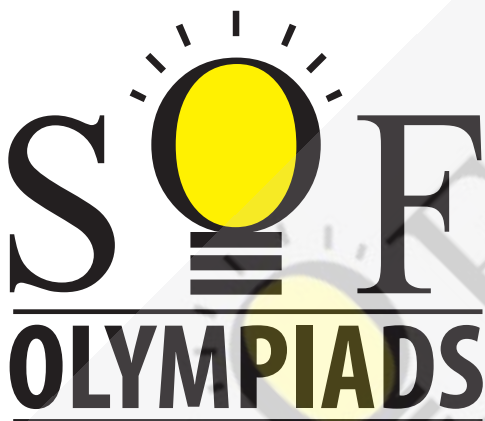


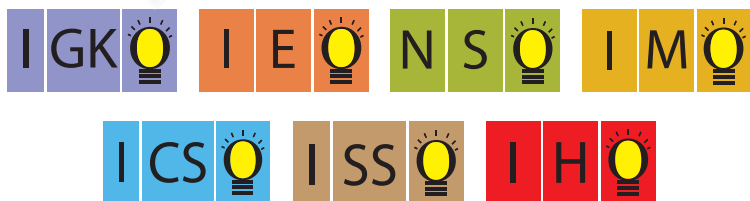
CLASS

9



Teacher Handbook

SYLLABUS 2025-26 **SAMPLE PAPER**





Important:
Applications
must reach us by
August 30,
2025.

THE WORLD'S BIGGEST OLYMPIADS



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Assessments

8
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About SOF Olympiads*

											
	Level 1										
Duration	60 Minutes										
Test Center	Your School										
Eligibility	All students										
Classes	1-10	1-12	1-12	1-12	1-10	3-10	3-10	3-10	11 & 12		
Type of Test	OBJECTIVE TYPE. MCQs - MULTIPLE CHOICE QUESTIONS (CLASSWISE NO. OF QUESTIONS ARE GIVEN BELOW)										
Classes 1-4	35	35	35	35	35	35	35	35	-		
Classes 5-12	50	50	50	50	50	50	50	50	50		
Sections	4	4	3	4	4	2/4/5	3	3	4		
	<ul style="list-style-type: none">• General Awareness• Current Affairs• Life Skills• Achievers Section	<ul style="list-style-type: none">• Word and Structure Knowledge• Reading• Spoken and Written Expression• Achievers Section	<ul style="list-style-type: none">For Classes 1-10• Logical Reasoning• Science• Achievers SectionFor Classes 11 & 12• Physics & Chemistry• Achievers Section• Mathematics or Biology	<ul style="list-style-type: none">For Classes 1-10• Logical Reasoning• Mathematical Reasoning• Everyday Mathematics• Achievers SectionFor Classes 11&12• Logical Reasoning• Mathematical Reasoning or Applied Mathematics• Everyday Mathematics• Achievers Section	<ul style="list-style-type: none">For Classes 1-5• Logical Reasoning• Computer Science• Information Technology• Achievers SectionFor Classes 6-10• Logical Reasoning• Computer Science• AI, Robotics and Information Technology• Achievers Section	<ul style="list-style-type: none">For Classes 3-6• Social Studies• Achievers SectionFor Classes 7 & 8• History• Geography• Social and Political Life• Achievers SectionFor Classes 9 & 10• History• Geography• Political Science• Economics• Achievers Section	<ul style="list-style-type: none">• शब्द और व्याकरण बोध• रचनात्मक बोध• मेधावी खंड	<ul style="list-style-type: none">• Economics• Business Studies• Accountancy• Achievers Section	<ul style="list-style-type: none">• Word and Structure Knowledge• Reading• Achievers Section	<ul style="list-style-type: none">For Classes 3-10• Science• Achievers SectionFor Classes 11 & 12• Physics & Chemistry• Achievers Section• Mathematical Reasoning or Applied Mathematics• Biology	<ul style="list-style-type: none">For Classes 3-10• Mathematics• Achievers SectionFor Classes 11 & 12• Mathematics• Mathematical Reasoning or Applied Mathematics• Achievers Section



SCHOOL AWARDS



	Principal			Teacher and Olympiad Incharge		
	Cash Award	Trophy	Certificate	Cash Award	Trophy	Certificate
School	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
District	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Zonal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
International	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

SOF SCHOOL ACADEMIC PROGRESS REPORT FOR EVERY SCHOOL

<input checked="" type="checkbox"/> Annual SOF Gifts	<input checked="" type="checkbox"/> New Year SOF Gifts
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Scholarships

SOF's dedicated scholarships, including the Girl Child Scholarship Scheme, Defence Services Academic excellence Scholarship and Academic Excellence Scholarship, demonstrate its commitment to fostering inclusivity and supporting education for all.



SOF
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**Girl Child
Scholarship
Scheme
2025-26**



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SOF
DSAS

**Defence Services
Academic excellence
Scholarship
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SOF
AES

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Scholarship
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Scholarships & Awards*

The Science Olympiad Foundation (SOF) is committed to nurturing young talent and recognizing excellence in academics and beyond. Through its prestigious Olympiads, SOF not only challenges students to reach their highest potential but also acknowledges their achievements with an extensive range of awards, scholarships and recognitions.



