# DELHI PUBLIC SCHOOL, SAIL TOWNSHIP, RANCHI ANNUAL EXAMINATION (2018-2019) 

Class: VII
Subject: General Knowledge

Time: 1Hr.15Min.
M. Marks: 50

## A. Answer the following question:

( $10 \times 1=10$ )

1. Which is the mobile operating system developed by Google?
2. How many states does the Unites States of America have?
3. Which cricketer was the first to take 400 wickets in test cricket?
4. Which city has the nickname " The Big Apple".
5. Which planet has satellites named after the characters in the works of William Shakespeare and Alexander Pope?
6. Name the system of Govt. in Saudi Arabia.
7. In which novel by Jane Austen is Anne Elliot the heroine.
8. For which book did Paul Beauty win the Man Booker Prize in 2016?
9. Who wrote the book 'The strange Case of Dr. Jekyll and Mr. Hyde'?
10. What is the minimum voting age in Brazil?

## B. Write True / False:

$(1 / 2 \times 10=5)$

1. In France, the king is still the ceremonial head of the state.
2. India is known as the largest democracy in the world.
3. The United Arab Emirates is a constitutional federation of seven emirates.
4. Steel is the most used metal in the world.
5. Lime juice contains citric acid.
6. Glycogen is the common name for ethylene glycol.
7. Air is an element.
8. Nitrous Oxide is also known as laughing gas.
9. Rock salt is a mixture of common salt and artificial food colouring.
10. The molecules in a gas move in only one direction.
C. Fill in the Blanks:
(10x1=10)
11. The solubility of gas in water $\qquad$ with an increase in temperature.
12. An acid mixture that dissolves gold is called $\qquad$ .
13. At $-40^{\circ} \mathrm{C}$, $\qquad$ and Celsius scale show the same reading.
14. Solid Carbon dioxide is also called $\qquad$ .
15. $\qquad$ comes in a number of different forms; these include diamond, graphite \& impure forms such as coal.
16. The word 'Yahoo' comes from Jonathan Swift's Novel $\qquad$ publish in 1726.
17. $\qquad$ are proteins found in plants and animals that catalyse the biochemical reactions necessary for life.
18. The constitution of India came into effect on $\qquad$ .
19. Providing a home to more than a quarter of all marine species, $\qquad$ are one of the most biodiverse habitats on Earth.
20. The $\qquad$ stadium in Kolkata is one of the largest stadiums in the world.

## Pg-1

## D. Choose the Correct Option:

1. Which of these styles of painting originated in Bihar?
(a) Warli
(b) Madhubani
(c) Phad
2. Who among these was an exponent of Odissi dance?
(a) Kelucharan Mahapatra
(b) Uday Shankar
(c) Rukmini Devi Arundale
3. Which lake, found in eastern India, is the largest coastal lake in India and one of the largest in the world?
(a) Rabindra Sarobar
(b) Chilka Lake
(c) Nal Sarovar
4. Which of these ancient kingdoms existed in the eastern part of India?
(a) Koshala
(b) Panchala
(c) Magadha
5. Vostak, Soyuz and Apollo 13 are all names of
(a) Lunar mission
(b) Solar mission
(c) Spacecrafts
6. This Planet can produce the most violent winds and suffers the most violent weather in the solar system:
(a) Jupiter
(b) Neptune
(c) Uranus
7. The planet does not spin on its axis like other planets but rather spins in a barrel sort of formation:
(a) Saturn
(b) Mercury
(c) Uranus
8. It is the heaviest natural satellite of our solar system. Its mass is nearly double of that of the moon:
(a) Europa
(b) Callisto
(c) Ganymede
9. The planet with lowest density:
(a) Mercury
(b) Saturn
(c) Jupiter
10. Hally's comet will next appear in
(a) 2061
(b) 2051
(c) 2041

## E. Name the following:

1. It ranks among the top ten luxury trains in the world, providing a complete tour of Rajasthan, in just seven days.
2. The study of what makes up the Universe and how it has grown and changed.
3. The spot on the moon where humans first landed.
4. The layer of gas surrounds the earth 30 km above its surface.
5. The first woman of Indian origin in space.

## F. Identify the following with given tips:

1. The Indian - born business executive is the CEO of Google Inc.
2. They are the largest molluscs on the Earth. They live in the warm waters of the South Pacific \& Indian Oceans.
3. Its two hard shells \& a soft body make it a bivalve. It stays mostly on the sea floor, squirting water out of its shells by rapidly opening \& closing them.
4. It has a streamlined body, full around the middle and narrowing to a paddle - shaped tail. With its wrinkled, grey - brown, spongy skin, it resembles the walrus.
5. This is the largest fish in the sea. It is carnivorous but its favorite meal is plankton. This creature has a filter that sticks out its jaws and passively filters everything in its path.

## G. Current Affairs:

1. Who is the newly appointed CBI director of India?
2. Who is the Vice President of US?
3. Who is RBI Governor?
4. Who are the Bharat Ratna Winner in 2018. (Name any one of them).
5. Who is the Defence Minister of India?

