# FINAL TERM EXAMINATION <br> 2019-2020 <br> SUBJECT-ENGLISH <br> CLASS - IX 

## TIME: 3 Hrs.

MAXIMUM MARKS: 80

## General Instructions:

1. This paper is divided into three sections: $\mathrm{A}, \mathrm{B}$ and C . All questions are compulsory.
2. Separate instructions are given with each section and question, wherever necessary. Read these instructions very carefully and follow them.
3. Do not exceed the prescribed word limit while answering the questions.

## Section A <br> (Reading) <br> 20

## 1. Read the passage carefully:

Read the following passage and answer the questions that follow.
Each year nearly 1.2 million people die and millions of other are injured or disabled as a result of road traffic crashes. The vast majority (over $90 \%$ ) of all road traffic deaths and injuries occur in low-income and middleincome countries. In high-income countries, most of those killed or injured in road traffic crashes are drivers and passengers of four-wheeled vehicles. In low-income and middle-income countries, however, "vulnerable road users" - pedestrians, cyclists and motorcyclists and users of public transportation - constitute a higher proportion of road users and consequently make up a larger proportion of those injured or killed on the roads. This report focuses on young road users, defined as those under 25 years of age. The document highlights the main risk factors for road traffic injuries, noting how many of these risks are elevated in youth. It stresses that successful prevention programmes can be put in place to protect young people and presents examples of interventions from different geographic and cultural contexts that have been shown to be effective. Children and young people under the age of 25 years account for over $30 \%$ of those killed and injured in road traffic crashes. Of the 383046 road traffic deaths that were recorded in this age group around the world, at least half were road users from the World Health Organization's African and South-East Asia Regions. However, the highest rates of road traffic fatalities in the 0-25 year age range occur among road users in the African and the Eastern Mediterranean regions. Road traffic injuries among those under 25 years rank as the eighth leading cause of death around the world. However, when analysed by five-year age groups the significance of road traffic injuries rises dramatically. Among 15-19 year-olds, road traffic injuries are the leading cause of death, while among the 10-14 years and 20-24 years age groups they are the second leading cause of death. Children under five years of age and in particular infants under 1 year, being especially vulnerable to other diseases and conditions, have the lowest ranking for road traffic deaths.
On the basis of your reading and understanding of the above passage, answer the following : (1x8=8)
i) Where do more than $90 \%$ of road traffic accidents and injuries occur?
ii) Are passengers of four-wheeled vehicles form the majority of those killed in road accidents in low and middle income countries ? (True/False)
iii) .......... account for $30 \%$ of those killed and injured in road traffic crashes.
iv) Which age group is least affected by road accidents and injuries? Why?
v) Identify the word in para 2 which means 'to be at risk'. (a) disabled (b) intervention (c) vulnerable (d) killed
vi) The highest rate of road traffic fatalities in the 0-25 year age range is in the: (a) low and middleincome countries. (b) African and the Eastern Mediterranean regions. (c) high-income countries. (d) African and South- East Asia Regions.
vii) Road accidents and injuries is the second leading cause of death in the age group of : (a) 10-14 (b) 20-24 (c) both (c) and (d) (d) 15-19.
viii) 'Vulnerable road users' are : (a) young road users (b) form a high proportion of road users in low and middle income families (c) car drivers (d) passengers of four-wheeled vehicles.

## 2. Read the following passage and answer the questions that follow.

Some of us think that writing is only for writers. But writing is for all of us. As Julia Cameron notes in her book The Right to Write: An Invitation and Initiation into the Writing Life, "I believe we all come into life as writers." Writing can be beneficial for all of us, because it can be therapeutic. One of the most powerful parts of therapy is cultivating the ability to observe our thoughts and feelings, said Elizabeth Sullivan, a licensed marriage and family therapist in San Francisco. And that's what writing helps us do. "Most of us do not think in complete sentences but in self-interrupted, looping, impressionistic cacophony," she said. Writing helps us track our spinning thoughts and feelings, which can lead to key insights (e.g., I don't want to go to that party; I think I'm falling for this person; I'm no longer passionate about my job; I realize how I can solve that problem; I'm really scared about that situation.) Writing is "speaking to another consciousness - 'the reader' or another part of the self. We come to know who we really are in the present moment," she said. Writing also creates a mind-body-spirit connection, she said. "When you use your hands to pen or type something directly from your brain, you are creating a powerful connection between your inner experience and your body's movement out in the world." We hold worries, fears and memories in our bodies, Sullivan said. When we use the body in positive ways - such as dancing or writing - we stay in the present moment, we inhabit our bodies and we can heal ourselves, she said.
"Writing is a small movement but it is incredibly powerful when you are writing down what is in your mind." Here are three types of writing you can try : Free write, Free writing or journalism is simply writing what's on your mind. It's letting it all hang out without censoring yourself. According to Sullivan, this could be: "Today I woke up and found the car window smashed and I wondered if the glass replacement guys go out at night and do it." Pen Poetry. "Poetry is a natural medicine; it is like a homeopathic tincture derived from the stuff of life itself-your experience," writes John Fox in Poetic Medicine: The Healing Art of PoemMaking. Compose a letter- Sullivan suggested writing a short letter to a loved one. Imagine this person has written to you and asked you: "How are you doing, really?" Another exercise is to "write to someone with whom you have 'unfinished business' without sending it." The goal is for you to gain a clearer understanding of your own thoughts and feelings about the person, she said.