Scan the QR code for more details

Level 1 - Scholarships and Awards

Level	Recognition
Level 1	<ul style="list-style-type: none"> All participating students receive a Certificate of Participation*. All participating students receive a detailed SPR - Student Progress Report. Gold Medal of Distinction and Certificate of Distinction for top 25 Zonal toppers per class per exam*. Gold Medal of Excellence for top 10% students from each class. SAPR - School Academic Progress Report for school management.



Final Level - Scholarships and Awards

Level	Category	Award	Additional Recognition	Numbers
Level 2 (IEO, NSO, IMO)	Top 3 International Rankers	₹50,000, ₹25,000 and ₹10,000 for ranks 1, 2 and 3 respectively	International Medals: Gold, Silver and Bronze Certificate of Outstanding Performance	222 Winners
Level 1 (IGKO, ICSSO, ISSO, IHO, ICO)	Top 3 Zonal Rankers	₹5,000, ₹2,500 and ₹1,000 for ranks 1, 2 and 3 respectively	Zonal Medals: Gold, Silver and Bronze Certificate of Zonal Excellence	5,772 Winners
Level 1 (IEO, NSO, IMO) Class 1 & 2	Zonal Rankers 4 to 10	Gift worth ₹500 each	Certificate of Zonal Excellence	13,468 Winners
	Zonal Rankers 11 to 25		Certificate of Zonal Excellence	28,860 Winners
Level 2 (IEO, NSO, IMO)	Zonal Rankers 26 onwards		Merit Certificate	

Recognition for Visionary Leaders (School Principals) & Visionary Educators (Teachers)



Best Principal (International) Citation + Trophy + ₹25,000

Best Principal (Zonal) Citation + Trophy + ₹10,000

Best Principal (District) Citation + Trophy + ₹5,100

Best Teacher (International) Citation + Trophy + ₹10,000

Best Teacher (Zonal) Citation + Trophy + ₹5,000

Best Teacher (District) Citation + Trophy + ₹1,000

* For further details, please visit www.sofworld.org **Note:** TDS as applicable will be deducted.

Guidelines



Scan the QR code to
get important updates

1. Medium of the Olympiads

All SOF Olympiads will be conducted in English, except IHO, which will be conducted in Hindi.

2. School Codes

Each school receives a unique 6-digit code from SOF when it registers for the Olympiads (different from CBSE or any other education board affiliation code). Schools should contact the SOF Head Office in Gurugram if they do not know their code.

3. Registration Procedure

Schools must complete all columns of the SRF (School Registration Form) and SRS (Student Registration Sheet) accurately and legibly and submit them before the due date. Schools are requested to display the enclosed posters on noticeboards, classrooms, or other prominent places. Students must register through their schools only. Individual or direct registrations will not be accepted.

Schools may register in one of the following ways:

- Fill out and courier the registration forms.
- Fill out, scan, and email the registration forms.
- Register online at ors.sofworld.org.

4. Sample Questions & Study Material

Sample questions and study material for each class are included with the prospectus. They can also be downloaded from the SOF website: www.sofworld.org.

5. Exam Format

All questions are multiple-choice questions (MCQ). There is no negative marking. Schools must choose one available date to conduct the exam. They must conduct it strictly on that chosen date only. Different sets of question papers are provided for each date, and non-adherence to the chosen date may lead to cancellation of the exam.

6. OMR Sheets

Students must fill in all columns of the OMR sheet correctly. Any incorrect or incomplete information may lead to disqualification from ranking. A sample OMR sheet is available on the SOF website and is also attached with the prospectus.

7. After the Exam

Answer sheets should be returned to the SOF Head Office next day of the exam. Schools must ensure the answer sheets reach the SOF Head Office within 7 days of the exam date. SOF will not evaluate any answer sheets received beyond the stipulated date.

8. Result

Results are typically declared about 8 weeks after the answer sheets are received. They will be sent to the respective schools and will also be uploaded on the SOF website.

LEVEL 1 SOF OLYMPIADS

1. Examination Centre

All Level 1 Olympiads will be conducted in the students' own schools.

2. Time of the Olympiads

The Level 1 Olympiads are held during school hours.

3. Criteria for Level 1

All students (as per their school's registration) in the relevant classes for the respective Olympiads.

Note : Some exams are single-level only: IGKO, ICSSO, ISSO, IHO and ICO. Students appearing for these exams will not have a Level 2 exam.

LEVEL 2 SOF OLYMPIADS

1. Applicable Olympiads

Level 2 Olympiads are conducted for IEO, NSO, and IMO for classes 3 to 12. IGKO, ICSSO, ISSO, IHO and ICO do not have a Level 2 (they are single-level exams).

2. Date and Examination Centre

The Level 2 exam is scheduled for 8th February, 2026 tentatively. It will be conducted at centers finalized by SOF (not in the students' own schools).

3. No Registration Fee

No separate registration fee is charged for the Level 2 exams.

4. Qualification Criteria

- Top 5% of students (class-wise) who appear in the Level 1 exam, internationally.
- Top 25 rank holders from each zone and each class.
- Class topper (where at least 10 students from a class register for the exam and the topper scores at least 50% marks). In the case of multiple sections in a class, the topper with the highest marks across all sections qualifies.

5. Admit Cards

Admit Cards for the Level 2 Olympiads will be dispatched to schools or uploaded on the SOF website (www.sofworld.org) before the Level 2 exam. The Roll Number slip from the Level 1 exam may also serve as the admit card for Level 2 for qualifying students.