# DELHI PUBLIC SCHOOL, SAIL TOWNSHIP, RANCHI ANNUAL EXAMINATION (2018-2019) 

Class: VII
Subject: Mathematics
Time: 3 Hrs.
M. Marks: 80

## General Instructions:-

1. All questions are compulsory.
2. The question paper consists of 30 questions divided into four sections $A, B, C$ and $D$. Section $A$ comprises of 6 questions of 1 mark each, Section B comprises of 6 questions of 2 marks each, section $C$ comprises of 10 questions 3 marks each, section D comprises of 8 questions 4 marks each.
3. Handwriting should be neat and clean.

## Section - A

1. Solve the following equation: $3(x+4)=24$
2. The difference in the measures of two complementary angles is 12 . Find the measures of the angles.
3. An exterior angle of a triangle is of measure $70^{\circ}$ and one of its interior opposite angles is of measure $25^{\circ}$. Find the measure of the other interior opposite angle.
4. Cost of an item is Rs. 50. It was sold with a profit of $12 \%$. Find the selling price.
5. Simplify: $\left(-15 x \frac{2}{5}\right)-\left(18 x \frac{2}{9}\right)$
6. The area of an equilateral triangle is $4 \sqrt{3}$ square cm . Find the length of it's side.

## Section-B

[2x6=12]
7. Find a number, such that one-fourth of the number is 3 more than 7 .
8. Find the product, using suitable properties: $625 \times(-35)+(-625) \times 65$.
9. On a certain sum the interest paid after 6 years is Rs. 900 at $5 \%$ rate of interest per annum. Find the sum.
10. By what number should we multiply $(-1 / 6)$ so that the product may be $(-23 / 9)$.
11. Simplify: $\left\{\left(2^{2}\right)^{3} \times 3^{6}\right\} \div\left(3^{2}\right)^{4}$
12. The temperature at 12 noon was $10^{\circ} \mathrm{C}$ above zero. If it decreases at the rate of $2^{\circ} \mathrm{C}$ per hour until midnight, at what time would the temperature be $8^{\circ} \mathrm{C}$ below zero? What would be the temperature at mid-night?

> Section -C
$[3 \times 10=30]$
13. In Fig identify: (i) two pairs of adjacent angles. (ii) two linear pairs. (iii) Two pairs of vertically opposite angles.
14. Find the perimeters of (i) $\triangle \mathrm{ABE}$ (ii) the rectangle BCDE in this figure. Whose perimeter is greater?

15. The rainfall (in mm ) in a city on 7 days of a certain week was recorded as follows:

| Day | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Rainfall | 1.1 | 10.2 | 2.1 | 7.1 | 12.5 | 5.5 | 7.5 |

(i) Find the range of the rainfall in the above data.
(ii) Find the mean rainfall for the week.
(iii) On how many days was the rainfall less than the mean rainfall?
16. The dimensions of a cuboid are $5 \mathrm{~cm}, 3 \mathrm{~cm}$ and 2 cm . Draw two different oblique sketches of this cuboid.
17. In Fig , $\mathrm{AD}=\mathrm{CD}$ and $\mathrm{AB}=\mathrm{CB}$. (i) State the three pairs of equal parts in $\triangle \mathrm{ABD}$ and $\triangle \mathrm{CBD}$. (ii) Is $\triangle \mathrm{ABD} \cong \triangle C B D$ ? Why or why not? (iii) Does BD bisect $\angle \mathrm{ABC}$ ? Give reasons.
18. The perimeter of a rectangle is 260 cm . If the breadth of the rectangle is 60 cm , find its length. Also find the area of the rectangle.
19. Construct $\triangle \mathrm{ABC}$, given $\mathrm{m} \angle \mathrm{A}=60^{\circ}, \mathrm{m} \angle \mathrm{B}=30^{\circ}$ and $\mathrm{AB}=5.8 \mathrm{~cm}$. Also, draw a perpendicular from $C$ on $A B$. Label it properly.
20. Simplify the expression and find the value if $x=3, a=-1$,

$$
3 x^{2}-5-2 x-9 a+2-8 x+4 x^{2}+4 a
$$

OR
Simplify: $5+[x-\{2 y-(6 x+y-4)+2 x\}-\{x-(y-2)\}]$
21. Simplify: $\frac{3^{n}+3^{n+1}}{3^{n+1}-3^{n}}$

## OR

Compare the following numbers: $2.7 \times 10^{16} ; 1.5 \times 10^{20}$.
22. Draw and write the centre of rotation, angle of rotation and order of rotation of the following shapes:
(i) Equilateral triangle.
(ii) Regular hexagon.

Section-D
[ $4 \times 8=32$ ]
23. The performance of a student in 1st Term and 2nd Term is given. Draw a double bar graph choosing appropriate scale and answer the following:

| Subject | English | Hindi | Mathematics | Science | Social Science |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $1^{\text {st }}$ Term <br> $(\mathrm{mm.-100})$ | 67 | 72 | 88 | 81 | 73 |
| $2^{\text {nd }}$ Term <br> $(\mathrm{mm}-100)$ | 70 | 65 | 95 | 85 | 75 |

(i) In which subject, has the child improved his performance the most?
(ii) In which subject is the improvement the least?
24. The diagonals of a rhombus measure 16 cm and 30 cm . Find its perimeter.
25. Reema took a loan of Rs. 8000 from a money lender, who charged interest at the rate of $18 \%$ per annum. After 2 years Reema paid him Rs. 10400 and a wrist watch to clear the debt. What is the price of the watch?

