# SOUTH BENGAL PUBLIC SCHOOL

## (Govt. Recognized)

Admission Test for class-07

( Syllabus Based on class-06 )

Sub - English

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## Syllabus

## WRITING SKILL ( 20 marks )

**Paragraph Writing ( Word limit-150 )** **10**

**Topics -** Great Personalities/Science / Habit / Importance day / Monuments / Game / National Theme / Festival.

N.B.:-Point will be mentioned

**Picture description ( Word limit-100 )** **05**

[ Picture will be given for analysis ]

**Letter Writing. ( Body of the letter with Maximum 10 lines )** **05**

[ Formal and Non formal ]

## GRAMMAR SKILL AND VOCABULARY SKILL

**( 30 marks )**

**[ SYLLABUS:**

**GRAMMAR:**

**Sentences :** Introduction, Classifications Example. Formation of the sentences. (Positive, Negative, Interrogative and Interrogative negative.)

**Noun:** Singular & plural number - countable and uncountable,. common, proper noun,Compound Nouns.

**Singular and Plural** ( adding ‘s’ , ‘es’, ’ves’ or ‘ies’ and examples like foot-feet, sheep-sheep)

**Gender-** Introduction and type, example.

**Pronouns**- Introduction, Kind of Pronouns, Uses of pronouns.

**Verb:** Kinds of verb, be verb, have verbs, doing words.

**Auxiliary verb:**

**Modal Auxiliaries:**
**Group Verb:** Common group verb.

**Adverbs:** Introduction, uses of adverbs of Time and Place.
**Adjective:** Introduction, types of adjectives.
**Conjunction:** 'And' , 'But', 'Because' and 'As' Conjunctions etc.
**Punctuation:** Full stop (.), Comma (,), Question mark(?),Use of Capital letters & Exclamation mark(!)
**Article:** Indefinite articles , Definite and indefinite Article.
**Preposition:** Introduction, Type and Uses.
**Tense:**

**Present** – Simple, Continuous, Perfect and perfect continuous structure, rules and uses.

**Past** – Simple, Continuous, Perfect and perfect continuous structure, rules and uses.

**Future** – Simple, Continuous, Perfect and perfect continuous structure, rules and uses.

**Voice Change:** Present ,Past and Future Tense.
**Narration Change:** Present ,Past and Future Tense.

**Framing questions.**

**VOCABULARY:**

Synonym & Antonym,
Group of Collections,
Comparisons,
One word for a group of words or Substitution,
Homes,
Homophones etc.

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# SOUTH BENGAL PUBLIC SCHOOL

## (Govt. Recognized)

Admission Test ( 2025-26 ) for class-07

( Syllabus Based on class-06 )

**Sub - English**

**Sample Paper**

**Total Marks-50** **Time-1 hour**

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## WRITING SKILL ( 20 marks )

**Question-01: Write a Paragraph within 100 words following the points.** **10**

A Great Personality

[Hints: Name – Mention the name of the personality.
Fame – Why is this person famous?
Family – Brief details about his/ her family.
Childhood – Any interesting facts about his/her early life.
Achievements – Major accomplishments.
Qualities – Key characteristics (e.g., hard work, bravery, kindness).
Inspiration – How do him/her inspire others?
Lessons – What can we learn from the personality?
Conclusion – A strong ending about his/her impact.]


**Ans.**_____

_____

_____

_____

_____

_____

_____

**Question-02 : Describe the picture within 100 words. 05**

Sample Questions

**Ans.**

**Question-03 : Write a letter to the Principal your school requesting leave for a family function.**
**(Write body of the letter with maximum 10 lines) 5**

**Ans.**

# GRAMMAR SKILL AND VOCABULARY SKILL
# ( 30 marks )

**Question-5. Choose the correct answer:**

1. Which of the following is a compound noun?
   (a) Sunlight
   (b) Bright
   (c) Play
   (d) Happily
   **Answer:** (a) Sunlight
2. Which of the following is a plural noun?
   (a) Foot
   (b) Sheeps
   (c) Books
   (d) Mouse
   **Answer:** (c) Books
3. Identify the pronoun in the sentence: "She is reading a book."
   (a) She
   (b) Reading
   (c) Book
   (d) Is
   **Answer:** (a) She
4. Which of the following is an auxiliary verb?
   (a) Sing
   (b) Jump
   (c) Have
   (d) Quickly
   **Answer:** (c) Have
5. Choose the correct article to complete the sentence: "He saw ___ elephant in the zoo."
   (a) A
   (b) An
   (c) The
   (d) No article
   **Answer:** (b) An


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**Application-Based MCQs**

**Fill in the blanks with the correct option:**

6. Choose the correct preposition: "The book is ___ the table."
   (a) On
   (b) In
   (c) With
   (d) Of
   **Answer:** (a) On

7. Which sentence is correctly punctuated?
   (a) Where are you going.
   (b) where are you going?
   (c) Where are you going?
   (d) where are you going.
   **Answer:** (c) Where are you going?
8. Identify the adverb of place in the sentence: "She looked everywhere for her keys."
   (a) She
   (b) Looked
   (c) Everywhere
   (d) Keys
   **Answer:** (c) Everywhere
9. Select the correct conjunction: "I was late, ___ I ran to school."
   (a) Because
   (b) And
   (c) But
   (d) As
   **Answer:** (c) But
10. Which of the following is a modal auxiliary?
   (a) Can
   (b) Dance
   (c) Eat
   (d) Write
   **Answer:** (a) Can


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**Rearrange Sentences**

**Rearrange the following words to form a meaningful sentence:**

11. "are / flying / the birds / sky / in the"

(a) Flying the birds are in the sky.
(b) The birds are flying in the sky.
(c) In the sky flying are birds.
(d) The birds in the sky are flying.
**Answer:** (b) The birds are flying in the sky.

