



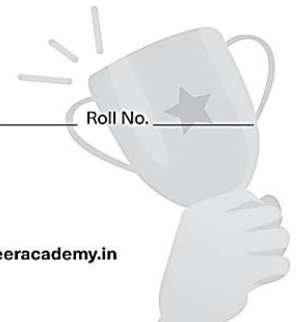
**TALENT SEARCH EXAM**

**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

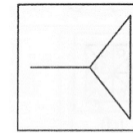
- When we press the bulb of a dropper with its nozzle kept in water, air in the dropper is seen to escape in the form of bubbles. Once we release the pressure on the bulb, water gets filled in the dropper. The rise of water in the dropper is due to
  - pressure of water
  - Gravity of the earth
  - shape of rubber bulb
  - atmospheric pressure**
- The force applied by the archer to stretch the bow is an example of
  - Muscular force**
  - Friction force
  - Magnetic force
  - None of these
- Friction produces
  - Heat**
  - Cold
  - Water
  - None of these
- Burning of charcoal in a

closed room will produce.

- Carbon dioxide
  - Nitrogen dioxide
  - carbon monoxide**
  - All of these
- Adding common salt to dissolved water makes it
    - Good conductor**
    - Good insulator
    - Both (a) and (b)
    - None of these
  - All metals are solid except
    - Sodium
    - Calcium
    - Mercury
    - Hydrogen**
  - The kitchen of the cell is called
    - Cell wall
    - Nucleus
    - Vacuoles
    - Plastids.**
  - Which organelle is called as "Suicidal bag" of cell?
    - Golgi body
    - Plastids

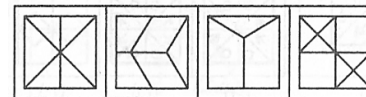
- In the given question, you are given a figure (X) followed by four figures (a), (b), (c) and (d) such that (X) is embedded in one of them. Trace out the correct alternative.

Problem figure



(X)

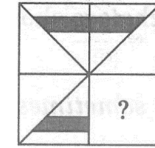
Answer figures



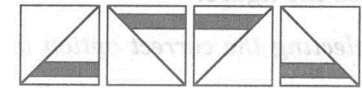
(a) (b) (c) (d)

- 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



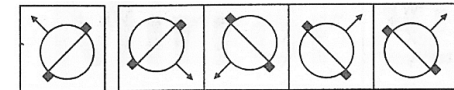
Answer figure



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

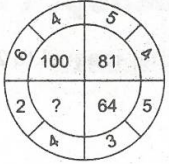
Ans. (d)

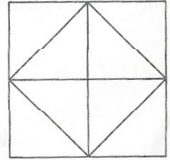
- Choose the correct mirror image of the figure (X) form amongst the four alternatives (a), (b), (c) and (d) given along with it.



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

Ans. (c)

- (a) NJGE  
(b) NLIH  
(c) NKHH  
**(d) NKHG**
32. 4, 9, 19, 34, 54, ...  
**(a) 79**  
(b) 74  
(c) 89  
(d) 83
33. Pointing to Amit, Anita said "His mother is the only daughter of my mother". How is Anita related to the Amit?  
**(a) Mother**  
(b) Daughter  
(c) Sister  
(d) Grandmother
34. Insert the missing letter or numerical value in the given question
- 
- (a) 64  
**(b) 36**  
(c) 16  
(d) 72

35. Vishnu ranks 16<sup>th</sup> from the top and 49<sup>th</sup> from the bottom in a class. How many students are there in the class?  
(a) 66  
(b) 65  
**(c) 64**  
(d) Cannot be determined
36. If + means  $\times$ , - means  $\div$ ,  $\times$  means + and  $\div$  means - then  $10 \times 18 - 9 + 3 \div 1$  is equal to  
(a) 16  
**(b) 15**  
(c) 17  
(d) 18
37. Count the number of triangles in the following figure.
- 
- (a) 8  
(b) 10  
**(c) 12**  
(d) 14

- (c) Lysosome**  
(d) Mitochondria.

9. Which of the following is a rabi crop?  
(a) Rice  
**(b) Mustard**  
(c) Soyabean  
(d) Maize.
10. In order to take precautions to control dengue, we must take measures to stop the breeding of:  
**(a) Aedes mosquito**  
(b) Fleas  
(c) Ants  
(d) Anopheles.

