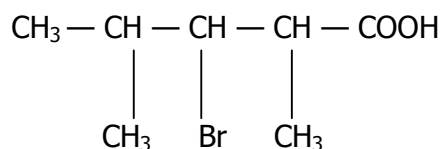


## SAMPLE TEST PAPER

**Note:** Choose the correct answer and write ("A", "B", or "C") against the question number in the answer sheet. **Do not write anything on question paper.**

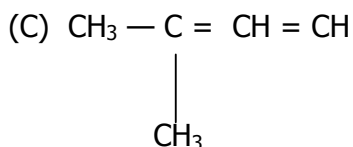
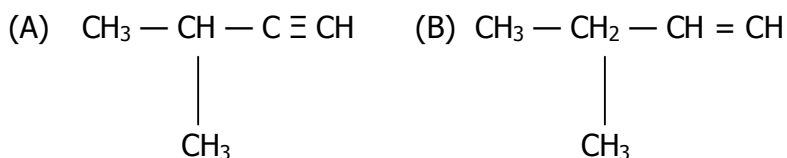
### "CHEMISTRY"

- One mole of any compound will have \_\_\_\_\_ molecules  
(A)  $6.02 \times 10^{23}$  (B)  $6.15 \times 10^{-18}$  (C)  $6.02 \times 10^{-23}$
- The pH of a solution is 7, its Hydrogen ion concentration will be:  
(A) Zero M. (B)  $10^{-7}$  M. (C)  $10^7$  M.
- Existence of a solid in more than one forms is called:  
(A) Isomerism (B) Isomorphism (C) Polymorphism
- $\beta$  rays are:  
(A) Electron emitting from nucleus. (B) Helium atom  
(C) Helium nuclei.
- Name in IUPAC system.



- 3 bromo 2, 4 dimethyl pentanoic acid
- 2 bromo 1, 3 dimethyl butanoic acid
- 3 bromo 1, 3 dimethyl pentanoic acid

6. Structural formula of 3 methyl —1 butyne is:



7. Deuterium and Tritium are the Isotopes of:

- (A) Hydrogen      (B) Oxygen      (C) Nitrogen

### **"ENGLISH"**

Read the following passage and choose the best answer:

The only nuclear weapons used were against Japan in 1945 by the so called 'most civilized country' the USA, killing almost 150000 people. Since then, though luckily no atomic bombing has taken place, the arms race has continued unabated. The wishful thinking of the USA, to be alone in dominating the world with an arsenal of nuclear weapons, was shattered within four years with the testing of first nuclear weapon by the Russians. The nuclear arms race was not confined to the USA and USSR. Within a short space of time U.K. and France joined the nuclear exclusive club. In the early sixties, feeling threatened by Russia, China tested its nuclear ability. India became a nuclear power in 1974. after India tested its nuclear device, Pakistan had no alternate but to join the race. Within ten years Pakistan developed the capability of going nuclear. When India tested five nuclear devices Pakistan responded with six nuclear tests within a few weeks to match the Indian aggressive designs.

8. China tested its nuclear ability because of fear from

- (A) USA                      (B) Russia                      (C) India

9. By sixties the number of countries having nuclear devices were  
(A) Three (B) Four (C) Five
10. Bone of contention means  
(A) Cause of friendship (B) Cause of difference  
(C) Cause of mutual relationship
11. 16<sup>th</sup> June 1998 was \_\_\_\_\_ hottest day for the city. (use correct article)  
(A) a (B) an (C) the
12. Pencils were being sold for Rs.3 each. I \_\_\_\_\_ two of them (use correct spelling)  
(A) bought (B) brought (C) boght

### **"MATHEMATICS"**

13. Slope of a line  $x + y = 1$  is perpendicular to the other line. The slope of other line will be:  
(A)  $-1$  (B) 0 (C) 1
14. A sequence, in which each term is formed by adding a fixed number to the one preceding it, is called:  
(A) Geometric sequence. (B) Harmonic sequence.  
(C) Arithmetic sequence.

13.  $\int_0^1 \frac{1}{x} x^2 dx =$

- (A) 16                      (B) 8                      (C)  $\frac{16}{3}$

**"PHYSICS"**

14. A ball is thrown upward from a position of 2 meters above the ground level. The ball will have maximum Potential Energy at:
- (A) 2 meter above the ground                      (B) At the highest point.  
(C) just above the ground.
15. The Momentum of a bullet having a mass of 100 gm and a velocity of 100 meter per second will be \_\_\_\_\_
- (A) 10000 kg m/sec.    (B) 10 kg m/sec.    (C)  $10^{-4}$  kg m/sec.
16. Two resistances of 2, and 3 ohm in series will have a total resistance of
- (A) 1 ohm                      (B) 0.86 ohm                      (C) 5 ohm