



# MSAT – 2025

(MAHARISHI SCHOLARSHIP CUM ADMISSION TEST)

## Class – 05<sup>th</sup> going to 6<sup>th</sup>

### SAMPLE PAPER

**Disclaimer:** This is a sample paper provided for practice purposes only. The level of difficulty, type of questions, and total number of questions may vary in the actual examination.

Time: 3 Hour

Maximum Marks: 155

**General Instructions:**

- Please read the instructions carefully. You are allotted 5 minutes specifically for this purpose.
- You are not allowed to leave the examination hall before the end of test.
- Do not keep the OMR sheet exposed to others.
- Shade the correct answers only in the OMR sheet given. Do not write or mark answers or symbols (Like ✓, •, X ...) anywhere in the questions paper.
- This booklet is your Question Paper.
- This Question Paper booklet contains 5 Sections. All Section contains Part – A only

Section	Subject	Types of Questions	Number of Questions	Marking Scheme
I	MAT	Single Answer Questions	20	+1,0
II	MATHS	Single Answer Questions	15	+3,-1
III	PHYSICS	Single Answer Questions	10	+3,-1
IV	CHEMISTRY	Single Answer Questions	10	+3,-1
V	BIOLOGY	Single Answer Questions	10	+3,-1

#### USEFUL DATA

##### PHYSICS

Acceleration due to gravity	: $g = 10 \text{ m/s}^2$
Planck constant	: $h = 6.6 \times 10^{-34} \text{ J-s}$
Charge of electron	: $e = 1.6 \times 10^{-19} \text{ C}$
Mass of electron	: $m_e = 9.1 \times 10^{-31} \text{ kg}$
Permittivity of free space	: $\epsilon_0 = 8.85 \times 10^{-12} \text{ C}^2 / \text{N} \cdot \text{m}^2$
Density of water	: $\rho_{\text{water}} = 10^3 \text{ kg/m}^3$
Atmospheric pressure	: $P_a = 10^5 \text{ N/m}^2$
Gas constant	: $R = 8.314 \text{ J}$
$K^{-1} \text{ mol}^{-1}$	

##### CHEMISTRY

Gas Constant	$R = 8.314 \text{ J K}^{-1} \text{ mol}^{-1}$
	$= 0.0821 \text{ Lit atm}$
$K^{-1} \text{ mol}^{-1}$	
$K^{-1} \text{ mol}^{-1}$	$= 1.987 \approx 2 \text{ Cal}$
Avogadro's Number $N_a$	$= 6.023 \times 10^{23}$
Planck's constant h	$= 6.625 \times 10^{-34} \text{ J.s}$
	$= 6.625 \times 10^{-27} \text{ erg.s}$
1 Faraday	$= 96500 \text{ coulomb}$
1 calorie	$= 4.2 \text{ joule}$
1 amu	$= 1.66 \times 10^{-27} \text{ kg}$
1 eV	$= 1.6 \times 10^{-19} \text{ J}$

Atomic No: H = 1, He = 2, Li = 3, Be = 4, B = 5, C = 6, N = 7, O = 8, F = 9, Ne = 10, Na = 11, Mg = 12, Si = 14, Al = 13, P = 15, S = 16, Cl = 17, Ar = 18, K = 19, Ca = 20, Cr = 24, Mn = 25, Fe = 26, Co = 27, Ni = 28, Cu = 29, Zn = 30, As = 33, Br = 35, Ag = 47, Sn = 50, I = 53, Xe = 54, Ba = 56, Pb = 82, U = 92.

Atomic masses: H = 1, He = 4, Li = 7, Be = 9, B = 11, C = 12, N = 14, O = 16, F = 19, Na = 23, Mg = 24, Si = 28, Al = 27, P = 31, S = 32, Cl = 35.5, K = 39, Ca = 40, Cr = 52, Mn = 55, Fe = 56, Co = 59, Ni = 58.7, Cu = 63.5, Zn = 65.4, As = 75, Br = 80, Ag = 108, Sn = 118.7, I = 127, Xe = 131, Ba = 137, Pb = 207, U = 238.