Total Questions : 50

Time : 1 hr.

PATTERN & MARKING SCHEME

Section	(1) General Awareness	(2) Current Affairs	(3) Life Skills	(4) Achievers Section
No. of Questions	30	10	5	5
Marks per Ques.	1	1	1	3

SYLLABUS

Plants and Animals, Our Environment, Science and Technology, India and the World, Social Studies, Language, Literature and Media, Sports, Quantitative Aptitude and Reasoning, Current Affairs, Life Skills (Empathy, Effective Communication, Critical Thinking, Creative Thinking, Coping with Stress, Decision Making, Problem Solving, Interpersonal Skills, Managing Emotions, Self-awareness).

Achievers Section : Higher Order Thinking Questions from the above given Syllabus.


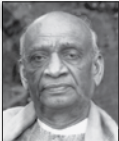

1. This plant is commonly called as 'Jumping Cholla' due to its tendency to detach itself easily from the main plant when touched lightly and jump onto a passer-by. Which plant is this?

(A) *Cylindropuntia fulgida* (B) *Amorphophallus titanum*
(C) *Nepenthes* (D) *Utricularia macrorhiza*

2. Which of the following elements is not a metalloid?

(A) Antimony (B) Silicon (C) Germanium (D) Tungsten

3. Who among the following is the founder of Arya Samaj?

(A)  (B)  (C)  (D) None of these

Swami Dayanand Saraswati Sardar Vallabhbhai Patel Raja Ram Mohan Roy

4. Select the incorrect match.

(A) Pampore – Saffron Capital of India
(B) Bengaluru – Silicon Valley of India
(C) Ahmedabad – The Manchester of India
(D) Madhya Pradesh – Spice Garden of India

5. Amrita Pritam's work 'The Revenue Stamp' is a/an _____.

(A) Novel (B) Autobiography (C) Poem (D) Biography

6. Which of the following is the 24 hours English Business news channel in India?

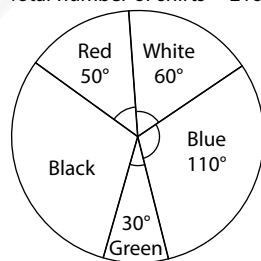
(A)  (B)  (C)  (D) None of these

7. Which city was the host of *Kho Kho* World Cup 2025?
 (A) Chennai (B) Kolkata (C) Hyderabad (D) New Delhi
8. Select the correct option regarding do's and don'ts of group discussion etiquettes.
- | Do's | Don'ts |
|----------------------------------|---------------------|
| (A) Lose your temper | Be open-minded |
| (B) Listen to others | Argue unnecessarily |
| (C) Talk about irrelevant points | Listen to others |
| (D) Use impolite tone | Use moderate tone |

ACHIEVERS SECTION

9. Read the given statements and select the correct ones.
- 'Ever Onward' is the motto of the Asian Games which was designed and proposed by Guru Dutt Sondhi.
 - LeBron James is the leading NBA scorer of all times.
 - Swaythling Cup is associated with golf and is the oldest golf tournament in the world.
 - The Jesse Owens Award is an annual award given to the best track and field athlete by USA Track and Field.
 - The headquarters of the International Table Tennis Federation (ITTF) is in Lausanne, Switzerland.
- (A) (i), (ii) and (v) only (B) (i), (ii), (iv) and (v) only
 (C) (iii), (iv) and (v) only (D) (i), (ii), (iii) and (iv) only
10. The given pie chart shows the different colors of shirts in a store. Study the given pie chart carefully and answer the following questions.
- What percentage of total shirts are white in the store?
 - What is the average of number of red, black and blue shirts in the store?

Total number of shirts = 2160



- | (i) | (ii) |
|-----------------------|------|
| (A) $15\frac{2}{3}\%$ | 450 |
| (B) $16\frac{2}{3}\%$ | 540 |
| (C) $15\frac{1}{3}\%$ | 600 |
| (D) $16\frac{2}{3}\%$ | 420 |

ANSWER KEY

1. (A) 2. (D) 3. (A) 4. (D) 5. (B) 6. (C) 7. (D) 8. (B) 9. (B) 10. (B)

Total Questions : 50

Time : 1 hr.

PATTERN & MARKING SCHEME

Section	(1) Word and Structure Knowledge	(2) Reading	(3) Spoken and Written Expression	(4) Achievers Section
No. of Questions	30	10	5	5
Marks per Ques.	1	1	1	3

SYLLABUS

Section – 1 : Synonyms, Antonyms, Analogies and Spellings, One word, Word order, Nouns, Pronouns, Verbs, Adverbs, Adjectives, Articles, Prepositions, Conjunctions, Punctuations, Jumbled words, Voices, Concord, Question forms, Tenses, Conditionals, Modals, Reported speech. Collocations, Phrasal verbs, Idioms, Homonyms and homophones, Words related to social cause, Travel, Workplace, etc.

Section – 2 : Search for and retrieve information from various text types like Flyers, Classifieds, Dictionaries, etc., Understand information presented in instruction manual format, Message format and others. Acquire broad understanding of and look for specific information in longer texts like editorials, Essays, etc.

Section – 3 : Ability to understand situation-based variations in functions like Giving advice, Stating preferences, Discussing probability, Making an offer, etc.

Section – 4 : Higher Order Thinking Questions - Syllabus as per Sections 1, 2 and 3.