## SOCIAL SCIENCE

11. English and French companies both had interests in \_\_\_\_\_.  
**(a) India**  
(b) Burma  
(c) Indonesia  
(d) Bengal
12. The \_\_\_\_\_ were the first to visit India for trade.  
(a) British

- (b) Dutch  
(c) French  
**(d) Portuguese**

13. The \_\_\_\_\_ were in charge of the cities.  
(a) kotwal  
**(b) daroga**  
(c) chowkidar  
(d) superintendent
14. Which of the following is a ubiquitous resource?  
**(a) Air**  
(b) River  
(c) Iron ore  
(d) Petroleum.
15. The Ganga Plain is covered with \_\_\_\_\_ soil.  
(a) Black  
(b) Red  
(c) Laterite  
**(d) Alluvial.**
16. Which of the following countries does not face water scarcity?  
**(a) UK**  
(b) Saudi Arabia  
(c) Australia  
(d) Algeria.

17. The grasslands of the Brazilian Highlands are also known as \_\_\_\_\_.
- (a) Savanna  
**(b) Campos**  
 (c) Llanos  
 (d) Veld.
18. Article \_\_\_\_\_ of the Constitution abolished the practice of untouchability.
- (a) 15  
 (b) 16  
**(c) 17**  
 (d) 20.
19. Which of these is not a secular value?
- (a) Treating all religions equally  
 (b) Allowing minorities to preserve their culture  
 (c) Freedom to follow or exit from a religion  
**(d) Collection of taxes by the government for promoting any religion.**
20. \_\_\_\_\_ look after the day-to-day administrative functions of the state.
- (a) Ministers of state**  
 (b) Civil servants

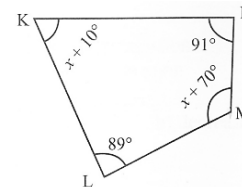
- (c) Deputy ministers  
 (d) Cabinet ministers.

### MATHEMATICS

21. If  $10\frac{1}{2}m$  of rope is divided into 6 equal pieces, the length of each piece is
- (a)  $2\frac{3}{4}$   
**(b)  $1\frac{3}{4}$**   
 (c)  $3\frac{1}{2}$   
 (d)  $5\frac{1}{6}$
22. If  $\frac{6^m \times 6^{-2}}{6^{-5}} = 6^{12}$ , then  $m =$
- (a) 7  
 (b) 12  
**(c) 9**  
 (d) -5
23.  $\frac{x+1}{4} + \frac{x+2}{2} = \frac{x-3}{2} - \frac{x-1}{3}$ , then  $x$  equals to
- (a)  $-\frac{29}{7}$**   
 (b)  $\frac{13}{2}$   
 (c)  $-\frac{3}{7}$   
 (d)  $\frac{15}{2}$

24. The age of Sumit's father is  $\frac{7}{4}$ th of Sumit's age and sum of their age is 55 years. Find their ages.
- (a) 15  
**(b) 20**  
 (c) 11  
 (d) 10

25. Find the missing angle in the given question



- (a) 30  
 (b) 70  
 (c) 60  
**(d) 50**
26. Which of the following is a Pythagorean triplet
- (a) (3, 4, 6)  
 (b) (5, 12, 14)  
**(c) (5, 12, 13)**  
 (d) (8, 15, 19)
27. If  $\sqrt{0.0196x} = 1.4$ , then the value of  $x$  is
- (a) 10  
**(b) 100**

- (c) 1000  
 (d) None of these

28. Which of the following is a perfect cube
- (a) 28  
 (b) 225  
 (c) 784  
**(d) 512**
29. Rajan buys a clock for Rs.75 and sells it for Rs.100. His gain percent is
- (a) 25%  
**(b)  $33\frac{1}{3}\%$**   
 (c) 20%  
 (d)  $37\frac{1}{2}\%$
30.  $(3x + 2y)^2 + (3x - 2y)^2$  equals to
- (a)  $9x^2 + 4y^2$   
**(b)  $18x^2 + 8y^2$**   
 (c)  $12xy$   
 (d)  $24xy$

### MENTAL ABILITY

31. If "TEAM" is coded as 'VGCO' then 'LIFE' will be coded as