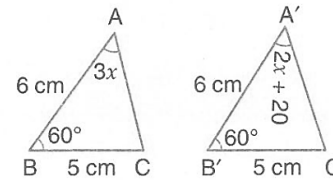
23. The perpendicular distance of the point $P(4,3)$ from x -axis is

- (a) 4
(b) **3**
(c) 5
(d) none of these

24. The graph of the linear equation $2x + 3y = 6$ cuts the y -axis at the point

- (a) (2,0)
(b) (0,3)
(c) (3,0)
(d) **(0,2)**

25. In Fig, the measure of $\angle B'A'C'$ is



- (a) 50°
(b) **60°**
(c) 70°
(d) 80°

26. Which of the following statements is true?

- (a) π and $\frac{22}{7}$ are both rationals
(b) π and $\frac{22}{7}$ are both irrationals
(c) π is rational and $\frac{22}{7}$ is irrational
(d) **π is irrational and $\frac{22}{7}$ is rational.**

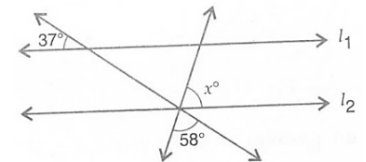
27. The value of $\sqrt{3 - 2\sqrt{2}}$, is

- (a) **$\sqrt{2} - 1$**
(b) $\sqrt{2} + 1$
(c) $\sqrt{3} - \sqrt{2}$
(d) $\sqrt{3} + \sqrt{2}$

28. If $f(x + 1) = x^2 - 7x + 2$, then the remainder when $f(x)$ is divided by $(x + 1)$, is

- (a) 8
(b) -4
(c) 2
(d) **-8**

29. In Fig, if $l_1 \parallel l_2$, what the value of x ?



- (a) 90°
(b) **85°**
(c) 75°
(d) 70°