Name : \_\_\_\_\_  
Registration Number : \_\_\_\_\_

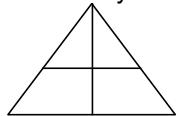
MAT

## **Section - I**

## Part – A

### Single Answer Questions

1. If farmer 'C' has two sons A and B as well as one daughter D. How is 'D' related to A ?  
(A) Sister (B) Sister –in – law (C) Uncle (D) Brother
2. If Aravind is taller than Lakshmi, but shorter than Aahil, Aahil is shorter than Atul then who is tallest ?  
(A) Ajay (B) Tara (C) Sharad (D) Atul
3. How many triangle are there in a following figure ?



**Directions (Q.No.7- 9) The following questions are based on the following alphabet series?**

Directions (Question 5): The following questions are based on the following passage.

7. Which letter will be sixth to the right of seventh letter from the left end of the alphabet?  
(A) F (B) N (C) M (D) W

8. Which letter is midway between 21<sup>st</sup> letter from right and 18<sup>th</sup> letter from left?  
(A) L (B) M (C) I (D) None of these

9. If all the alphabet is written in the reverse order, which will be the eighth letter to the right of 'C'?  
(A) F (B) V (C) G (D) W

Directions (Q.No.10 – 12) Read the following information given below and Answer the Question based on it. Eight friends P, T, V, R, M, D, K and W are sitting around a circular table facing the centre v is second to the left of T. T is fourth to the right of M. D and P are not sitting next to T. D is third to the right of P. W is not sitting next to P. P is sitting next left of K

10. Who is second left of K?  
(A) D (B) R (C) T (D) P

11. How many peoples sit between D and R ?  
(A) 2 (B) 3  
(C) 4 (D) Cannot be determined

12. Who sits exactly opposite of M?  
(A) T (B) R (C) P (D) V

**Directions (Q.No.13 – 15) Read the following information given below and answer the questions base on it.**  
**In a certain code language numbers are coded as follows**

Digit	2	9	0	3	4	7	1	6	5
Code	P	Q	H	N	L	W	X	V	F

13. What will be the code for 9569302041  
(A) QFVQNHPLX  
(C) QFVQNHPLX  
(B) QFVQHNHPLX  
(D) QFVQNHLPX

14. What will be the code for '304569205'  
(A) NHLFVQPHF  
(B) NHLVFQPHF  
(C) NHLQPFHFV  
(D) None of these

15. What will be the code for [29156+13456]  
(A) LPVXP  
(B) LVPXP  
(C) VPLXP  
(D) PXLVP

16. Find the missing number in the given figure ?  

2	16	4
3	54	6
3	?	5

  
(A) 54  
(B) 45  
(C) 30  
(D) 75

17. After arranging the given words according to dictionary order, which word will come at 'fifth' position?  
(1) History  
(2) Historian  
(A) Historian  
(B) Hobnob  
(3) Hobnob  
(4) Historical  
(5) Hobna  
(C) Historical  
(D) Hobnail

18. How many 5s are there in the following number sequence which are immediately preceded by 7 and immediately followed by '6'?  
755945764598756764325678  
(A) One  
(B) Two  
(C) Three  
(D) Four

19. In the following question select the odd word from the given alternatives?  
(A) Almonds  
(B) Cashew nut  
(C) Walnut  
(D) Potato

20. Find the next number in the given series ?  
3, 6, 10, 15, 21, ?  
(A) 25  
(B) 32  
(C) 28  
(D) 15

## MATHS

## Section - II

## **Part – A**

### **Single Answer Questions**

4. The value of  $4\frac{1}{2} \times 4\frac{1}{3} - 8\frac{1}{3} \div 5\frac{2}{3}$  is equal to  
 (A)  $18\frac{1}{34}$       (B)  $18\frac{2}{34}$       (C)  $18\frac{3}{34}$       (D)  $18\frac{4}{34}$

5. The sum of 10 numbers is 550. Find their average numbers  
 (A) 56      (B) 55      (C) 57      (D) 60

6.  $\frac{3}{8}$  is what part of  $\frac{1}{12}$ ?  
 (A)  $\frac{3}{7}$       (B)  $\frac{1}{12}$       (C)  $\frac{4}{3}$       (D)  $\frac{9}{2}$

7. By how much is three-fifth of 350 greater than four-seventh of 210?  
 (A) 95      (B) 110      (C) 120      (D) 90

8. Round 3.567 to the nearest hundredth "decimal"  
 (A) 3.56      (B) 3.57      (C) 3.58      (D) 3.50

9.  $7\frac{1}{2} \times 2\frac{1}{3} + 3\frac{1}{5} \div 6\frac{2}{3}$  is equal to  
 (A)  $16\frac{20}{31}$       (B)  $17\frac{31}{47}$       (C)  $17\frac{49}{50}$       (D)  $17\frac{17}{50}$