### 2.1 On the basis of your reading and understanding of the above passage, answer the following:

(i) Why does Julia Cameron believe that we all come into life as writers ?
(ii) What is the most important therapeutic quality of writing ?
(iii) Whose consciousness does a writer touch through his or her writing ?
(iv) How does Elizabeth Sullivan describe our thinking? Why does she say so ?.

### 2.2 Answer the following questions:

[1×4=4]
(v) Which word in the passage means 'a coarse unpleasant noise' ?
(vi) How can a person clear his or her misunderstanding with someone ?
(vii) The word 'tincture' can be replaced with the word (a) trace (b) potion (c) touch (d) flavour (viii) Which of the following, according to the passage, is not true about writing ? (a) Writing is a static activity of the brain. (b) Writing is a process of self-discovery. (c) Writing is a positive way of using our body. (d) Writing helps us streamline our thoughts.

## Section B

## (Writing and Grammar)

3. Reading a newspaper regularly is significant for the development of writing skills. Write an article in 100 150 words explaining how reading of a newspaper regularly helps to develop writing skills. [8]

## OR

Write a letter to the Editor of a Newspaper in about 100-150 words expressing your views against the intensive use of loudspeakers.
4. Write a short story based on the given outline or cue/s in about 150-200 words.

It was 11 p.m. Seema was about to shut the door and retire for the day when she saw Bono, her pet dog, in the garden. When she went out to bring Bono inside, she saw Bono frantically digging. Seema screamed when she saw...

## OR

One Sunday afternoon, when not only your family but also the entire neighbourhood was enjoying a nap, you felt as if something was burning. Write a story on what happened that afternoon in 150-200 words having a title and a moral.

## 5. Read the sentence given below and fill in the blanks by choosing the most appropriate options from the

 ones that follow.Kamal was scared. Kally no more remembered (i) $\qquad$ he (ii) $\qquad$ his admit card. (iii) $\qquad$ the passage of each hour, he was going closer to the time of his examination. He (iv) $\qquad$ find his admit card as life may not give him another chance to prove himself.
(i) (a) what (b)
(b) when
(c) where
(d) how
(ii) (a) kept (b) had kept (c) was keeping (d) has kept
(iii) (a) With (b) By (c) Over (d) On
(iv) (a) should (b) Can (c) may (d) must
6. One word is omitted in every line against which a blank is given. A slash is given in the place where the word is omitted. Write the word in the given blank.

Eg . 'Let's read together' is/effort by the famous $\qquad$ an
(i) Book Lovers Association/develop an intrinsic $\qquad$
$\qquad$
(ii) love for reading/children and youth. A member $\qquad$
(iii) of the association presides/a reading session $\qquad$
(iv) in / children read aloud some passages of a book $\qquad$
7. Rearrange the following groups of jumbled words/ phrases into meaningful sentences. ( $1 \times 4=4$ )
(i) a great/Hussain's/was astounded/in such/l/my painting/art exhibition/to find/beside.
(ii) bird bath/is a home/the/to/her garden/myriad birds/in.
(iii) much/little/can avert/humanity/bloodshed/a.
(iv) to give up/didn't have/he/other option/but/any.

## Section C

## (Literature)

8. Read the extract given below and answer the questions that follow.
$(1 \times 4=4)$
Few would grudge her the riches she is now reaping. This is what she has to say about her monetary gains from tennis: "Of course, money is a motivation."
(i) Whom does 'her' refer to here ?
(ii) Write the meaning of the word 'grudges'.
(iii) Why few grudged her riches ?
(iv) What was the other motivation for 'her' ?