## OR

By selling an article for Rs.240, a man makes a profit of $20 \%$. What is his C.P? What would his profit percent be if he sold the article for Rs.275?
26. From a circular card sheet of radius 14 cm , two circles of radius 3.5 cm and a rectangle of length 3 cm and breadth 1 cm are removed. (as shown in the adjoining figure). Find the area of the remaining sheet. (Take $\Pi=22 / 7$ )


## OR

A path 5 m wide runs along inside a square park of side 100 m . Find the area of the path. Also find the cost of cementing it at the rate of Rs. 250 per 10 square metre.
27. Draw a line $l$. Draw a perpendicular to $l$ at any point on $l$. On this perpendicular choose a point $X, 4 \mathrm{~cm}$ away from $l$. Through $X$, draw a line $m$ parallel to $l$ and label it properly .
28. From the sum of $4+3 x$ and $5-4 x+2 x^{2}$, subtract the sum of $3 x^{2}-5 x$
and $-x^{2}+2 x+5$.
29. If $a b c=1$ then find
$\frac{1}{1+a+b^{-1}}+\frac{1}{1+b+c^{-1}}+\frac{1}{1+c+a^{-1}}$
30. Simplify: $\frac{5}{12}+\frac{-5}{18}-\frac{7}{24}+\frac{9}{16}$

# DELHI PUBLIC SCHOOL, SAIL TOWNSHIP, RANCHI ANNUAL EXAMINATION (2018-2019) 

Class: VII
Subject: English

Time: 3 Hrs.
M. Marks: 80

## Section-A (Reading)

## 1. Read the given passage carefully and answer the questions that follow:-

## WHO IS A TRUE INDIAN?

The moment a child enters his school he is drilled and made to learn the Indian pledge stating India is my country, all Indians are my brothers and sisters and so on. Civics books are loaded with the rights and duties of an Indian citizen. Statements like Mera Bharat Mahan adorn the body of many trucks and buses on the road. All these may very well give a notion that we are proud of our country and that we are all committed to our country. But every conscious citizens knows how hypocritical and hollow these statements are!

Who is these times, can be called a true Indian? Can a person with intense chauvinism be called a true Indian? Chauvinism in the sense that he believes Indian to be the greatest a militant nationalism," my country right or wrong!"
Is he a true Indian who takes India Hindustan in a literal sense as the nation of Hindus one who believes in strict communalism who actively participate in destroying the past grandeur of this country? It is a million dollar question then who is really a true Indian? Or can there be one in present times?

In my opinion, a true Indian is one who first and foremost loves his country because he believes in it, has optimistic dreams and magnanimous feeling for his fellow citizens. Before he asks what the country has done for him, he should ask himself what he has done for his country. It may be difficult for a common man to be idealistic like Gandhi or mother Teresa but it is not impossible for him to do his little bit for the country to commit himself to tax obligations sincerely, to keep his surroundings clean and protected, to respect public property, to respect law and order, to respect the police, to protect the environment and above all, to respect the right of others to live.

As future citizen of the Country, some of us may end up as highly trained professionals on whom the government would have invested lakhs of rupees. We should then vow not to leave India for developed countries in pursuits of greener pastures but to work for making our country prosperous. We are blessed to have been born in this great country and should solemnly resolve towards the goal of taking India to greater height in this millennium.
(a) What is a child made to learn when he enters the school?
(b) Where can we usually see the glorifying slogans?
(c) Which two ideas do these slogans give?
(d) Name any two things by which we can show our real patriotism.
(e) Which way we should take as the future citizen?
(f) How are we blessed according to the author?
(g) On the basis of your reading find out the synonyms from the passage given above - to beautify.
(h) Find out antonyms from the passage given above -- undignified.

## 2. Read the following passage carefully:

It's a time bomb waiting to explode, once these children become adults, making obesity one of the most serious public health challenges of the $21^{\text {st }}$ century. In 2010, Dr.Khadilkar and his researchers conducted studies at 11 affluent urban schools from five zones across India. They found 18.2 percent of all kids aged 2 to 17 to be overweight or obese as per international standards. Other studies too have come up with similar figures.
"During the past three decades obesity rates have doubted for pre-school age children and adolescents and tripled for school-going children aged 6 to 11 years." Maintains Dr Rekha Harish professor and head of paediatrics at Government Medical College, Jammu, who is also national convener of the Indian Academy of Paediatrics' task force for the prevention of childhood obesity. "Overweight children have 70 per cent chance of being an overweight or obese adult, by which time it may be too late to intervene. Childhood obesity's enormouslygrowing rate needs urgent attention if its potential toll on morbidity, mortality and the economy is to be avoided".
Make children and adolescents participate in at least 60 minutes of physical activity every day. For pre- schoolers, most physical activity will be unstructured; playing outdoors is particularly helpful. Encourage physical activity in this age group by just "prescribing" playground time.

