

International
Olympiad of
Science
2009

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iOS '09

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New Delhi, India

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CLASS 9th

SYLLABUS

The Actual Question Paper contains 40 questions. The duration of the test paper is 60 Minutes

Section I. • Matter in our surroundings & is matter around us Pure • Atoms and Molecules & Structure of Atom • The Fundamental Unit of Life & Tissues & Diversity in living organisms • Motion & Force and Laws of Motion • Gravitation • Work and Energy • Sound • Why do we fall ill • Natural Resources • Improvement in food resources. **Section II.** Applied Science

1. Which of the following is the formula for potassium sulphate?

(A) K_2SO_4 (B) $K_3(SO_4)_2$
(C) $K(SO_4)_2$ (D) KSO_4
(E) None of these

Chapter : Atoms and Molecules

Skill Tested : How to write a formula of compound

2. Which of the following is the correct hierarchy of classification groups?

(A) Class→kingdom→phylum (for animal)/
division(for plants) →genus→order→family→
species
(B) kingdom→phylum(for animal)/division(for
plants) → class→ family→ order→ genus→
species
(C) kingdom→phylum(for animal)/division(for
plants) → class→ order → family→ genus→
species
(D) kingdom→ phylum(for animal)/division(for
plants) → class→ order→ genus→ family→
species
(E) None of these

Chapter : Fundamental unit of life and tissues and
diversity in living organism

Skill Tested : Facts about classification groups

3. Select the value of g where $G=6.7 \times 10^{-11} \text{ N m}^2 \text{ kg}^{-2}$, $M=4 \times 10^{21} \text{ kg}$ and radius of the earth is $6.4 \times 10^4 \text{ m}$.

(A) $1 \times 10^2 \text{ m s}^{-2}$ (B) $0.654 \times 10^6 \text{ N}$
(C) $0.654 \times 10^2 \text{ N}$ (D) $2 \times 10^6 \text{ N}$
(E) None of these

Chapter : Gravitation

Skill Tested : Calculating the value of " g ".

4. Which of the following is the correct percentage of gases present in air?

(A) 58% nitrogen, 22% oxygen and 20% argon
(B) 58% nitrogen and 42% oxygen
(C) 78% argon and 22% oxygen
(D) 78% nitrogen and 21% oxygen
(E) None of these

Chapter : Matter in our surroundings and is matter
around us pure

Skill Tested : Composition of air.

5. How much energy is required to convert water to steam at 100°C ?

- (A) $22.24 \times 10^5 \text{ J/kg}$ (B) $3.34 \times 10^5 \text{ J/kg}$
 (C) $22.5 \times 10^5 \text{ J/kg}$ (D) $2.23 \times 10^5 \text{ J/kg}$
 (E) None of these

Chapter : Work and energy

Skill Tested : Energy in converting state of matter

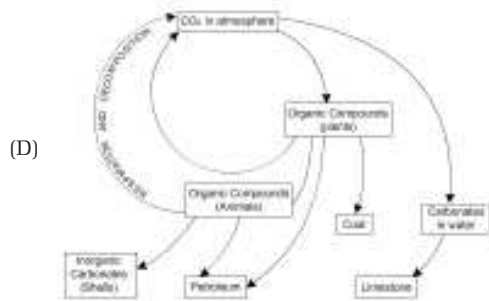
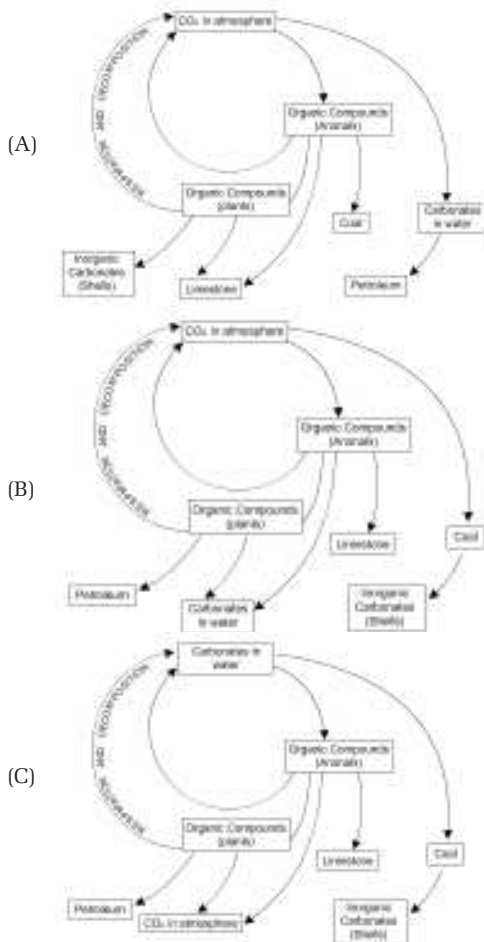
6. What is the acceleration of a train that starts from railway station and attains speed of 30m/s in 2 minutes?

