

**SECTION I : GENERAL MENTAL ABILITY TEST (G.M.A.T.) SAMPLE PAPER**

1. i) A 2 B means A is a mother of B.  
ii) A 4 B means A is the brother of B.  
iii) A 5 B means A is the daughter of B.  
iv) A 9 B means A is the husband of B.

Which of the following expression shows the relation that 'K' is Mother-in-Law of 'M' ?

- 1) M 9 N 2 K 4 I      2) M 9 N 5 K 2 J  
3) K 5 J 9 M 2 N      4) K 2 J 9 N 4 M

**Directions : 2 – 6 :** Study the following information carefully and answer the questions given below.

i) Six authors P, Q, R, S, T and U, each one has written books on six different subjects viz. Physics, Chemistry, Psychology, Sociology, Political science & Economics but not necessarily in the same order. These books are kept in a pile but not necessary in the given order.

ii) The book of Physics is written by 'Q' and it is kept below the book of Psychology. The book of Chemistry is written by 'R' and it is kept just below the book of Sociology which is not on the top. The book of Political science is kept between the book of Chemistry and Economics. The book written by 'U' is not at the bottom. The book written by 'P' is on the top. The book of Sociology is not written by 'S' or 'U'.

2. Who wrote the book of Political Science ?

- 1) S                                      2) T  
3) Data inadequate      4) None of these

3. Who wrote the book which is kept at the bottom?

- 1) R                                      2) Q  
3) S                                      4) T

4. Which of the following combination of 'Subject' – 'Author' – 'Position from the top' is not correct ?

- 1) Physics – Q – Third  
2) Political Science – U – Fifth  
3) Economics – S – Sixth  
4) Psychology – P – First

5. The book of which of the following subject is kept on the top ?

- 1) Chemistry  
2) Psychology  
3) Political Science  
4) Either psychology or chemistry

6. What is the position of the chemistry book from the top ?

- 1) Second                                      2) Fifth  
3) Third                                      4) Fourth

**Direction : 7 – 9 :** Find the odd one out from the given alternatives.

7. 1) Eagle                      2) Cock  
3) Crow                        4) Parrot

8. 1) PKJQ                      2) RIGT  
3) WDBY                      4) SHFU

9. Find the missing number from the given response

31	17	58	87
68	19	61	56
91	22	70	50
10	142	11	?

- 1) 6                              2) 7  
3) 3                              4) 9

10. If  $34 \oplus 21 = 20$  and  $69 \oplus 35 = 46$ ,  
then  $31 \oplus 29 = ?$

- 1) 35                              2) 30  
3) 45                              4) 64

*Section I ends here.*

**SECTION II : SCHOLASTIC APTITUDE TEST (S.A.T.) SAMPLE PAPER**

1. Internal and external surface of a calorimeter are polished. Why?
  - 1) It looks attractive.
  - 2) It prevents rusting by loosing contact with the air.
  - 3) It prevents transfer of heat due to conduction.
  - 4) It prevents transfer of heat due to radiation
  
2. What does a pyrometer measure?
  - 1) High altitude
  - 2) Pressure
  - 3) High temperature
  - 4) The radiant energy
  
3. Which of the following is not a fundamental physical quantity?
  - 1) Length                      2) Pressure
  - 3) Time                         4) Mass
  
4. Which of the following metals react with dilute acids?
  - 1) Copper                      2) Gold
  - 3) Silver                        4) Calcium
  
5. Which of the following food components can be absorbed in the alimentary canal without undergoing digestion?
  - 1) Proteins.                      2) Lipids
  - 3) Cane sugar                  4) Vitamins.
  
6. Srivijaya was a famous ancient Indian kingdom in \_\_\_\_\_.
  - 1) Myanmar                      2) Kampuchea
  - 3) Thailand                      4) Indonesia
  
7. Guru Tegh Bahadur was the \_\_\_\_ Guru of the Sikhs
  - 1) Second                        2) Eighth
  - 3) Ninth                         4) Tenth.
  
8. Sun is a gaseous body it is mainly made up of \_\_\_\_\_
  - 1) Carbon dioxide and hydrogen
  - 2) Hydrogen and Helium
  - 3) Hydrogen and Oxygen
  - 4) Helium and Nitrogen.

9. The factors of  $(x^4 + 4)$  are :

1)  $(x^2 + 2)^2$

2)  $(x^2 + 2x + 2)(x^2 - 2x + 2)$

3)  $(x^2 + 2)(x^2 - 2)$

4) None of these

10. If 3 chairs and 2 tubes cost Rs.1200 and 5 chairs and 3 tubes cost Rs.1900, then the cost of 2 chairs and 2 tubes (in Rs.) is :

1) 700

2) 900

3) 1000

4) 1100

*Section II ends here.*