For Older children, encourage structured physical activity when possible (team or individual sports, or supervised exercise sessions).
Children are more likely to participate consistently when they are accountable to a coach or leader. The American Academy of Paediatrics (AAP) recommends at least 30 minutes of structured physical activity during the school day. Refrain from withholding recess as a punishment.
TV, computer and video games should be considered a privilege, not a right.

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There should be no TV in bedrooms. No eating while watching TV (Warning: a lot of commercials with children's programs are related to food). Television viewing in perhaps the best established environmental influence on the development of obesity during childhood. Limit screen time to less than two hours per day (AAP recommends 14 hours per week). Take physical activity breaks during commercials.

## A. On the basis of your reading of the above passage, complete the following statements:

[6]
a) Child obesity is a time bomb because
b) Child obesity needs urgent attention as
c) The best physical activity for pre-scholars is $\qquad$
d) Physical activity for older children includes
e) To prevent overeating, reduces time on $\qquad$
f) Television viewing and obesity are linked because
B. Fill in the blanks with one word only:

## [4]

Screen time should be (a) $\qquad$ to two hours per day in order to (b) $\qquad$ obesity in children. All children must (c) $\qquad$ in sixty minutes of physical activity to remain (d)
C. Fill the words in the passage which mean the same as the following:
a) connected with disease $\qquad$
b) connected with death $\qquad$

## Section- B (Writing, Vocabulary, Grammar)

1. Write an article for a national daily on 'Can increase in fines imposed be the solutions for traffic rules violation!' You are Rachit / Rachita, a reporter.

## OR

You are Sohan. One of your classmates, Mohan, is in the habit of stealing small things from the school bags of other students. Write a letter to the mother of Mohan telling her politely to stop his bad habits of stealing.
2. Justify and write a paragraph on 'Speak only when asked to'

## OR

Last week your school arranged a visit to the local orphanage where you met many children. You were so overwhelmed with feelings after meeting these children that you felt an urge to write your feelings. Write your feelings in the form of diary entry.
3. A famous professor Dr. Robert Langdon will be visiting your school on $15^{\text {th }}$ March 2019 to give a lecture on 'Various fields after high school'. Draft a notice for the students of classes IX to XII regarding the same. You are Ankit/Ankita, Head boy/ girl of Gyan Chand Public School, Raipur.

## OR

## Complete the following dialogues:-

Naman:
Robin: I am interested in science subjects.
Naman:
Robin: My father says that I should go in for medical or engineering profession.
Naman: $\qquad$
Robin: I am not fully aware to make the final decision.
Naman:
Robin: I'll do my specialisation in cardiology.
Naman: $\qquad$
Robin: Daily we read about many people suffering from heart diseases.
Naman: $\qquad$

## GRAMMAR

1. Find out transitive and intransitive verbs from these sentences.
(a) The Soldiers walked briskly
(b) I felt severe pain in my stomach.
2. Find out the phrases and write whether they are noun, adverb or adjective phrase.
(a) A green eyed lady greeted us at the reception.
(b) Hardwork is the only key to success.
3. Change them into indirect speech.
(a) The guard said to the visitors, "Do not take photographs inside the church".
(b) Mr. Swami said to his wife, "Can't you wait to ask these questions until we get home?"
4. Fill in the blanks choosing the correct options
(a) If it doesn't rain I__ go to see the match.(might, will)
(b) We have enough vegetables, you $\qquad$ go to the market. (needn't, mustn't)
(c) I $\qquad$ come to your party as I was not well. (can't, couldn't)
(d) Keep telling yourself that hard work ___ pay(will, would)
5. Fill in the blanks with correct preposition.

Of, from, with, for, into, on

Laughter is a natural mechanism (a) $\qquad$ relaxation. It releases you (b) $\qquad$ all levels of your being. It transports you (c) $\qquad$ the innocent world (d) $\qquad$ a child.

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\text { Pg- } 4 \text { of } 6
$$

6. Fill in the blanks with correct forms of verbs given.
(a) It $\qquad$ (be) cloudy all day. I hope the sun shows up tomorrow.
(b) I $\qquad$ (draw) the diagram. Do you think it's all right?
7. Rearrange these jumbled words to make meaningful sentences.
(a) in the lower/ make a hole/ the bottom triangle/right corner of /with a hole punch or pencil point.
(b) to read/that/reading level/or article/get some books/are at your own.