WORD AND STRUCTURE KNOWLEDGE

- Choose the correct option to fill in the blank.
I have _____ screened every participating athlete to make sure they are not at the risk of _____ doping.
(A) feverishly, deliberately (B) slovenly, rigged
(C) meticulously, inadvertent (D) intently, vigilantly
- Choose the correct synonym of the given word.
Intimidate
(A) Frighten (B) Help
(C) Intimate (D) Intricate
- Choose the correct antonym of the given word.
Conditioning
(A) Influencing (B) Fluent
(C) Continuing (D) Confusing
- Choose the option with correct spelling.
How do you spell the word that means 'to integrate'?
(A) Sinchronize (B) Synchronize
(C) Synchonise (D) Synchronice

READING

Directions (For Q. No. 5 and 6) : Read the passage and answer the questions that follow.

Perseverance is about as important to achievement as gasoline is to driving a car. Sure, there will be times when you feel like you're spinning your wheels, but you'll always get out of the rut with genuine perseverance. Without it, you won't even be able to start your engine.

The opposite of perseverance is procrastination. Perseverance means you never quit. Procrastination usually means you never get started, although the inability to finish something is also a form of procrastination.

Ask people why they procrastinate and you'll often hear something like, "I'm a perfectionist. Everything has to be just right before I can get down to work. No distractions, not too much noise, no telephone calls interrupting me, and, of course, I have to be feeling well physically, too. I can't work when I have a headache."

5. Perseverance is important for success because it _____.
(A) is a form of gasoline (B) is important for driving a car
(C) keeps you motivated (D) gives you rest
6. What is the meaning of procrastination?
(A) You never get started. (B) You never quit.
(C) You never accept defeat. (D) You always win.

SPOKEN AND WRITTEN EXPRESSION

Directions (For Q. No. 7 and 8) : Choose the correct option to complete each conversation.

7. Ritik : I am going to be the class president. I am pleased _____, mom.
Mother : I am stoked to hear this, dear.
(A) by hunch (B) at crunch (C) as punch (D) in bunch
8. Olivia : Why does Matthew always seem so irked?
Ethan : I'm not sure, but he _____.
(A) throws caution to the wind (B) flies off the handle
(C) kicks the bucket (D) throws in the towel

ACHIEVERS SECTION

9. Choose the correct option to fill in the blank.
The artist's final masterpiece appeared to possess a _____ texture and seemingly soft surface.
(A) flippant (B) flocculent (C) flukish (D) flump
10. Choose the correct synonym of the given word.
Astute
(A) Inspire (B) Naive (C) Adroit (D) Imbecile

ANSWER KEY

1. (C) 2. (A) 3. (D) 4. (B) 5. (C) 6. (A) 7. (C) 8. (B) 9. (B) 10. (C)

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

SYLLABUS

Section – 1 : Verbal and Non-Verbal Reasoning.

Section – 2 : Motion, Force and Laws of Motion, Gravitation, Work and Energy, Sound, Matter in Our Surroundings, Is Matter Around Us Pure, Atoms and Molecules, Structure of the Atom, Cell-The Fundamental Unit of Life, Tissues, Natural Resources, Improvement in Food Resources.

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

LOGICAL REASONING

1. Which of the following Venn diagrams best represents the relationship amongst, "Soldiers, Women and Indians"?



2. Select the odd one out.

(A) FRJV

(B) MDQH

(C) TPXS

(D) CJGN

3. Select the correct water image of the given word.

INSTRUMENTS

(A) SNIJRTNUSNI

(B) INJRTNUSNI

(C) 2TNIJRTNUSNI

(D) 2TNIJRTNUSNI

SCIENCE

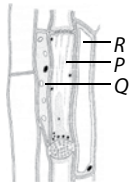
4. Identify the labelled parts *P*, *Q* and *R* in the given figure and select the incorrect statement regarding them.

(A) The end wall of *P* is perforated with numerous pores and it does not have nucleus.

(B) *Q* is metabolically active cell that helps in conduction of food material.

(C) *R* is living parenchymatous cell that helps in the storage of food.

(D) *P*, when mature, is thick-walled and elongated containing dense cytoplasm and large elongated nucleus.



5. Which of the following is not a man-made cause of air pollution?

(A) Burning of fossil fuels

(B) Deforestation

(C) Pollen grains

(D) Emission of aerosols from jet airplanes

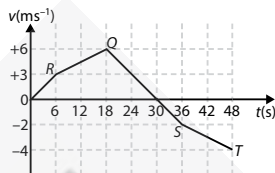
6. Two particles M and N have the composition as shown in the table :

Particle	Number of electrons	Number of neutrons	Number of protons
M	10	12	11
N	10	12	12

Which of the following statements is correct about the given particles?

- (A) Both M and N are cations.
 (B) Nucleon numbers of M and N are 23 and 24 respectively.
 (C) Particle M is Na^+ and particle N is Mg^{2+} .
 (D) All of these.

7. The motion of a particle in a straight line is depicted through the given velocity (v)- time (t) graph.



Which of the following statement(s) is/are correct about the motion of the particle?