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**Match the Following**

**12. Match the following words with their meanings:**

| Column-A | Column-B |
|---|---|
| A. Optimistic - | 1) Hopeful |
| B. Pessimistic - | 2) Negative thinker |
| C. Courage - | 3) Bravery |

**Answer:** A-1, B-2, C-3

**Fill in the blanks with the correct tense form of the verb given in brackets:**

13. She _____ (write) a letter now.
    **Answer:** is writing
14. They _____ (go) to school every day.
    **Answer:** go
15. By 2025, she _____ (complete) her studies.
    **Answer:** will have completed
16. The sun _____ (rise) in the east.
    **Answer:** rises
17. They _____ (play) football when it started raining.
    **Answer:** were playing


**Change the voice of the following sentences:**

18. The teacher explains the lesson.
    **Answer:** The lesson is explained by the teacher.

19. She wrote a letter.
    **Answer:** A letter was written by her.

20. They will complete the project soon.
    **Answer:** The project will be completed by them soon.

21. The book has been read by him.
    **Answer:** He has read the book.

**Change the narration of the following sentences:**

22. He said, "I am reading a book."
    **Answer:** He said that he was reading a book.

23. She said, "I will visit my grandmother tomorrow."
    **Answer:** She said that she would visit her grandmother the next day.

24. The teacher said, "Honesty is the best policy."
    **Answer:** The teacher said that honesty is the best policy.

25. He asked, "Where do you live?"
    **Answer:** He asked where I lived.

**Synonym & Antonym**

**Choose the correct synonym or antonym:**

26. Synonym of "Brave":
    (a) Timid
    (b) Coward
    (c) Courageous
    (d) Weak
    **Answer:** (c) Courageous

27. Antonym of "Happy":
    (a) Joyful
    (b) Cheerful
    (c) Sad
    (d) Excited
    **Answer:** (c) Sad
28. Synonym of "Beautiful":
    (a) Pretty
    (b) Ugly
    (c) Tall
    (d) Small
    **Answer:** (a) Pretty
29. Antonym of "Fast":
    (a) Quick
    (b) Speedy
    (c) Slow
    (d) Rapid
    **Answer:** (c) Slow
30. Synonym of "Big":
    (a) Small
    (b) Large
    (c) Tiny
    (d) Weak
    **Answer:** (b) Large

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# SOUTH BENGAL PUBLIC SCHOOL

## (Govt. Recognized)

Admission Test

Questions Framework for Admission Test to Class – 7

( Syllabus Based on class-06 )

## Sub - Mathematics Syllabus

**Total Marks-50** **Time-1 hr**

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**Theme 1: Number System**

**Key Concepts:**

**Numbers**

1. Consolidating the sense of numberness up to 5 digits, size, estimation of numbers, identifying smaller, larger, etc.
2. Place value (recapitulation and extension.,
3. Operations on large numbers.
4. Word problems on number operations involving large numbers This would include conversions of units of length & mass (from the larger to the smaller units).
5. Estimation of outcome of number operations.
6. Introduction to a sense of the largeness of, and initial familiarity with, large numbers up to 8 digits and approximation of large numbers).
7. Numbers in Indian and International Systems and their comparison.

**Natural numbers and Whole numbers.**

8. Natural numbers.
9. Whole numbers.
10. Properties of numbers (commutative, associative, distributive, additive identity, multiplicative identity).
11. Number line.
12. Seeing patterns, identifying and formulating rules for operations on numbers.

**Negative Numbers and Integers**

13. Need for negative numbers.
14. Connection of negative numbers in daily life.
15. Representation of negative numbers on number line.

16. Ordering of negative numbers, Integers.
17. Identification of integers on the number line,
18. Operation of addition and subtraction of integers,
19. Addition and subtraction of integers on the number line
20. Comparison of integers,
21. ordering of integers.

**Sets**

22. Idea of sets.
23. Representation of sets.
24. Types of sets: Finite/infinite and empty.
25. Cardinality of a set.

**Fractions**

26. Revision of what a fraction is.
27. Fraction as a part of whole.
28. Representation of fractions (pictorially and on number line).
29. Fraction as a division.
30. Proper, improper & mixed fractions.
31. Equivalent fractions.
32. Comparison of fractions,
33. Operations on fractions (Avoid large and complicated unnecessary tasks). (Moving towards abstraction in fractions).
34. Review of the idea of a decimal fraction.
35. Place value in the context of decimal fraction.
36. Inter conversion of fractions and decimal fractions (avoid recurring decimals at this stage).
37. Word problems involving addition and subtraction of decimals (two operations together on money, mass, length and temperature).