## VOCABULARY

8. Fill in the blanks with correct option
(a) China demands the $\qquad$ of a part of Indian territory.(cession/session)
(b) The poor mother has $\qquad$ many hardships(borne/born)
9. Fill in the blanks with the antonyms of underlined words:-
(a) A dull morning sometimes ends in a $\qquad$ evening.
(b) A lamb is meek whereas a peacock is $\qquad$ .
10. Complete these similes

As firm as a $\qquad$ as brittle as $\qquad$
11. Choose the correct spelling:-
(a) Tution / tuition /tusion
(b) Occurred / occurred / ocured
12. Make sentence with
(a)Lay by
(b) as a rule

## SECTION-C LITERATURE

13. Read these sentence and answer the questions
a) 'I wonder what Grandfather will say'
i) Who said this?
ii) What had happened to make him worry about grandfather's reactions?
iii) What did grandfather say when he learnt of the incidents?
b) 'The village all declar'd how much he knew;
'I was certain he could write and cipher too:
lands he could measure, terms and tides presage,
And e'en the story ran that he could guage.'
i) Who is 'he' here?
ii) What are the jobs that 'he' could do?
iii) Which poetic device has been used here? Mention it.
a) What kind of relationship did Aditya and Sasanka have during childhood?
b) Write a short character sketch of the young soldier. (The incident at the French Camp)
c) How did Newton discover the force of gravitation?
d) How did Parvati prepare the colours to paint the earthenware?
e) What was Moxon's opinion on machines?
f) Write the central idea of the poem ' Palanquin Bearers'.
14. 'Home is the shelter where one is safe'. Still in many areas people cut down trees to make their home. Is it right on their part to cut down woods for their own homes or is it wrong in the sense that they are making birds homeless? What should come first-one's own safety or the safety of the birds?
15. Write the character sketch of Claudius.
16. What did Sebastian say to tease Olivia?
17. What did Claudius do to get rid of Hamlet?

## Pg-6 of 6

# DELHI PUBLIC SCHOOL SAIL TOWNSHIP, RANCHI <br> ANNUAL EXAMINATION (2018-19) 

Class:-VII
Subject:- Social Science
Time- 3 Hrs.
M.M-80

## General Instructions:-

1. All the questions are compulsory.
2. Marks are given against the instruction.
3. Map to be attached with Geography answer script.

## HISTORY

I. Answer these question in short.

1. Who were the Mongols?
2. In whose reign did the Sultanate reach its farthest extent?
3. What was Akbar's idea of 'Sulh-i-kul'?
4. Differentiate between primogeniture and coparcenary.
5. Why did the Mughals emphasise their Timurid and not their Mongol descent?
6. What is pietra-dura?
7. List anyone difference between 'trabeate' and 'arcuate'.
8. Sultan Mahmud of Ghazni was a contemporary of which Chola ruler?
II. Answer these questions:-
(3X5=15)
9. What were the steps taken to ensure that muqtis performed their duties?
10. How important was the income from land revenue to the stability of the Mughal Empire?
11. State the reasons for the people to visit Surat from distant lands.
12. How was the administration of the Ahom state organised?
13. What were the major beliefs and practices of the Sufis?
III. Answer in detail:-
(1X5=5)
14. List the groups into which the states of eighteenth century can be divided. Mention any two policies adopted by Murshid Quli Khan to strengthen his position in his newly found state. (3+2)

CIVICS
I. Answer these questions in short:

1. Define Constituency.
2. What is a Press Conference?
3. What is meant by double-burden?

## Pg-1 of 2

4. In what way a person may feel de-valued?
5. List one way in which media play an important role in a democracy.
6. What is censorship?
7. Why does media 'set agenda'?
II. Answer these questions :-
8. Explain how do some MLAs become ministers?
9. How does the difference between the toys and games of boys and girls define their roles that they have to play as adults?
10. How did branding start? List two reasons why building brands is important to advertising
11. List the important features of a weekly market.
III. Answer the questions in detail:-
12. On what grounds inequality is practiced in India? In what ways the Indian Constitution is a 'living document' in people's struggle for equality? $(2+3=5)$

## GEOGRAPHY

I. Answer the following questions in one word or one sentence.

1. Which regions are known as 'Orchards of the world'?
2. The animals in polar region have thick fur and thick skin. Why?
3. Write one merit and demerit of air transport?
II. Answer the following questions in short:-
4. 'Man modifies his environment'. Explain this statement with three suitable points.
5. Write three uses of rocks.
6. How does air circulation take place?
III. Answer the following question in detail:-
7. Why do the plates move? What are exogenic and endogenic forces?

Give an example of each.
2. What are tides and how are they caused? Explain three advantages of tides. $(2+3=5)$
IV. Draw and label the diagrams of three types of rainfall.
V. On the outline map of world locate and label the following items:
i. An airport - New York
ii. A seaport - Mumbai
iii. Victoria Lake.

## Pg-2 of 2

# DELHI PUBLIC SCHOOL <br> SAIL TOWNSHIP, RANCHI <br> ANNUAL EXAMINATION (2018-19) 

Class:-VII<br>Subject:- Science

Time- 3 Hrs.<br>M.M-80

## PHYSICS

1. 

( $1 \times 5=5$ )

1. What do we call the metallic ball of the pendulum?
2. Show the shape of the distance-time graph for the uniform motion.
3. Give one reason for excessive flow of current through a circuit.
4. What are the features of a fuse wire?
5. Which colour is good absorber of heat?
6. 

$$
(2 \times 4=8)
$$

1. What are the two laws of reflection of light? State one use of concave mirror and convex mirror.
2. Why is a room heater placed near the floor and an air conditioner near the ceiling?
3. What do you mean by the time period of a simple pendulum?

