

International Science Supremo Olympiad (ISSO)

CLASS-10 SAMPLE QUESTION PAPER

The Actual Question Paper Contains 50 Questions. The duration of the Test Paper is 60 Minutes.



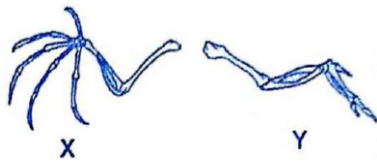
CPS OLYMPIADS
COMPETITION PROMOTION SOCIETY

DECADES OF EDUCATIONAL EXCELLENCE
An ISO 9001:2008 Certificated Organization

1. A long-sighted person cannot see objects clearly at a distance less than 40 cm from his eye. The power of the lens needed to read an object at 25 cm is
 (A) -2.5 D (B) +2.5 D
 (C) -6.25 D (D) +1.5 D
 (E) None of these

2. An optician, while testing the eyes, find the vision of a patient to be 6/12. By this he means that
 (A) The person can read the letters of 6 inches from a distance of 12 m
 (B) The person can read the letter of 12 inches from 6 m
 (C) The person can read the letters from 6 m which the normal eye can read from 12 m
 (D) The focal length of eye lens had become half that of the normal eye.
 (E) None of these

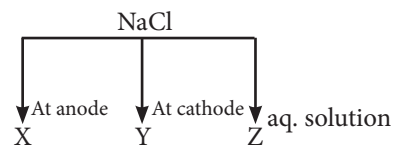
3. Refer to the given figure. It shows wings of two animals X and Y. These wings are Z structures. Select the option that correctly identifies X, Y and Z.



- | X | Y | Z |
|-------------------|--------|------------|
| (A) Bat | Bird | Analogous |
| (B) Bat | Insect | Homologous |
| (C) Bird | Bat | Homologous |
| (D) Bird | Insect | Analogous |
| (E) None of these | | |

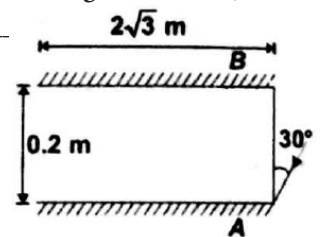
4. Which type of event is typically seen in the fossil record?
 (A) Speciation
 (B) Successive change in structures
 (C) Extinction (D) All of these
 (E) None of these

5. The given figure shows important products of chlor-alkali process. What are X, Y and Z respectively?



- (A) NaOH, Cl₂, H₂
- (B) H₂, Cl₂, NaOH
- (C) Cl₂, H₂, NaOH
- (D) Cl₂, NaOH, H₂
- (E) None of these

6. Two plane mirrors A and B are aligned parallel to each other, as shown in the figure. A light ray is incident at an angle 30° at a point just inside one end of A. The plane of incidence coincides with the plane of the figure. The maximum number of times the ray undergoes reflections (including the first one) before it emerges out is _____

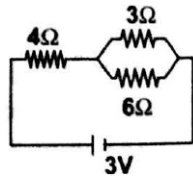


- (A) 30
- (B) 31
- (C) 32
- (D) 34
- (E) None of these

7. Coal, petroleum, natural gas, and propane are fossil fuels. They are called fossil fuels because _____.
 (A) They are burnt to release energy and they cause air pollution
 (B) They were formed from the buried remains of plants and tiny animals that lived hundreds of millions of years ago
 (C) They are nonrenewable and will run out
 (D) They are mixed with fossils to provide energy
 (E) None of these

8. The potential drop across the 3Ω resistor is _____.

- (A) 1 V
- (B) 1.5 V
- (C) 2 V
- (D) 3 V
- (E) None of these



9. When a plane mirror is placed horizontally on level ground at a distance of 60 metre from the foot of a tower, the top of the tower and its image in the mirror subtend at the eye, an angle of 90° . The height of the tower is _____.

- (A) 30 metres
- (B) 60 metres
- (C) 90 metres
- (D) 120 metres
- (E) None of these

10. The image of a distant object is obtained on a screen by using a concave mirror. The focal length of the mirror can be determined by measuring the distance between _____.

- (A) The object and the mirror
- (B) The object and the screen
- (C) The mirror and the screen
- (D) The mirror and the screen as well as that between the object and the screen
- (E) None of these