- (i) The distance travelled by particle in duration 6s to 18s is greater than 50 m.
 (ii) The acceleration of the particle in duration $t = 18\text{s}$ to $t = 30\text{s}$ is -0.5 ms^{-2} .
 (iii) The displacement of the particle during $t = 10\text{s}$ to $t = 25\text{s}$ is less than the distance travelled by particle in the same span.
 (A) (i) and (ii) only (B) (ii) only (C) (iii) only (D) (i), (ii) and (iii)

8. Mohan is driving a car with velocity v on the road and suddenly sees a broad wall in front of him at a distance r as shown in the given figure.

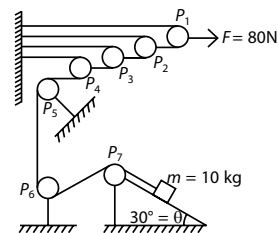


He has two alternatives either to apply brakes instantly or take a sharp turn. Which one of the following correctly represents the course of action, taken by Mohan and reason behind it to avoid direct strike with the wall?

- (A) Mohan should take a sharp turn as it will be easier for the moving car to turn and avoid collision because turning will require less amount of force to be applied.
 (B) Mohan should apply brakes instantly as it will require less amount of force to be applied.
 (C) Both applying brake and taking a sharp turn, will require equal amount of force to be applied.
 (D) It is not possible to avoid collision in any case.

ACHIEVERS SECTION

9. In the given figure, all the pulleys and strings are massless and all the surfaces are frictionless. A small block of mass m is placed on a fixed wedge. What is the acceleration of the block?



- (A) 4.5 ms^{-2} down the incline
 (B) 4.5 ms^{-2} up the incline
 (C) 5 ms^{-2} down the incline
 (D) Zero

10. Plant cell does not burst in a hypotonic solution because _____.

- (i) Its cell sap is more concentrated (ii) Its cell wall resists bursting
 (iii) Its cell sap is rich in cellulose (iv) It does not have lysosomes
 (A) (i) only (B) (ii) only (C) (i) and (iii) only (D) (i), (ii) and (iv) only

ANSWER KEY

1. (A) 2. (C) 3. (B) 4. (D) 5. (C) 6. (D) 7. (A) 8. (B) 9. (A) 10. (B)

Total Questions : 50

Time : 1 hr.

PATTERN & MARKING SCHEME

Section	(1) Logical Reasoning	(2) Mathematical Reasoning	(3) Everyday Mathematics	(4) Achievers Section
No. of Questions	15	20	10	5
Marks per Ques.	1	1	1	3

SYLLABUS

Section – 1 : Verbal and Non-Verbal Reasoning.




Section – 2 : Number Systems, Polynomials, Coordinate Geometry, Linear Equations in Two Variables, Introduction to Euclid's Geometry, Lines and Angles, Triangles, Quadrilaterals, Circles, Heron's Formula, Surface Areas and Volumes, Statistics.

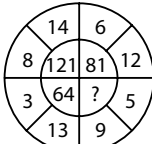
Section – 3 : The syllabus of this section will be based on the syllabus of Mathematical Reasoning and Quantitative Aptitude.

Section – 4 : Higher Order Thinking Questions - Syllabus as per Section – 2.

LOGICAL REASONING

- Three different positions of a dice are shown here. Select a number from the options that will replace the question mark (?) in the given dice.
 (A) 2 (B) 4 (C) 5 (D) 1




- In a certain code language, 'health is wealth' is written as 'sol liv mah', 'smile good health' is written as 'tim sol gil' and 'cry is not smile' is written as 'mah vil tan gil'. How will 'wealth' be written in the same code language?
 (A) sol (B) liv (C) mah (D) gil
- Find the missing number in the given figure.
 (A) 64
 (B) 49
 (C) 100
 (D) 72



MATHEMATICAL REASONING

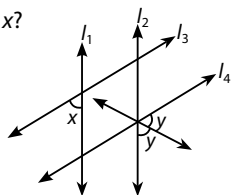
- Which of the following equations satisfies the data in the given table?

x	-1	0	1	2
y	-3	-1	1	3

- (A) $y = x - 2$ (B) $y = 2x - 1$ (C) $y = 3x - 3$ (D) $y = x + 1$

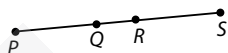
5. If $l_1 \parallel l_2$ and $l_3 \parallel l_4$, then what is the value of y in terms of x ?

- (A) $90^\circ + x$
 (B) $90^\circ + 2x$
 (C) $90^\circ - \frac{x}{2}$
 (D) $90^\circ - 2x$



6. In the given figure, if $PQ = RS$, then which Euclid's axiom is used to prove $PR = QS$?

- (A) The whole is greater than the part.
 (B) Things which are double of the same things are equal to one another.
 (C) If equals are added to equals, the wholes are equal.
 (D) Things which coincide with one another are equal to one another.



EVERYDAY MATHEMATICS

7. Vikas has $\text{₹}(x^3 + 2ax + b)$, with this money he can buy exactly $(x - 1)$ jeans or $(x + 1)$ shirts with no money left. How much money Vikas has, if $x = 4$?
- (A) ₹ 80 (B) ₹ 120 (C) ₹ 30 (D) ₹ 60
8. A conical tent is to accommodate 11 persons. Each person must have 4 sq. metres of the space on the ground and 20 cubic metres of air to breathe. Find the height of the cone.
- (A) 11 m (B) 16 m (C) 14 m (D) 15 m

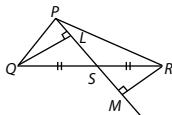
ACHIEVERS SECTION

9. Read the given statements carefully and select the correct option.

Statement-I : The $\frac{p}{q}$ form of $15.\overline{712} + 4.\overline{32}$ is $\frac{389}{90}$.