Calculate the time period of a pendulum if it takes 32 seconds to complete 20 oscillations.
4. Do you think an electromagnet can be used for separating plastic bags from a garbage heap?

Explain.
3.

1. Can we use clinical thermometer to measure the temperature of boiling water? If not, why?

Convert: $25^{\circ} \mathrm{C}$ to ${ }^{\circ} \mathrm{F}$.
$59^{\circ} \mathrm{F}$ to ${ }^{\circ} \mathrm{C}$.
2. You want to reduce the time period of a pendulum. How will you achieve it?

The distance between two stations is 240 km . A train takes 4 hrs to cover this distance. Calculate the speed of the train.
3. Differentiate between concave lens and convex lens. (2 points)

A shiny metallic flat surface forms an image but it is not as clear as the image formed by a mirror. Explain.
4.

1. What are CFLs? State its one advantage and one disadvantage .
2. What is an electric bell? Explain its working with the help of diagram.

Or

1. What is the difference between odometer and speedometer?
2. The distance-time graph for a moving body is given below:-

| Time (in sec) | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Distance covered (in <br> $\mathrm{m})$ | 10 | 20 | 30 | 40 | 50 | 60 |

Plot the distance time graph and calculate the speed of the body from the plot.

## CHEMISTRY

Q1. Name the acid base indicator extracted from lichens.
Q2. At a sewage treatment plant, what type of bacteria works:
a) In a digester tank
b) In aeration tank

Q3. When the soil is too acidic plants do not grow well in it. To improve its quality, what must be added to the soil ?

Q4. A student adds dilute sulphuric acid to lime water. Will the reaction mixture become hot or cold ?

Q5. Which gases are responsible for acid rain ?( any two )
Q6. a) Explain how painting of an iron gate prevents it from rusting ?
b) What is the chemical name of baking soda?

$$
(1 \times 2=2)
$$

Q7. a) Give an example of a process in which both physical and chemical changes take place.
b) when carbon dioxide is passed through lime water, it turns milky due to the formation of a chemical . name the chemical.

$$
(1 \times 2=2)
$$

Q8. a) X and Y are two types of organisms which are found in forest. Both of them are cleansing agents of the forest. X eats up dead animals whereas Y breaks down dead animals into humus. What is the general name of the organism $X$ and $Y$ ?
b)Why forest are called green lungs ?

Q9. a) Why it is suggested to plant eucalyptus trees all along sewage ponds.
b) Why should oil and fats not be released in the drain ?

$$
(1 \times 2=2)
$$

Q10. Complete the following table :

| SL <br> No | Test Solution | Effect on Litmus | China Rose |
| :--- | :--- | :--- | :--- |
| a) | Vinegar |  |  |
| b) | Baking Soda |  |  |
| c) | Sugar Solution |  |  |

$(0.5 \times 6=3)$
Q11. a)How forest helps in preventing floods ?
b) What name is given to the branchy part of the tree above the stem? Also show it with the help of diagrams.

Q12. a) Explain why it is harmful to discharge untreated sewage into water bodies?
b) Which type of toilet is used in aeroplanes ?
c) Name two water borne diseases.

Q13. Answer any one : A or B
A) a)When is the World water Day celebrated?
'b) What is the purpose of rain water harvesting?
c) Draw a well labelled diagram of roof top rain water harvesting?

## OR

B) You have been asked to maintain a garden :
a)How will you minimise the use of water for the irrigation of plants in the garden ?( 2 ways)
b)Draw a labelled sketch showing the ground water, water table, infiltration

$$
(2+3=5)
$$

## BIOLOGY

I. Answer in one sentence- $1^{*} 4=4$

1. Why is chlorophyll necessary for photosynthesis?
2. What is the importance of humus in the soil?
3. Nostrils help us to inhale air. Which organ performs the same function in [a] insects [b] plants
4. Why should we not speak while swallowing food?
II. Answer as directed $-2 * 4=8$
5. Write ways to prevent soil erosion and soil pollution[2 points in each]
6. What is migration? Name two migratory birds.
7. Draw a labeled diagram of the soil profile.
8. Write one point of difference between aerobic and anaerobic respiration. Write two ways in which anaerobic microbes are useful to us.

III] Answer in brief- $3 * 3=9$

1. Write the function of each of these -
[a] Pseudopodia in amoeba
[b] liver in humans
[c] rumen in cows
2. Define sericulture. Draw the 4 stages in life cycle of a silk moth.
3. Define [a] pollination [b] fertilization [c] vegetative propagation
IV. Answer any one of the following questions $-5 * 1=5$

1[a] Draw a schematic diagram to show circulation of blood.
[b] Name the components of blood and the function of each.
OR
2[a] Draw a well labeled diagram of the human excretory system.
[b] Write the function of each of its parts.