**Playing with Numbers**

38. Simplification of brackets.
39. Multiples and factors,
40. divisibility rule of 2, 3, 4, 5, 6, 8, 9, 10, 11. (All these through observing patterns. Children would be helped in deducing some and then asked to derive some that are a combination of the basic patterns of divisibility)
41. Even/odd and prime/composite numbers, Co-prime numbers, prime factorisation, every number can be written as products of prime factors.
42. HCF and LCM, prime factorization and division method for HCF and LCM, the property LCM × HCF = product of two numbers.

(All the above concepts are to be embedded in children's contexts so that it brings out the significance and provide motivation to the child for learning these ideas.)

**Theme 2: Ratio and Proportion**

**Key Concepts:**

1. Difference between fraction and ratio.
2. Concept of Ratio.
3. Proportion as equality of two ratios.
4. Unitary method (with only direct variation implied).
5. Word problems on ratio and proportions.
6. Idea of percent as fraction with 100 as denominator
7. Idea of speed and simple daily life problems related to speed, time and distance.

**Theme 3: Algebra**

**Key Concepts:**

1. Introduction to constants, variable and unknown through patterns and through appropriate word problems and generalisations (For example 1+3=2^2, 1+3+5=3^2, 1+3+5+7=4^2 , sum of first n odd numbers = n^2.).

2. Generate such patterns with more examples and generalisation.
3. Introduction to unknowns through examples with simple contexts (single operations)
4. Terminology associated with algebra- like literal numbers, terms, expressions, factor, coefficient, polynomials, degree, like and unlike terms.
5. Framing algebraic expressions.
6. Evaluation of algebraic expressions by substituting a value for the variable.
7. Introduction to linear equation in one variable.

**Theme 4: Geometry**

**Key Concepts:**

1. Basic geometrical ideas (2 -D): Introduction to geometry. Its linkage with and reflection in everyday experiences.

- Line, line segment, ray.
- Open and closed figures.
- Interior and exterior of closed figures.
- Curvilinear and linear boundaries
- Angle — Vertex, arm, interior and exterior.
- Triangle — vertices, sides, angles, interior and exterior, altitude and median.
- Quadrilateral — Sides, vertices, angles, diagonals, adjacent sides and opposite sides (only convex quadrilateral are to be discussed), interior and exterior of a

· quadrilateral.

· Circle — Centre, radius, diameter, arc, sector, chord, segment, semicircle, circumference, interior and exterior.

**2. Understanding Elementary Shapes (2-D and 3-D):**

· Measure of Line segment.

· Measure of angles.

· Pair of lines – Intersecting and perpendicular lines, Parallel lines. Types of angles- acute, obtuse, right, straight, reflex, complete and zero angle.

· Classification of triangles (on the basis of sides, and of angles). Types of quadrilaterals – Trapezium, parallelogram, rectangle, square, rhombus.

· Simple polygons (introduction) (Upto octagons regulars as well as non-regular).

· Identification of 3-D shapes: Cubes, Cuboids, cylinder, sphere, cone, prism (triangular and square), pyramid (triangular and square), Identification and locating in the surroundings.

· Elements of 3-D figures. (Faces, Edges and vertices).

· Nets for cube, cuboids, cylinders, cones and tetrahedrons.

**3. Symmetry: (reflection)**

·Observation and identification of 2-D symmetrical objects for reflection symmetry.

· Operation of reflection (taking mirror images) of simple 2-D objects.

· Recognising reflection symmetry (identifying axes).

**4. Constructions (using Straight edge Scale, protractor, compasses)**

· Drawing of a line segment.

· Perpendicular bisector.

· Construction of angles (using protractor).

· Angle 60°, 120° (Using Compasses)

· Angle bisector- making angles of 30°, 45°, 90° etc. (using compasses).

· Angle equal to a given angle (using compass.)

· Drawing a line perpendicular to a given line from a point a) on the line b) outside the line.

· Construction of circle.

**Theme 5: Mensuration**

**Key Concepts:**

1. Concept of perimeter and introduction to area
2. Introduction and general understanding of perimeter using many shapes.
3. Shapes of different kinds with the same perimeter.
4. Concept of area, Area of a rectangle and a square
5. Conversion of units (Mass, time, money, and capacity) from to smaller to larger and vice-versa
6. Counter examples to different misconceptions related to perimeter and area
7. Perimeter of a rectangle – and its special case – a square.
8. Deducing the formula of the perimeter for a rectangle and then a square through pattern and generalisation.