10. The reciprocal of  $1\frac{1}{2}$  is  
 (A)  $\frac{3}{4}$       (B)  $\frac{3}{2}$       (C)  $\frac{2}{3}$       (D)  $\frac{4}{3}$

11. What is the difference between L.C.M and HCF of two numbers 10 and 15?  
 (A) 20      (B) 30      (C) 25      (D) 15

12. What is the other fraction is equivalent to 0.75?  
 (A)  $\frac{1}{2}$       (B)  $\frac{3}{4}$       (C)  $\frac{2}{3}$       (D)  $\frac{4}{5}$

13. Convert the fraction  $\frac{5}{8}$  to a decimal  
 (A) 0.625      (B) 0.75      (C) 0.8      (D) 0.85

14. If sum of two fractions is  $\frac{23}{24}$ . If one of the fractions is  $\frac{7}{12}$ , what is the other fractions?  
 (A)  $\frac{1}{8}$       (B)  $\frac{5}{8}$       (C)  $\frac{3}{8}$       (D)  $\frac{1}{3}$

15. What is the results of  $[6 \times (3 + 2)] \div 5 + 7$   
 (A) 10      (B) 11      (C) 12      (D) 13

## PHYSICS

### **Section – III**

## **Part – A**

### **Single Answer Questions**

## CHEMISTRY

## Section – IV

## **Part – A**

### **Single Answer Questions**

## BIOLOGY

## Section – IV

## **Part – A**

### **Single Answer Questions**

1. How does the roughage help us?  
(A) moving the food easily through our digestive system  
(C) add bulk to fecal matter by absorbing water  
(B) proper removal of solid waste  
(D) all of the above mentioned
2. The sweet taste of food can be recognized with the help of taste buds of tongue. Which part of the tongue taste this first –  
(A) tip of the tongue  
(C) lateral part of the tongue  
(B) back of the tongue  
(D) center part of the tongue.
3. While we keep the dry food in the mouth after some time it becomes watery it is due to -  
(A) intake of water  
(B) secretion of Saliva  
(C) secretion of bile juice  
(D) all of these
4. Where does the food moves which we swallow it from our mouth?  
(A) to heart  
(B) to stomach  
(C) to intestine  
(D) to lung
5. Food helps us  
(A) to grow  
(B) to get energy  
(C) to get strength  
(D) All of these
6. In which part of the plant new baby plant or seedling will arise -  
(A) leaf  
(B) seed  
(C) root  
(D) stem
7. Nitu found sick; she got severe dehydration; doctor suggested her to get admit in hospital to provide support. Suggest from the option what support does doctor gave to Nitu.  
(A) blood transfusion  
(B) provided food  
(C) vitamin injection  
(D) glucose drips
8. Nitu found sick; she got severe dehydration; doctor suggested her to get admit in hospital to provide support. Suggest from the option what support does doctor gave to Nitu.  
(A) blood transfusion  
(B) provided food  
(C) vitamin injection  
(D) glucose drips
9. We can get potato plant from  
(A) Seed  
(B) eye – bud of tuber  
(C) Flower  
(D) leaf
10. When the pods are ripened, the seeds will get disperse to long distance by burst. Which seed is the best example for the above said condition?  
(A) tomato  
(B) apple  
(C) banana  
(D) legumes

**Answer key – Class - 5****MAT**

1.A	2.D	3.A	4.B	5.D
6.A	7.C	8.A	9.C	10.B
11.B	12.A	13.C	14.A	15.A
16.B	17.B	18.A	19.D	20.C

**MATHS**

1.C	2.C	3.A	4.A	5.B
6.D	7.D	8.B	9.C	10.
11.C	12.C	13.B	14.A	15.C

**PHYSICS**

1.D	2.C	3.D	4.B	5.A
6.C	7.C	8.A	9.A	10.B

**CHEMISTRY**

1.A	2.B	3.B	4.B	5.C
6.A	7.A	8.A	9.C	10.D

**BIOLOGY**

1.D	2.A	3.B	4.B	5.D
6.B	7.D	8.D	9.B	10.D