Statement-II : The value of $\frac{\sqrt[3]{0.125} \times \sqrt[5]{(0.00032)^{-2}}}{\sqrt[5]{(0.00243)^{-3}} \times (27)^{2/3}}$ is $\frac{3}{80}$.

- (A) Both Statement-I and Statement-II are true.
 (B) Both Statement-I and Statement-II are false.
 (C) Statement-I is true but Statement-II is false.
 (D) Statement-I is false but Statement-II is true.
10. Which of the following is incorrect?
- (A) In triangles ABC and RQP , if $AB = AC$, $\angle C = \angle P$ and $\angle B = \angle Q$, then the two triangles are isosceles and congruent.
 (B) The perpendiculars drawn from the vertices of equal angles of an isosceles triangle to the opposite sides are equal.
 (C) In the adjoining figure, if PS is a median and QL & RM are perpendiculars drawn from Q and R respectively on PS and PS produced, then $QL = RM$.
 (D) None of these



ANSWER KEY

1. (B) 2. (B) 3. (B) 4. (B) 5. (C) 6. (C) 7. (D) 8. (D) 9. (D) 10. (A)

Total Questions : 50

Time : 1 hr.

PATTERN & MARKING SCHEME

Section	(1) Logical Reasoning	(2) Computer Science	(3) AI, Robotics and Information Technology	(4) Achievers Section
No. of Questions	10	30	5	5
Marks per Ques.	1	1	1	3

SYLLABUS

Section – 1 : Verbal and Non-Verbal Reasoning.






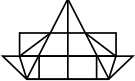
Section – 2 : Fundamentals of Computer (Hardware, Software, I/O Devices, Animation & Multimedia, Memory and Storage Devices, Number System(binary to decimal and decimal to binary conversion)), Introduction to Visual Basic, HTML & CSS (Links, Anchors and Table tags and Some More Advanced Tags), MS-Word, MS-Excel (Formula Auditing, Data Tools, Protecting and Sharing workbooks/worksheets, Working with cell range), MS-Access, MS-PowerPoint, Networking, Cyber Safety, Operating Systems (Types-Interactive (GUI based), Real Time and Distributed, Commonly used OS), Using Windows 11, Programming in Scratch, Introduction to Python 3.13 (as of December 2024).

Section – 3 : AI, Robotics, IT Gadgets, Devices, Apps, Computerization, and other Developments in the Field of IT.

Section – 4 : Higher Order Thinking Questions - Syllabus as per Sections 2 and 3.

Questions are based on Windows 11 and MS-Office 2016.

LOGICAL REASONING

- Select a figure from the options which is exactly embedded in the given figure as one of its parts.
(A)  (B)  (C)  (D)  
- Find the number of triangles formed in the given figure.
(A) 18 (B) 19
(C) 20 (D) More than 20 
- There is a certain relationship between the pair of terms on the either side of :: Identify the relationship between the given pair and find the missing term.
HWTk : SRGF :: PSEN : ?
(A) KNVI (B) KIVM (C) KXJI (D) KNVJ

COMPUTER SCIENCE

- Which of the following options can be included in the multimedia?
(i) Text (ii) Sound (iii) Animation
(iv) Videos (v) Graphics
(A) (i), (iii) and (v) only (B) (ii), (iii) and (iv) only
(C) (ii), (iv) and (v) only (D) (i), (ii), (iii), (iv) and (v)

5. Identify the following networking device.

- The main function of this device is to regenerate an incoming signal from the sender before transmitting it to the receiver.
- It can extend the range of the network by boosting the signal and reducing the error and loss of data.

(A) Repeater (B) Bridge (C) Switch (D) Router

6. What would be the output of the following Python program?




```
X = 8
X = "Computer Science"
print(X)
```

(A) 8 Computer (B) Computer Science
(C) 8, ComputerScience (D) 8

AI, ROBOTICS AND INFORMATION TECHNOLOGY

7. Identify the following .

- It is an online, cloud-based photo storage system released by Google in 2015.
- It allows users to upload photos and videos that can be accessed and edited on multiple platforms using a Google account.

(A)  (B)  (C)  (D) 

8. In AI, _____ are loosely modelled after how neurons in the human brain behave and they are able to extract data features automatically without needing the input of the programmer.

(A) Neural networks (B) Problem scoping
(C) Data exploration (D) Data acquisition

ACHIEVERS SECTION

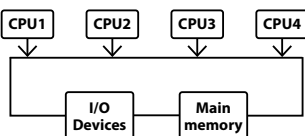
9. Identify the following:

- It acts as an entry node for other network nodes.
- It connects two dissimilar networks.
- It is also called as a proxy server.

(A) Router (B) Bridge (C) Gateway (D) Switch

10. Select the incorrect statement about the type of operating system whose diagram is depicted in the given image.

- (A) If one processor fails in such OS, then execution of processes can be done with another processor.
- (B) Such OS increases the throughput of the system.
- (C) Computers installed with such kind of OS, runs very slow.
- (D) UNIX and LINUX are examples of such OS.



ANSWER KEY

1. (C) 2. (D) 3. (A) 4. (D) 5. (A) 6. (B) 7. (B) 8. (A) 9. (C) 10. (C)

Total Questions : 50

Time : 1 hr.