**Theme 6: Data Handling**

**Key Concepts:**

1. Collection of data to examine a hypothesis
2. Collection and organisation of data - examples of organising it in tally bars and a table.
3. Pictograph- Need for scaling in pictographs interpretation & construction of pictograph
4. Construction of bar graphs for given data interpreting bar graphs.
5. Mean and median of data not having more than ten observations

## Questions Pattern: Mathematics.

**I. Give answer of the following questions. 01x20=20**

**II. Section B: Short Answer Questions 01x20=20**

**III.Section-C: Higher Order Thinking Skills (HOTs) Questions. 01x02=10**

**Set 1: HOTs Questions (5 Marks)**
**(2 Marks) +(3 Marks)**

**Set 2: HOTs Questions (5 Marks)**
**(2 Marks) +(3 Marks)**

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# SOUTH BENGAL PUBLIC SCHOOL

## (Govt. Recognized)

Admission Test ( 2025-26 ) for class-07

( Syllabus Based on class-06 )

Sample Question paper

Sub - Mathematics

**Total Marks-50** **Time-1 hr**

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## I.) Give answer of the following questions. 20

### Section A: Objective Type Questions (20 Marks)

### 1. Multiple-Choice Questions (MCQs) - Knowledge-Based

1. **What is the place value of 7 in 7,58,329?**

   **A) 700** **B) 7,000**

   **C) 70,000** **D) 7,00,000**

   **Answer: (D) 7,00,000**

2. **Which of the following numbers is a prime number?**

   **A) 15** **B) 19**

   **C) 21** **D) 27**

   **Answer: B) 19**

3. **True/False: The sum of any two odd numbers is always even.**

   **Answer: True**

4. **Identify the smallest fraction from the given options:**

   **A) 3/4** **B) 5/6**

   **C) 2/5** **D) 7/8**

   **Answer: C) ⅖**

5. **Find the missing number in the pattern: 2, 4, 8, 16, __, 64**
   **Answer: 32**
6. **The LCM of 12 and 18 is:**
   **Answer: 36**
7. **Convert 3.45 into a fraction.**
   **Answer: 345/100**
8. **The standard form of 4,00,000 + 30,000 + 5,000 + 600 + 70 + 8 is:**
   **Answer: 4,35,678**
9. **Which of the following is a rational number?**

   **A) 5.4** **B) -3**

   **C) 2/7** **D) All of the above**

   **Answer: (B)**

10. **Which of the following angles is a right angle?**

    **A) 30°** **B) 45°**

    **C) 90°** **D) 120°**

    **Answer: (C) 90°**


11. **The HCF of 24 and 36 is:**
    **Answer: 12**
12. **Find the perimeter of a square with a side of 8 cm.**
    **Answer: 32 cm**
13. **True/False: A parallelogram has opposite sides equal.**
    **Answer: True**
14. **Convert 3 hours into minutes.**
    **Answer: 180 minutes**
15. **A train travels 300 km in 5 hours. What is its speed?**
    **Answer: 60 km/h**
16. **What is 25% of 200?**
    **Answer: 50**
17. **Solve: (5 × 6) + (8 ÷ 2)**
    **Answer: 34**
18. **Write the next number in the sequence: 2, 6, 12, 20, __**
    **Answer: 30**

19. **The number of faces in a cube is:**

**Answer: 6**

20. **The mean of 4, 8, 10, 12, and 6 is:**

**Answer: 8**

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## Section B: Short Answer Questions (20 Marks)

**(Each question carries 2 marks)**


1. **Simplify: (-3) +5-(-7) ÷9**

2. **If 20% of a number is 100. Find the number.**

3. **Divide: 1.056 ÷ 0.08**

4. **Express 7/20 as a decimal.**

5. **Write the successor and predecessor of 99,999.**

6. **Convert 5 kg into grams.**

7. **Find the perimeter of a rectangle with length = 12 cm and breadth = 8 cm.**
8. **Find the HCF of 18 and 27.**


9. **Convert 5/8 into a percentage.**

10. **Draw a quadrilateral and mark its diagonals.**

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**Section C: Higher Order Thinking Skills (HOTs) Questions (10 Marks)**
**(Each question carries 5 marks)**

**Set 1: Problem-Solving and Critical Thinking**

**(i) A shopkeeper sells apples in packets of 6. If he has 84 apples, how many complete packets can he make? How many apples will be left? (2 Marks)**

**(ii) The sum of two numbers is 90. One number is 38. Find the other number. (3 Marks)**

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**Set 2: Logical Reasoning and Analytical Thinking**

**(i) Which type of triangle have three lines of symmetry? Give reason for your answer. (2 Marks)**

**(ii) A class has 40 students. 60% of them are girls. How many girls are there in the class? (3 Marks)**


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# SOUTH BENGAL PUBLIC SCHOOL

## (Govt. Recognized)

Admission Test for class-07

( Syllabus Based on Class-06 )

Sub - Science (PCB)

**Total Marks-75** **Time-1 hr 15 minutes**

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## Physics ( 25 )

**Theme 1: Matter**

**Key Concepts: 1.** Matter- its meaning and composition.

**States of Matter**

1. Solids, Liquids and Gases.
2. Characteristics of Solids,Liquids and Gases (Shape, texture and Volume).
3. Distinguishing properties of Solids, Liquids and Gases.