- (A) $.0083 \text{ m/s}^2$ (B) $.5 \text{ m/s}^2$
 (C) $.67 \text{ m/s}^2$ (D) $.0067 \text{ m/s}^2$
 (E) None of these

Chapter : Motion & Force and Laws of Motion

Skill Tested : Calculating acceleration

7. Which of the following figure shows the correct carbon cycle in nature?



- (E) None of these

Chapter : Natural resources

Skill Tested : Understanding carbon cycle

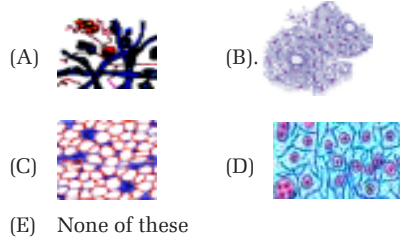
8. Which of the following is the hearing range for average human beings?

- (A) 20 Hz - 200 Hz (B) 20 Hz to 2000 Hz
 (C) 20 Hz to 20 kHz (D) 20 kHz to 200 kHz

Chapter : Sound

Skill Tested : Some facts about sound

9. Which of the following figures shows the compact bone types of connective tissues?



Chapter : The Fundamental Unit of Life & Tissues & Diversity in Living Organisms

Skill Tested : Understanding structure of tissues

10. Statement A: Cow is vacca and cowpox is vaccinia in latin.

Statement B: Hepatitis viruses cause jaundice and are transmitted through air.

- (A) Statement B is False and Statement A is True.
 (B) Statement A is False and Statement B is True.
 (C) Both, Statement A and Statement B are True.
 (D) Both, Statement A and Statement B are False.

Chapter : Why do we fall ill?

Skill Tested : Facts about various diseases

11. How many types of white blood cells are present in the human body?

- (A) 3 (B) 5
(C) 8 (D) 6
(E) None of these

Chapter : *The Fundamental Unit of Life & Tissues & Diversity in Living Organisms*

Skill Tested : *Facts about cells in our body*

12. Statement A: Ultrasonic sound is emitted by a bat and it is reflected back by an obstacle.

Statement B: Bats search out prey and fly in dark night by emitting and detecting reflections of ultrasonic waves.

- (A) Statement B is False and Statement A is True.
(B) Statement A is False and Statement B is True.
(C) Both, Statement A and Statement B are True.
(D) Both, Statement A and Statement B are False.

Chapter : *Sound*

Skill Tested : *Understanding ultrasonic sound and the organisms that use it*

13. Statement A: Hydrogen atom is made of electrons, protons and neutrons.

Statement B: Hydrogen atom is made up of only one electron and one proton.

- (A) Statement B is False and Statement A is True.
(B) Statement A is False and Statement B is True.
(C) Both, Statement A and Statement B are True.
(D) Both, Statement A and Statement B are False.

Chapter : *Atoms and Molecules & Structure of Atom*

Skill Tested : *Understanding structure of atoms*

14. Match the following:

Column A	Column B
1. Element	(A) copper
2. Metals	(B) fluorine
3. Compound	(C) water
4. Metalloid	(D) boron

(A) 1-C, 2-A, 3-D, 4-B

(B) 1-C, 2-A, 3-B, 4-D

(C) 1-B, 2-A, 3-C, 4-D

(D) 1-B, 2-D, 3-C, 4-a

(E) None of these

Chapter : *Matter in our surroundings and is matter around us pure*

Skill Tested : *Understanding elements, compounds, metals and non metals*

15. Match the following:

Column A	Column B
1. Protochordata	(A) warm-blooded animals
2. Echinodermata	(B) bilaterally symmetrical and triploblastic animals
3. Aves	(C) coldblooded animals
4. Reptilia	(D) exclusively free-living marine animals

(A) 1-B, 2-D, 3-A, 4-C

(B) 1-A, 2-D, 3-B, 4-C

(C) 1-D, 2-B, 3-A, 4-C

(D) 1-B, 2-A, 3-D, 4-C

(E) None of these

Chapter : *The Fundamental Unit of Life & Tissues & Diversity in Living Organisms*

Skill Tested : *Understanding characteristics of living things*

ANSWERS

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