PATTERN & MARKING SCHEME

Section	(1) History	(2) Geography	(3) Political Science	(4) Economics	(5) Achievers Section
No. of Questions	15	10	10	10	5
Marks per Ques.	1	1	1	1	3

SYLLABUS

Section – 1 : History – The French Revolution, Socialism in Europe and the Russian Revolution, Nazism and the Rise of Hitler, Forest Society and Pastoralists in the Modern World

Section – 2 : Geography – India – Physical Features and Climate, Drainage, Natural Vegetation and Wildlife, Population

Section – 3 : Political Science – What is Democracy? Why Democracy?, Constitutional Design and Democratic Rights, Elections and Working of Institutions

Section – 4 : Economics – The Story of Village Palampur, People as Resource, Poverty and Food Security in India

Section – 5 : Higher Order Thinking Questions - Syllabus as per Section – 1, 2, 3 & 4.

- When did the representatives of the Third Estate declared themselves as a 'National Assembly'?
(A) 12th June, 1788 (B) 20th June, 1789 (C) 12th July, 1788 (D) 20th July, 1789
- Which of the following statements are correct regarding the liberal social group?
(i) They advocated democratic form of the Government.
(ii) They wanted a nation which tolerated all religions.
(iii) They favoured voting rights for all including women.
(iv) They opposed the powers enjoyed by most of the dynastic rulers in the Europe.
(A) (i) and (iii) only (B) (ii) and (iv) only
(C) (i), (ii) and (iv) only (D) (i), (ii), (iii) and (iv)
- The colonial power in Indonesia were the _____.
(A) Dutch (B) French (C) British (D) Portuguese
- Arrange the following tributaries of Ganga from East to West and select the correct option.
(i) Ghaghara (ii) Kosi (iii) Gandak (iv) Yamuna
(A) (i) → (ii) → (iii) → (iv) (B) (ii) → (iii) → (i) → (iv)
(C) (ii) → (iv) → (iii) → (i) (D) (iv) → (iii) → (i) → (ii)
- Which of the following terms is used for plants which are presently part of natural vegetation but have originally come to India from abroad?
(A) Indigenous plants (B) Endemic plants
(C) Endangered plants (D) Exotic plants

6. In August 2002, Pervez Musharraf issued a 'Legal Framework Order' that amended the Constitution of Pakistan. What could the President of Pakistan do according to this order?
- (A) Dismiss the national and provincial assemblies
(B) Appoint the members of the national assembly
(C) Amend the constitution on his own
(D) Form councils to control military rulers
7. Which Fundamental Right mentions the provision that human trafficking is a punishable offence under the Constitution of India?
- (A) Right against Exploitation (B) Right to Freedom
(C) Right to Equality (D) Right to Constitutional Remedies
8. X is an important poverty alleviation programme which was launched by Government of India in 1999. The aim of this programme is to assist poor families in rising above the poverty line by organising them into self-help groups by providing them bank credit and government subsidies. Identify X.
- (A) *Pradhan Mantri Mudra Yojana*
(B) *Swarnajayanti Gram Swarozgar Yojana*
(C) Rural Employment Generation Programme
(D) *Antyodaya Anna Yojana*

ACHIEVERS SECTION

9. Which of the following statements regarding Maasai are correct?
- (i) The Maasai lost about 60 percent of their pre-colonial lands during the late nineteenth century.
(ii) They were confined to an arid zone with uncertain rainfall and poor pastures.
(iii) The word 'Maasai' is derived from the word 'Maa' which means 'my land'.
(iv) In 1865, Maasailand was cut into half with an international boundary between British Kenya and Russian Tanganyika.
- (A) (i) and (iv) only (B) (i) and (ii) only
(C) (ii), (iii) and (iv) only (D) (i), (ii), (iii) and (iv)
10. Match column I with column II and select correct option from the given codes.

Column I (River)		Column II (Place of Origin)	
(i) Kaveri		(a) Mahabaleshwar	
(ii) Tapi		(b) Satpura ranges	
(iii) Krishna		(c) Brahmagiri range	
(iv) Mahanadi		(d) Highlands of Chhattisgarh	
(i)	(ii)	(iii)	(iv)
(A) (d)	(c)	(b)	(a)
(B) (c)	(a)	(b)	(d)
(C) (c)	(b)	(a)	(d)
(D) (a)	(b)	(c)	(d)

ANSWER KEY

1. (B) 2. (B) 3. (A) 4. (B) 5. (D) 6. (A) 7. (A) 8. (B) 9. (B) 10. (C)

कुल प्रश्न : 50

समय : 1 घंटा

पैटर्न तथा अंक योजना			
खंड	(1) शब्द और व्याकरण बोध	(2) रचनात्मक बोध	(3) मेधावी खंड
प्रश्नों की संख्या	35	10	5
अंक प्रति प्रश्न	1	1	3

पाठ्यक्रम

खंड-1: भाषा-विचार, वर्ण-विचार, शब्द-विचार, संधि एवं समास, उपसर्ग एवं प्रत्यय, विकारी शब्द, काल एवं कारक, लिंग एवं वचन, अविकारी शब्द, वाच्य, वाक्य-रचना एवं विराम-चिह्न, पदबंध, अलंकार, भारतीय साहित्य एवं संस्कृति