**Theme 2: Physical Quantities and Measurement**

**Key Concepts: 1. Measurement of Length:**

· Concept of length as distance between two points.
· Measurement of length (ruler, measuring tape).
· Units (with symbol and full name).

| Name of unit | Symbol |
|---|---|
| centimetre | cm |
| meter | m |
| Kilometre | km |
| Inch | inch |
| foot | ft |

**2. Measurement of Mass:**

· Concept of Mass as matter contained in an object.
·Measurement of Mass (Beam Balance, Electronic Balance).
· Units (with symbol and full name).

| Name of unit | Symbol |
|---|---|
| milligram | mg |
| gram | g |
| kilogram | kg |

**3. Measurement of Time:**

- Concept of time and explanation in terms of hours, minutes and seconds.
- Measurement of Time (Clock, watch, stop watch).
- Units (with symbol and full name).

| Name of unit | Symbol |
|---|---|
| Second | s |
| Minutes | min |
| Hour | h |

(No distinction of SI, metric, MKS, CGS).

**4. Measurement of Temperature:**

- Temperature as a measure of degree of hotness or coldness of body.
- Measurement of temperature (clinical thermometer, laboratory thermometer).
- Normal temperature of a human body.
- Units (with symbol and full name).

| Name of unit | Symbol |
|---|---|
| Celsius | °C |

5. Measurement of Area: EConcept of area. EArea of Regular shapes (using graph paper).

**Theme 3: Force**

**Key Concepts: 1**. Force as a push or pull.

2. Effects of force on
   - Mass (No effect)
   - Speed
   - Direction (rest and motion)
   - Change in shape and size
   - Using real world examples only.

**3. Force of Friction:**

- Types – Rolling, Sliding and Static.
- Advantages and Disadvantages**.**

**Theme 4: Energy**

**Key Concepts: 1. Simple Machines:**

- Basic Concept
- Mechanical Advantage

**2. Types of Simple Machines:**

- Lever
- Wheel and axle
- Pulley
- Inclined plane
- Wedge EScrew

**3. Different Orders of Levers**

4. Numericals based on mechanical advantage or leverage Load × Load arm = Effort × Effort arm.

**Theme 5: Light**

**Key Concepts: 1.** Rectilinear Propagation of Light.

2. Applications of rectilinear propagation of light.

3**. Pinhole camera:**

- Principle and Working
- Factors on which the size of the image produced depends
-

4**. Shadows:**

- Umbra
- Penumbra
- Natural Shadows – Eclipses

**Theme 6: Magnetism**

**Key Concepts: 1.** Magnetic and non-magnetic substances.

2. Characteristics of a magnet.
3. properties of magnets
4. Magnetic field around a magnet.
5. Earth's magnetic field.
6. Making of Magnets
7. Permanent & temporary magnets and their uses
8. Electromagnets and
9. choice of material for the core of an electromagnet
10. Care & storage of magnets
11. Demagnetization by heating, hammering and electricity.

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# Questions Pattrena: Physics

**[ Section A ]**

**01. Give answer of the following questions. [ MCQs] 01 x 10=10**

**[ Section B]**

**02. Answer the following questions in one or two sentences each. Each question carries 1 mark. 01x10=10**

**[ Section-C ]**

**03. Answer the following questions. [ Higher Order Thinking Skills (HOTs) Questions. ] 01x05=05**

**Set-I Or Set-II**

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# Chemistry ( 25 )

**Theme 1: Introduction to Chemistry**

**Key Concepts: 1.** Chemistry – meaning and importance.

2. Development of Chemistry- A historical perspective.

3. Notable chemists/ scientists and their contributions to Chemistry (at least 3 scientists).

4. Food and Chemistry.

5. Cosmetics and Chemistry.

6. Clothing and Chemistry.

7. Chemicals as Medicines.

8. Chemicals in Industries.

**Theme 2: Elements, Compounds and Mixtures**

**Key Concepts:**

**1**. Element (a substance made up of identical atoms).

·Use of symbols as short hand notations of writing names of elements.

· Origin of symbols of elements.

· Names and symbols of first 20 elements.

· Molecules of elements contain atoms of the same element ($O_2$, $N_2$, $H_2$).

2. Compound (two or more than two elements combine in fixed definite proportions to form a compound. Original properties of the constituent elements are lost and a substance with new properties is formed).

·Molecules of compounds contain atoms of different elements. ($H_2O$, $CO_2$, $NO_2$, CaO, $ZnCl_2$).

3. Mixture (components of more than one substance combine in any proportion, original properties of the components are retained).

4. Difference between mixtures and compounds (on the basis of proportion of combination of components and their properties).

**5. Separation techniques of mixtures into their components:**

- Sieving
- Sedimentation
- Decantation
- Filtration
- Evaporation
- Magnetic Separation
- Sublimation

**Theme 3: Matter**

**Key Concepts: States of Matter**

1. Classification of matter into solid, liquid and gas on the basis of properties (shape, volume). Factors responsible for the existence of matter in different states.

