

SAMPLE PAPER SYLLABUS 2024-25



8



SCIENCE OLYMPIAD

Total Questions : 50			Time : 1 hr.
PATTERN & MARKING SCHEME			
Section	(1) Logical Reasoning	(2) Science	(3) Achievers Section
No. of Questions	10	35	5
Marks per Ques.	1	1	3



Scan the QR code for more details

SYLLABUS

Section - 1: Verbal and Non-Verbal Reasoning.

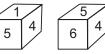
Section – 2: Crop Production and Management, Microorganisms, Coal and Petroleum, Combustion and Flame, Conservation of Plants and Animals, Reproduction and Endocrine System, Force and Pressure, Friction, Sound, Chemical Effects of Electric Current, Some Natural Phenomena, Light.

Section – 3: Higher Order Thinking Questions - Syllabus as per Section -2.

LOGICAL REASONING

 Three positions of a dice are shown below. What is the number opposite to 1?





- (A) 2
- (B) 3
- (C) 5
- (D) 6
- Select the correct water image of the given figure.





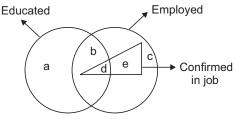








3. In the given Venn diagram, find the region representing persons who are educated and employed but not confirmed in job.



- (A) d
- (B) e
- (C) b
- (D) a, b

SCIENCE

- 4. Bees which are not carrying honey fly with a flapping frequency of 440 Hz while those which are carrying honey fly with a flapping frequency of 300 Hz. The sound made by bees which are not carrying honey has
 - (A) A lower pitch
 - (B) A higher pitch
 - (C) A smaller loudness
 - (D) A greater loudness.
- **5.** The pressure of the water near the bottom of the wall forming a dam does not depend on _____.
 - (A) The depth of the water

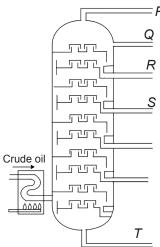
- (B) The cross-sectional area of the reservoir
- (C) Density of water
- (D) Atmospheric pressure
- **6.** Which of the following statements are correct?
 - Substance which undergoes spontaneous combustion have ignition temperature higher than the room temperature.
 - II. Respiration is a special combustion reaction at body temperature.
 - III. Formation of rust is an example of slow combustion.

- IV. Combustion is an exothermic reaction.
- (A) I and II only
- (B) II and IV only
- (C) I, II and IV only
- (D) II, III and IV only
- 7. Which of the following on reshuffling gives the term that refers to the process of sowing seeds manually by sprinkling them on soil by hand?

- (A) INLGTIL
- (B) GLNOPUIHG
- (C) ATNBRDOCAIGS (D) GIOWNWINN
- Which of the following groups represents the bacterial diseases?
 - (A) Cholera, Tuberculosis, Malaria, Measles
 - (B) Small pox, Tuberculosis, Malaria, Typhoid
 - (C) Cholera, Tuberculosis, Typhoid, Measles
 - (D) Cholera, Anthrax, Tuberculosis, Typhoid

ACHIEVERS SECTION

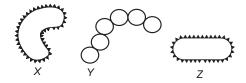
The given figure represents fractional distillation of petroleum.



Which of the following statements are correct regarding this process?

- I. P is used in LPG and condenses first.
- II. Q. R and S all are used as domestic fuels.
- III. The increasing order of boiling points is P < Q < R < S < T
- IV. Paraffin wax is obtained from *T*.
- (A) III and IV only

- (B) I and III only
- (C) II, III and IV only
- (D) I, III and IV only
- 10. Refer to the given figures of bacteria X, Y and Z and read the statements (i), (ii), (iii) and (iv) regarding them.



- Bacterium *X* can be causal organism of typhoid.
- (ii) Bacterium Y can cause a disease which disrupts proper exchange of gases.
- (iii) Bacterium Z can convert lactose sugar of milk into lactic acid.
- (iv) Bacterium X can be the causal organism of cholera.
 - Which of these statements are incorrect?
- (A) (i) only
- (B) (i) and (ii) only
- (C) (ii), (iii) and (iv) only
- (D) (i), (ii), (iii) and (iv)

SPACE FOR ROUGH WORK

ANSWERS