## निर्देश:-

(i) सभी प्रश्नों के उत्तर निर्देशानुसार देना अनिवार्य है।
(ii) प्रश्नों के कुल चार खण्ड हैं - क, ख, ग, घ ।
(iii) प्रश्नों की कुल संख्या 15 है।

1. नीचे लिखे गद्यांश को ध्यानपूर्वक पढ़कर प्रश्नों के उत्तर दें:-

सुभाषचन्द्र बोस पिता की इच्छापूर्ति के लिए इंग्लैंड गए और अथक परिश्रम करके भारतीय प्रशासनिक सेवा की परीक्षा उत्तीर्ण कर ली। लेकिन अंग्रेजों द्वारा भारतीयों पर होते हुए अत्याचार को देखकर उन्होंने प्रशासनिक सेवा को ठुकरा दिया और तन-मन-धन से देश सेवा में जुट गए। उन्होंने आजाद हिन्द फौज की स्थापना की। इस फौज का नारा था-'जय-हिन्द' और राष्ट्रगान था - सुख चैन की वर्षा बरसे भारत नाम सुभागा' और राष्ट्र्व्वज था 'तिरंगा'। आज़ाद हिन्द फौज में न कोई हिन्दू था न कोई मुसलमान और न कोई ईसाई - सब हिन्दुस्तानी पहले बाद में कोई और। सबकी एक भाषा थी, एक धर्म था, एक लक्ष्य था। सभी के मन में नेताजी सुभाष के 'प्रति असीम' प्यार था और देश को स्वतंत्र कराने के जिए मर-मिटने की चाह। नेताजी ने नारा दिया था, 'तुम मुझे खून दो, मैं तुम्हें आजादी दूँगा।"
(क) नेता जी कौन सी परीक्षा के लिए इंग्लैंड गए और यह परीक्षा उन्होंने किसकी इच्छापूर्ति हेतु दी?
(ख) सुभाषचन्द्र ने किस फौज की स्थापना की थी और उस फौज का राष्ट्र गाान क्या था?
(ग) आजाद हिन्द फौज की क्या विशेषता थी?
(घ) भारतीयों पर अत्याचार होते देख नेता जी ने क्या किया?
(ङ) देशवासियों के मन में नेताजी के लिए किस प्रकार भावना थी?
2. नीचे लिखे पद्यांश को ध्यानपूर्वक पढ़कर प्रश्नों के उत्तर दें:-

थाल सजा कर किसे पूजने
चले प्रातः ही मतवाले?
कहाँ चले तुम राम नाम का
पीताम्बर तन पर डाले?
चले झूमते मस्ती से तुम
क्या अपना पथ आए भूल?
कहाँ तुम्हारा दीप जलेगा
कहाँ चढ़ेगा माला-फूल?
सुंदरियों ने जहाँ देश-हित
जौहर-व्रत करना सीखा,
स्वतंत्रता के लिए जहाँ
बच्चों ने भी मरना सीखा।
वहीं जा रहा पूजा करने
लेने सतियों की पद-धूल
वहीं हमारा दीप जलेगा
वहीं चढ़ेगा माला-फूल।
(क) वीर, पूजा करने क्या लेकर जा रहा है और उसने तन पर क्या डाल रखा है?
(ख) देश-हित के लिए बच्चों ने क्या करना चाहा है?
(ग) वीर ने फूल और माला को कहाँ चढ़ाने की इच्छा व्यक्त की है?
(घ) महिलाओं ने देश -हित के लिए क्या करना सीखा है?
[खण्ड-ख]
3. निर्देशानुसार उत्तर लिखें:-
(क) इनके विलोम लिखें।
राग या अथ
(ख) स्त्रीलिंग शब्द छाँटे-
गाँव , मित्रता
(ग) दिए गए उपसर्ग से शब्द बनाएँ - 'उप'
(घ) इस शब्द में से प्रत्यय अलग करें- चढ़ाव
(ङ) हिन्दी भाषा की दो विशेषताओं लिखें।
(च) अनेक शब्दों के लिए एक शब्द लिखें:-
जानने की इच्छा रखने वाला
जो कहा न जा सके
(छ) किसी एक का दो पर्यायवाची बताएँ।
युद्ध या गृह
(ज) दिए गए वाक्यों के क्रिया विशेषण के आधार पर भेद बताएँ।
(i) वह हमेशा पढ़ता है।
(ii) प्रतिदिन का गृह कार्य करो।
(झ) एकार्थक शब्दों के अर्थ बताएँ अनुरोध — प्रार्थना
(ञ) अनेकार्थक शब्दों के एक-एक अर्थ लिखें।
धन, वंश
(ट) मुहावरों के अर्थ बताएँ -
अपने पाँव पर कुल्हाड़ी मारना या उल्टी गंगा बहाना
(ठ) श्रुतिसम भिन्नार्थक शब्दों के अन्तर वाक्य द्वारा दिखाएँ :-