2. Arrangement of atoms/ molecules in solids, liquids and gases: - intermolecular space, cohesive forces).

3. There is space between the particles of matter.

4. Effect of heat on matter (expansion, change of state and chemical change)

**Theme 4: Water**

**Key Concepts:**

**1.** Importance of water in everyday life (household purpose, industry, watering plants, etc.).

2. Water resources (well, river, hand pump, lakes, pond, etc.).

3. Capacity to dissolve many salts in it.

4. Definition of Solute, Solvent and Solution.

5. Importance of water for sustenance of life on earth.

6. Reasons for water pollution; its prevention; conservation of water.

**Theme 5: Air and Atmosphere**

**Key Concepts: 1.** Air is present everywhere around us.

2. Air - a mixture of gases namely, nitrogen, oxygen, carbon dioxide, water vapour; dust and smoke as pollutants.

3. Percentage composition of air.

4. Uses of the components present (importance of nitrogen to plants to be mentioned).

5. Definition of atmosphere as layer of air around the earth.

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# Questions Pattrena: Chemistry

**[ Section A ]**

**01. Give answer of the following questions. [ MCQs] 01 x 10=10**

**[ Section B]**

**02. Answer the following questions in one or two sentences each. Each question carries 1 mark. 01x10=10**

**[ Section-C ]**

**03. Answer the following questions. [ Higher Order Thinking Skills (HOTs) Questions. ] 01x05=05**

**Set-I Or Set-II**

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# Biology ( 25 )

**Theme 1: Plant Life**

**Key Concepts: THE LEAF**

1. External structure (parts of a leaf in detail).
2. Kinds of leaves (simple & compound).
3. Types of venation (reticulate and parallel).
4. Functions of leaf (main functions).
5. Modifications (tendrils, spines, scale leaves).
6. Insectivorous plants. Need for modification with an example.
7. Vegetative propagation in leaf (example bryophyllum).

**THE FLOWER**

1. Parts (4 whorls), structure and function of each whorl.
2. Pollination (self and cross): An idea about agents of cross pollination (wind, water and insects – their examples).
3. Fertilization: process in simple terms.
4. Formation of fruit – fate of each part (whorl) of flower after fertilization.
5. Parts of fruits: dry and fleshy, examples of dry and fleshy parts; parts of the pericarp of fleshy fruits (epicarp, mesocarp, endocarp) and function of each part.
6. Seed- parts (cotyledon, embryo: Radicle, plumule) and types (monocot, dicot)
7. Germination – conditions required for germination (moisture, warmth), seed germination of different seeds.

**Theme 2: The Cell**

**Key Concepts:**

1. Plant cell: Cell organelles and their functions.
2. Animal cell: Cell organelles and their functions.
3. Diagrams of plant and animal cell.
4. Only the following to be included: Cell wall, Cell membrane, Plastids, Nucleus, Vacuole, Cytoplasm – their structure and functions
5. Differences between plant and animal cells.

**Theme 3: Human Body**

**Key Concepts:**

**Digestive System**

1. Revisit previous learning.
2. Organs of the digestive system; function of each organ.
3. Process of digestion particularly of Carbohydrates Proteins and Fats.

**Respiratory System**

1. Main parts (nose, pharynx, larynx, trachea, bronchi, lungs); functions of each part of the respiratory system.

2. Difference between respiration and breathing.

3. Mechanism of breathing (physical process with respect to diaphragm and ribs-inhalation and exhalation).

4. Mention of common respiratory diseases: asthma, bronchitis, pneumonia, tuberculosis (T.B.).

**Circulatory System**

1. Main parts of the circulatory system (heart, blood, blood vessels).

2. Process of circulation in the body.

3. Components of blood (plasma and blood cells - RBC, WBC, platelets with their functions only).

4. Types of Blood groups (A, B, AB, O): mention only.

5. Blood pressure (concept only); heartbeat, pulse

6. Keeping the heart healthy through exercise and good food habits.

**Theme 4: Health and Hygiene**

**Key Concepts:**

1. Types of diseases (communicable and noncommunicable).

2. Communicable diseases: bacterial, viral, protozoal, diseases caused by worms (common examples of each).

3. Modes of transmission of diseases (air, water, food, insects).

4. Ways to prevent communicable diseases.

5. Non-communicable diseases: examples, ways to prevent them.

6. Hygiene – ways to keep the surroundings clean, safe disposal of garbage, healthy practices for hygiene.

**Theme 5: Adaptation**

**Key Concepts:**

**1. Habitat –** definition.

**2. Adaptations of plants and animals to the following habitats along with characteristics and examples:**

- Aquatic habitatfloating, submerged and fixed plants; adaptations in fish.
- Desert - adaptations in cactus as desert plant and camel as desert animal.
- Mountain – adaptations in trees like Pine and Fir; mountain goat
- Air - adaptation for flight in birds, aerial plants.