खंड-2: अपठित गद्यांश, अपठित पद्यांश, मुहावरे एवं लोकोक्तियाँ

खंड-3: उच्चतर क्रम सोच कौशल आधारित प्रश्न- खंड 1 और 2 के पाठ्यक्रम के अनुसार

शब्द और व्याकरण बोध

- ‘सागर-सा गंभीर हृदय हो, गिरी-सा ऊँचा हो जिसका मन।’ उपरोक्त पंक्ति में _____ अलंकार है।
(क) रूपक (ख) उपमा (ग) श्लेष (घ) यमक
- दिए गए वाक्य को कर्तृवाच्य में बदलिए—
मोहन से रामायण पढ़ी जाती है।
(क) मोहन के द्वारा रामायण पढ़ी गई। (ख) मोहन से रामायण पढ़ी जा रही है।
(ग) मोहन से रामायण पढ़ी गई। (घ) मोहन रामायण पढ़ता है।
- दिए गए वाक्य के रेखांकित वाक्यांश में कौन-सा पदबंध है?
हस्तिनापुर के राजा पांडु की दो रानियाँ थीं।
(क) क्रियाविशेषण पदबंध (ख) सर्वनाम पदबंध
(ग) विशेषण पदबंध (घ) संज्ञा पदबंध
- ‘ओजस्वी’ शब्द का उचित स्त्रीलिंग है—
(क) ओजस्विनी (ख) ओजस्विनि (ग) ओजस्वीनी (घ) ओजस्विता
- नवरोज _____ धर्म के लोगों का प्रमुख त्योहार है।
(क) सिक्ख (ख) पारसी (ग) ईसाई (घ) इस्लाम
- निम्नलिखित वाक्यों में से सही विराम-चिह्न युक्त वाक्य का चयन कीजिए—
(क) अरे, तुम इतनी जल्दी उठ गए। (ख) अरे? तुम इतनी जल्दी उठ गए।
(ग) अरे: तुम इतनी जल्दी उठ गए। (घ) अरे! तुम इतनी जल्दी उठ गए।

रचनात्मक बोध

निम्नलिखित पद्यांश को पढ़कर प्रश्न संख्या 7 और 8 के उत्तर दीजिए—
छोड़ो मत अपनी आन, सीस कट जाए,
मत झुको अनय पर, भले व्योम फट जाए।

दो बार नहीं यमराज कंठ धरता है,
मरता है जो, एक बार ही मरता है।
तुम स्वयं मरण के मुख पर चरण धरो रे,
जीना हो तो मरने से नहीं डरो रे।
स्वातंत्र्य जाति की लगन, व्यक्ति की धुन है,
बाहरी वस्तु यह नहीं, भीतरी गुण है।
नत हुए बिना जो, अशनि-घात सहती है,
स्वाधीन जगत में वही जाति रहती है।
वीरत्व छोड़ मत पर का चरण गहो रे,
जो पड़े आन खुद ही सब आग सहो रे।

7. 'यमराज दो बार कंठ नहीं धरता है।' इस पंक्ति का अर्थ है—

- (क) यमराज दो कंठ धारण नहीं करता है।
(ख) यमराज दो बार गला पकड़ता है।
(ग) यमराज एक बार ही प्राण हरता है अर्थात् मनुष्य की मृत्यु एक बार ही होती है।
(घ) यमराज को मृत्यु का देवता कहा जाता है।

8. 'वीरत्व' कौन-सी संज्ञा है?

- (क) व्यक्तिवाचक संज्ञा (ख) जातिवाचक संज्ञा
(ग) भाववाचक संज्ञा (घ) द्रव्यवाचक संज्ञा

मेधावी खंड

9. निम्नलिखित वर्णों को उनके उच्चारण स्थान के आधार पर सुमेलित कर उचित विकल्प का चयन कीजिए—

- (अ) च, छ (i) ओष्ठ्य
(ब) क, ख (ii) तालव्य
(स) प, फ (iii) कंठ्य
(द) न, म (iv) नासिक्य
(क) (अ)-(iv), (ब)-(iii), (स)-(ii), (द)-(i)
(ख) (अ)-(ii), (ब)-(i), (स)-(iii), (द)-(iv)
(ग) (अ)-(i), (ब)-(ii), (स)-(iii), (द)-(iv)
(घ) (अ)-(ii), (ब)-(iii), (स)-(i), (द)-(iv)

10. पर्यायवाची शब्दों के मिलान के उचित विकल्प का चयन कीजिए—

- (अ) भागीरथी (i) सुधा
(ब) चाँदनी (ii) गंगा
(स) हनुमान (iii) कौमुदी
(द) अमृत (iv) पवनसुत
(क) (अ)-(iii), (ब)-(iv), (स)-(i), (द)-(ii)
(ख) (अ)-(ii), (ब)-(i), (स)-(iv), (द)-(iii)
(ग) (अ)-(ii), (ब)-(iii), (स)-(iv), (द)-(i)
(घ) (अ)-(i), (ब)-(iii), (स)-(ii), (द)-(iv)

उत्तर कुंजी

1. (ख) 2. (घ) 3. (घ) 4. (क) 5. (ख) 6. (घ) 7. (ग) 8. (ग) 9. (घ) 10. (ग)



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Group photo of International award winning Principals and Teachers after the 26th International Annual Award Ceremony with Chief Guest & Guests of Honour

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