> (i) असमान - आसमान या आधी - आँधी
(ड) अनुस्वार और अनुनासिक में सोउदाहरण अन्तर स्पष्ट करें।
(ढ) रचना के आधार पर दिए गए शब्दों के भेद बताएँ-
जलज, वीणापाणि, आदमी, देवदूत
[खण्ड-ग]
4. पाठ के आधार पर रिक्त स्थानों को भरें।
(क) तेरे दादा ने यह $\qquad$ मुझे इसी दिन के लिए पहनाया था।
(ख) कवि ने किसान एक शाम कविता में $\qquad$ की शाम का प्राकृतिक दृश्य दिखाया है।
5. यह कथन किनके द्वारा कहा गया है- (पठित पाठ के आधार पर)
(क) मैं हैरान था कि दुबली -पतली गंगा, यमुना और सतलुज मैदानों में उतर कर विशाल कैसे हो जाती है।
(ख) उरिन हो गई बेटा, भगवान भला करे हमारी मालकिन का।
6. (क) हिमालय की बेटियाँ पाठ में किस लेखक के द्वारा नदियों को माता कहा गया है?
(ख) शाम एक किसान कविता में पहाड़ और नदी की समानता किससे की गई है?
7. नीचे लिखे प्रश्नों के उत्तर दें-
(क) 'फास्ट फूड' के फायदे क्या हैं?
(ख) कुब्जा से बचने के लिए नीलकंठ क्या करता था?
(ग) बाबू कुँवर सिंह किस तरह के युद्ध में पारंगत थे एवं उनके अंदर देशभक्ति की भावना किसने उत्पन्न की?
8. लघु उत्तरीय प्रश्नों के उत्तर लिखें -
(क) माधवदास क्यों बार-बार चिड़िया से कहता था कि यह बगीचा तुम्हारा ही है? क्या वह, यह बात नि:स्वार्थ भाव से कह रहा था?
(ख) कवि रहीम ने परोपकारी व्यक्ति की तुलना किनसे की है इसके आधार पर सज्जन व्यक्ति को क्या करना चाहिए?
(ग) 'विप्लव' कविता के माध्यम से कवि क्या संदेश देना चाहते हैं?
(घ) पाठ के आधार पर पक्षी उन्मुक्त रहकर अपनी कौन-कौन सी इच्छा पूर्ण करना चाहते हैं? यह कविता किस भावना को महत्व देती है?
9. निम्नलिखित दोहे में से किसी एक का अर्थ बताएँ। धरती की -सी रीत है, सीत, धाम और मेह। जैसी परि सो सहि रहें, त्यों रहीम यह देह।।

## या

जाल परे जल जात बहि, तजि मीनन को मोह। रहिमन मछरी नीर को, तऊ न छाँड़ती छोह।।
10. निम्नलिखित प्रश्नों के उत्तर लिखें-
(क) नीलकंठ की शारीरिक विशेषताओं का वर्णन करें।
(ख) खान-पान में बदलाव के कौन-कौन से फायदे हैं? फिर भी लेखक इस बदलाव को लेकर क्यों चिन्तित है?
(ग) यासुकी चान के लिए पेड़ पर चढ़ने का यह पहला और अंतिम मौका था? लेखिका ने ऐसा क्यों कहा?
11. निम्नलिखित पठित गद्यांश को पढ़कर प्रश्नों के उत्तर दें।

मिठाई वाले का स्वर उसके लिए परिचित था, झट से रोहिणी नीचे उतर आई। उस समय उसके पति मकान में नहीं थे। हाँ, उनकी वृद्धा दादी थीं। रोहिणी उनके निकट आकर बोली, '"दादी चुन्नू-मुन्नू के लिए मिठाई लेनी है। जरा कमरे में चलकर ठहराओ। मैं उधर कैसे जाऊँ, कोई आता न हो। जरा हट कर मैं भी चिक की ओट में बैठ रहूँगी।
(क) रोहिणी किसका स्वर सुनकर उतर आई?
(ख) मिठाई किनके लिए लेनी थी और घर में रहने वाली दूसरी महिला कौन थी?
(ग) ज़रा हट कर मैं चिक की ओट में बैठी रहूँगी, ये किसने, किससे कहा?
12. मूल्यपरक प्रश्न-

कुँवर सिंह ने आपसी सद्भाव बढ़ाने के क्षेत्र में क्या-क्या कार्य किए? आप समाज में सद्भाव बढ़ाने के लिए क्या कर सकते हैं?
13. महाभारत पर आधारित प्रश्न :- (किन्हीं पाँच प्रश्नों के उत्तर दें)
(क) द्रौपदी स्वयंवर के लिए पांचाल नरेश ने क्या शर्त रखी थी?
(ख) धृतराष्ट्र की बात मानकर पांडवों ने किस निर्जन वन को अपनी राजधानी बनाया और उसका क्या नाम रखा?
(ग) हनुमान ने भीम की परीक्षा कैसे ली?
(घ) महाभारत कथा को सबसे पहले किसने, किसको सुनाया?
(ङ) विदुर की दो विशेषताएँ बताएँ।
(च) ऋषि दुर्वासा ने कुंती को क्या वर दिया था?
(छ) दुर्योधन ने कर्ण को किस देश का राजा बनाया था क्यों ?

> [खण्ड-घ]
14. बिजली व्यवस्था में सुधार हेतु बिजली विभागाध्यक्ष को पत्र लिखें।

विद्यालय में खेल-कूद के सामान की कमी है, विद्यालय के प्राचार्य को खेल-कूद के सामान की पूर्ति हेतु आवेदन पत्र लिखें।
15. किसी एक पर अनुच्छेद लिखें।

- जीवन में त्योहारों का महत्व
- वनों का महत्व
- जल ही जीवन है।