# Questions Pattrena: Biology

**[ Section A ]**

**01. Give answer of the following questions. [ MCQs] 01 x 10=10**

**[ Section B]**

**02. Answer the following questions in one or two sentences each. Each question carries 1 mark. 01x10=10**

**[ Section-C ]**

**03. Answer the following questions. [ Higher Order Thinking Skills (HOTs) Questions. ] 01x05=05**

**Set-I Or Set-II**

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# SOUTH BENGAL PUBLIC SCHOOL
## (Govt. Recognized)
## Admission Test ( 2025-26 ) for class-07
## ( Syllabus Based on Class-06 )
## Sub – Science(Physics)
## Total Marks-25 Time-25 Minutes

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**[ Section A ] (MCQs)** **1x 10=10**

01. Which of the following is NOT a state of matter?

a) Solid b) Liquid
c) Gas d) Plasma

2. Which of the following has a fixed shape and volume?
a) Gas b) Liquid
c) Solid d) Plasma
3. The instrument used to measure length is:
a) Beam Balance b) Stopwatch
c) Ruler d) Thermometer
4. The unit of mass in the metric system is:
a) Kilogram b) Centimeter
c) Newton d) Liter
5. Which of the following is NOT an effect of force?
a) Change in mass b) Change in speed
c) Change in direction d) Change in shape
6. Friction is a type of force that:
a) Increases motion b) Stops or slows down motion
c) Always helps movement d) Does not affect motion

7. The mechanical advantage of a simple machine is given by:
   a) Load × Load arm  b) Effort × Effort arm
   c) Load ÷ Effort  d) Load – Effort
8. The umbra of a shadow is:
   a) The fully dark region  b) The partially dark region
   c) The bright region  d) None of these
9. The Earth behaves like a:
   a) Giant bar magnet  b) Plastic ball
   c) Non-magnetic object  d) Metal sphere
10. The best material for the core of an electromagnet is:
   a) Copper  b) Aluminum
   c) Iron  d) Plastic


**[ Section B ] (Short Answer Questions)** **1x10=10**

11. Define matter.

Ans:_____
_____

12. What are the three states of matter?

Ans:_____
_____

13. Name two instruments used to measure length.

Ans:_____
_____

14. What is the normal body temperature of a human?

Ans:_____
_____

15. What are the units of time? Write any two.

Ans:_____
_____

16. Define force.

Ans:_____
_____

17. Give two examples of simple machines.

Ans:_____
_____

18. What is the principle of a pinhole camera?

Ans:_____
_____

19. Name two magnetic and two non-magnetic materials.

Ans:_____
_____

20. How can magnets be demagnetized?

Ans:_____
_____

**[ Section C ] (Higher Order Thinking Skills - HOTs)**

**( Attempt any one set of questions)** **1x5=5**

**Set-I**

21. Why do gases have neither a fixed shape nor a fixed volume?

Ans:_____
_____

22. Explain how friction is useful in daily life.

Ans:_____
_____

23. A lever has an effort arm of 50 cm and a load arm of 10 cm. What is its mechanical advantage?

Ans:_____
_____

24. Why does a shadow become longer or shorter at different times of the day?

Ans:_____
_____

25. Why should we store magnets carefully?



Ans:_____
_____

**OR**

**Set-II**

21. Why do liquids take the shape of the container but have a fixed volume?

Ans:_____
_____

22. Give one example where friction is a disadvantage and one where it is an advantage.

Ans:_____
_____

23. A pulley is used to lift a load of 200 N with an effort of 50 N. What is its mechanical advantage?

Ans:_____
_____

24. Explain why a pinhole camera forms an inverted image.

Ans:_____
_____

25. What is the importance of the Earth's magnetic field?

Ans:_____
_____

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# SOUTH BENGAL PUBLIC SCHOOL
## (Govt. Recognized)
## Admission Test ( 2025-26 ) for class-07
## ( Syllabus Based on Class-06 )
## Sub – Science(Chemistry)
## Total Marks-25 Time-25 Minutes

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**[ Section A: Multiple Choice Questions (MCQs) ]** (01 x 10 = 10)


1. What is the chemical formula of water?
   a) $H_2O$
   b) $CO_2$
   c) $O_2$
   d) HCl
2. Which of the following is an element?
   a) $H_2O$
   b) $O_2$
   c) $CO_2$
   d) NaCl
3. Which of the following separation techniques is used to separate iron filings from a mixture?
   a) Sieving
   b) Magnetic separation
   c) Filtration
   d) Decantation
4. Who is known as the "Father of Indian Chemistry"?
   a) Isaac Newton
   b) Antoine Lavoisier
   c) Albert Einstein
   d) Acharya Prafulla Chandra Roy

5. The most abundant gas in the air is:
   a) Oxygen
   b) Carbon dioxide
   c) Nitrogen
   d) Hydrogen
6. What is the primary use of nitrogen for plants?
   a) To make food through photosynthesis
   b) To provide energy
   c) To help in growth by forming proteins
   d) To absorb water
7. Which of the following is a compound?
   a) Gold
   b) Oxygen
   c) Water
   d) Hydrogen
8. What is the symbol of Calcium?
   a) C
   b) Ca
   c) Cl
   d) Cu
9. Which property distinguishes solids from liquids and gases?
   a) Fixed volume only
   b) Fixed shape and volume
   c) No fixed volume
   d) Compressibility
10. What is the main reason for water pollution?
   a) Falling of leaves in water
   b) Mixing of harmful chemicals and waste
   c) Increase in fish population
   d) Water evaporation


