

FIITJEE ADMISSION TEST

Class – VIII (going to class IX)

I.Q.

Direction (1 – 2): Read the following sequence of letters

a b a b b a a b a b a a c c a b a b b a a a b

1. How many a's are preceded by 'b' and followed by 'a'?
- (A) 1 (B) 4
(C) 3 (D) 2

2. How many b's are preceded and followed by 'a'?
- (A) 1 (B) 2
(C) 5 (D) 4

Directions (3 – 5): Each of the following questions contain four pairs of words related in some respect. Identify the pair which is different from the other three pairs.

3. (A) uncle : aunt (B) grandfather : grandmother
(C) father-in-law : mother-in-law (D) brother : sister
4. (A) tea : coffee (B) wheat : maize
(C) eucalyptus : pine (D) rice : cereal
5. (A) brake : car (B) saw : wood
(C) kick : football (D) bus : speed

Physics

1. The role of lubricants is to
(A) increase friction (B) reduce friction
(C) increase wear and tear of object (D) None of these
2. Image formed by a plane mirror is
(A) virtual, behind the mirror and enlarged.
(B) virtual, behind the mirror and of the same size as the object.
(C) Real, at the surface of the mirror and enlarged.
(D) Real, behind the mirror and of the same size as the object.
3. The function of iris is to
(A) protect the interior the eye from accident.
(B) control the amount of light entering into the eye.
(C) allow light to enter inside the eye
(D) send the visual sensations to the brain
4. A rainbow is a result of
(A) reflection of light (B) scattering of light
(C) dispersion of light (D) none of these

5. For a sound of high frequency, the pitch will be
 (A) low (B) high
 (C) pitch does not depend upon frequency (D) cant say

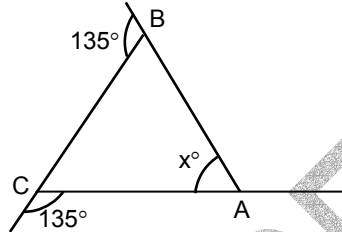
Chemistry & Biology

1. Artificial wool is known by the name of
 (A) rayon (B) acrylic
 (C) polycot (D) none of these
2. Metal which does not react with HCl is
 (C) Na (B) Zn
 (C) Sn (D) Hg
3. Which of the following is called as noble metal?
 (A) Mercury (B) Gold
 (C) Lithium (D) Cesium
4. Biogas is a mixture of
 (A) methane + CO₂ (B) methane + CO
 (C) ethane + CO₂ (D) ethane + CO
5. Types of combustion are
 (A) rapid (B) spontaneous, rapid and explosive
 (C) explosive (D) spontaneous
6. The largest cell which measure 170 mm in diameter
 (A) red blood cell (B) ostrich egg
 (C) nerve cell (D) green algae chara
7. "All cells arises from pre existing cells"
 (A) Leeuwenhock (B) Virchow
 (C) Purkinje (D) Robert Hooke
8. The comma shaped bacteria is
 (A) streptococcus (B) staphylococcus
 (C) vibrio (D) micrococcus
9. Viruses that parasitise bacteria are known as
 (A) Mosaics (B) Mutons
 (C) Bacteriophages (D) none of these
10. The process of release of ovum by the respective ovary is called as
 (A) Ovulation (B) Menstruation
 (C) Menarche (D) Menopause

Mathematics

1. If x and y vary inversely as each other and x = 4, when y = 5, then the value of y, when x = 3, is
 (A) 6.666 (B) $\frac{-20}{3}$
 (C) $\frac{6+3}{2}$ (D) 20

2. A shopkeeper selling a pair of shoes for Rs. 998. A draper loses 16% for how much should he sell the shoes to gain 12%?
 (A) 1330.66 (B) 1333
 (C) 1296 (D) $(1338 + 998)$
3. Raju took a loan of Rs. 1,50,000 with 12% interest p.a. Then how much money he has to re-pay after seven years as interest?
 (A) Rs. 1,20,000 (B) Rs. 12,600
 (C) Rs. 1,26,000 (D) Rs. 1,260
4. In the given figure, the value of x is
 (A) 45°
 (B) 90°
 (C) 135°
 (D) 60°



5. If 3 cubes of sides 3 cm, x cm, 5 cm are melted and a new cube is formed. The total volume of the previous 3 cube is 216, then the side of the new cube is
 (A) 5 cm (B) 4 cm
 (C) 6 cm (D) 11 cm

ANSWERS

IQ

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|-------------|-------------|-------------|-------------|
| 1. C | 2. D | 3. D | 4. D |
| 5. D | | | |

Physics

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|-------------|-------------|-------------|-------------|
| 1. B | 2. B | 3. B | 4. C |
| 5. B | | | |

Chemistry & Biology

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

Mathematics

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|-------------|-------------|-------------|-------------|
| 1. A | 2. A | 3. C | 4. B |
| 5. C | | | |