**[ Section B: Short Answer Questions ]** (01 x 10 = 10)

1. Define Chemistry.

Ans:_____
_____

2. What is an element? Give an example.

Ans:_____
_____

3. What are molecules of elements? Give an example.

Ans:_____
_____

4. Name any two scientists and their contributions to Chemistry.

Ans:_____
_____

5. What is a compound? Give one example.

Ans:_____
_____

6. What is a mixture? How is it different from a compound?

Sample Questions

Ans:_____
_____

7. Name any two separation techniques used to separate mixtures.

Ans:_____
_____

8. Why is water important for living beings?

Ans:_____
_____

9. What are the major components of air?

Ans:_____
_____

10. What is the role of nitrogen in plant growth?

Ans:_____
_____

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**[ Section C: Higher Order Thinking Skills (HOTs) Questions ]** (01 x 05 = 05)

(Attempt any one Set of Questions)


**Set-I:**

1. Why is Chemistry important in our daily life? Give two examples.

Ans:_____
_____

2. Explain the difference between solids, liquids, and gases based on molecular arrangement.

Ans:_____
_____

3. How does heat affect the state of matter? Give one example.

Ans:_____
_____

4. Describe any two methods to prevent water pollution.

Ans:_____
_____

5. How is air pollution harmful to humans and the environment?

Ans:_____
_____

**or**

**Set-II:**

1. Why are symbols used for elements instead of writing their full names?

Ans:_____
_____

2. Why do compounds have different properties from their constituent elements? Explain with an example.

Ans:_____
_____

3. Explain how filtration helps in separating substances.

Ans:_____
_____

4. Explain how stalks are separated from grains?

Ans:_____
_____

5. How can we conserve water in our daily lives?

Ans:_____
_____

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# SOUTH BENGAL PUBLIC SCHOOL
## (Govt. Recognized)
## Admission Test ( 2025-26 ) for class-07
## ( Syllabus Based on Class-06 )
## Sub – Science (Biology)
## Total Marks-25 Time-25 Minutes

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## [ Section A ]

**01. Choose the correct answer from the options given below. (MCQs) [1 x 10 = 10]**

1. Which part of the leaf helps in gas exchange?

   a) Petiole
   b) Stomata
   c) Veins
   d) Midrib

2. A compound leaf consists of:

   a) A single leaf blade
   b) Multiple leaflets attached to a common stalk
   c) A thick midrib
   d) A single petiole

3. Which type of venation is found in monocot leaves?
   a) Reticulate
   b) Parallel
   c) Spiral
   d) None of the above

4. Insectivorous plants modify their leaves mainly to:

   a) Store water
   b) Protect themselves
   c) Trap insects for nutrition
   d) Support weak stems

5. Which part of a flower develops into fruit after fertilization?

   a) Sepal
   b) Petal
   c) Ovary
   d) Stigma

6. Which organelle is responsible for photosynthesis in plant cells?

   a) Nucleus
   b) Mitochondria
   c) Chloroplast
   d) Golgi apparatus

7. The function of the diaphragm in respiration is to:

   a) Pump blood
   b) Help in digestion
   c) Aid in inhalation and exhalation
   d) Transport oxygen

8. The liquid part of blood is called:

   a) Plasma
   b) RBC
   c) WBC
   d) Platelets

9. Which of the following is a bacterial disease?
   a) Malaria
   b) Dengue
   c) Tuberculosis
   d) Influenza

10. Camels adapt to desert conditions by:

a) Storing water in their humps
b) Having webbed feet
c) Breathing through gills
d) Having short legs

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**[ Section B ]**

**02. Answer the following questions in one or two sentences each. [1 x 10 = 10]**

1. What are the two main types of leaves? Give an example of each.

   Ans:_____
   _____

2. Define parallel venation and give an example.

Ans:_____
_____

3. What is the main function of leaves in plants?


Ans:_____
_____

4. What is vegetative propagation? Give an example of a plant that shows vegetative propagation through leaves.

Ans:_____
_____

5. Name the four whorls of a flower.

Ans:_____
_____

6. What is pollination? Mention two types of pollination.

Ans:_____
_____

7. State one difference between respiration and breathing.


Ans:_____
_____

8. Name any two components of blood and their functions.

Ans:_____
_____

9. How does regular exercise help keep the heart healthy?

Ans:_____
_____

10. What is adaptation? Give an example of an animal adaptation in a mountain habitat.

Ans:_____
_____

**[ Section C ]**

**03. Answer the following Higher Order Thinking Skills (HOTs) questions. [1 x 5 = 5]**

**( Attempt any one set of questions)**

**Set I**

1. Why do insectivorous plants need to trap insects despite being green?

   Ans:_____
   _____

2. Explain why cross-pollination is beneficial for plants.



Ans:_____
_____

3. What would happen if the diaphragm stopped functioning?

   Ans:_____
   _____

4. Why is the heart called a double pump?

   Ans:_____
   _____

5. How do cacti conserve water in the desert?

   Ans:_____
   _____

**OR**

**Set II**

1. Why do leaves of aquatic plants have a waxy coating?

   Ans:_____
   _____

2. What role do insects play in pollination?

   Ans:_____
   _____

3. What will happen if the lungs fail to remove carbon dioxide from the body?

   Ans:_____
   _____

4. How does the structure of RBCs help in their function?

   Ans:_____
   _____

5. How do birds adapt to flying in the air?

   Ans:_____
   _____