## OR

I will arise and go now, and go to Innisfree, And a small cabin build there, of clay and wattles made:
Nine bean-rows will I have there, a hive for the honeybee, And live alone in the bee-loud glade.
(i) Name the poem and the poet.
(ii) Why will 'I' go to Innisfree ?
(iii) Where will ' $I$ ' stay in Innisfree?
(iv) Write the meaning of the word 'wattles'.
9. Answer any five of the following questions in 30-40 words.
( $2 \times 5=10$ )
(i) How did the author react when the snake fell on him ?
(ii) What did Einstein jokingly call his desk drawer at work? What did Einstein secretly do during his first job ?
(iii) Was Bruno a loving and playful pet? Why, then, did he have to be sent away?
(iv) What is the belief at Pashupatinath about the end of Kaliyug?
(v) What attracted the child towards the balloons? Why didn't his parents give him the balloons ?
(vi) What does the author notice one Sunday afternoon? What is his mother's reaction? What does she do?
(vi) How does Bill Bryson end up in a "crash position" in the aircraft?

## 10. Answer any one of the questions in 100-150 words.

Who was the worst packer according to you? Justify your answer.
OR
Would you like to be the duck or the kangaroo? Explain.

## 11. Answer any one of the questions in 100-150 words.

What do you think appealed the Swallow to be the messenger of the happy prince?
OR
Describe the character of Sergei.

# FINAL TERM EXAMINATION <br> (2019-2020) <br> SUBJECT: MATHEMATICS <br> CLASS - IX 

Time: 3 Hours
Maximum Marks: 80

## General Instructions:

(i) The question paper comprises of 40 questions divided into four sections, A, B, C and D.
(ii) All questions are compulsory.
(iii) Question number 1 and 20 in Section-A are multiple choice type questions and carry one mark each.
(iv) Question number 21 to 26 in Section-B are very short answer type questions and carry 2 marks each.
(v) Question number 27 to 34 in Section-C are short answer type questions and carry 3 marks each.
(vi) Question number 35 to 40 in Section-D are long answer type questions and carry 4 marks each.

## Section A

1. The number of dimensions, a point has :
(A) 0
(B) 1
(C) 2
(D) 3
2. Median of the following numbers $: 4,4,5,7,6,7,7,12,3$ is
(A) 4
(B) 5
(C) 6
(D) 7
3. The value of the polynomial $6 x+4 x^{2}-3$, when $x=-1$ is
(A) -6
(B) 6
(C) 2
(D) -2
4. Point $(-3,5)$ lies in the
(A) first quadrant
(B) second quadrant
(C) third quadrant
(D) fourth quadrant
5. If $(2,0)$ is a solution of the linear equation $2 x+3 y=k$, then the value of $k$ is
(A) 4
(B) 6
(C) 5
(D) 2
6. The angles of a triangle are in the ratio $5: 3: 7$. The triangle is
(A) an acute angled triangle
(B) an obtuse angled triangle
(C) a right triangle
(D) an isosceles triangle
7. In $\triangle \mathrm{ABC}, \mathrm{BC}=\mathrm{AB}$ and $\angle \mathrm{B}=80^{\circ}$. Then $\angle \mathrm{A}$ is equal to
(A) $80^{\circ}$
(B) $40^{\circ}$
(C) $50^{\circ}$
(D) $100^{\circ}$
8. If angles $\mathrm{A}, \mathrm{B}, \mathrm{C}$ and D of the quadrilateral ABCD , taken in order, are in the ratio 3:7:6:4, then ABCD is a
(A) rhombus
(B) parallelogram
(C) trapezium
(D) kite
9. Two parallelograms are on equal bases and between the same parallels. The ratio of their areas is
(A) $1: 2$
(B) $1: 1$
(C) $2: 1$
(D) $3: 1$
10. In Fig., if $\angle \mathrm{ABC}=20^{\circ}$, then $\angle \mathrm{AOC}$ is equal to:
(A) $20^{\circ}$
(B) $40^{\circ}$
(C) $60^{\circ}$
(D) $10^{\circ}$

11. With the help of a ruler and a compass it is not possible to construct an angle of :
(A) $37.5^{\circ}$
(B) $40^{\circ}$
(C) $22.5^{\circ}$
(D) $67.5^{\circ}$
12. The length of each side of an equilateral triangle having an area of $9 \sqrt{3} \mathrm{~cm}^{2}$ is
(A) 8 cm
(B) 36 cm
(C) 4 cm
(D) 6 cm
13. The lateral surface area of a cube is $256 \mathrm{~m}^{2}$. The volume of the cube is
(A) $512 \mathrm{~m}^{3}$
(B) $64 \mathrm{~m}^{3}$
(C) $216 \mathrm{~m}^{3}$
(D) $256 \mathrm{~m}^{3}$
14. The range of the data :
$25,18,20,22,16,6,17,15,12,30,32,10,19,8,11,20$ is
(A) 10
(B) 15
(C) 18
(D) 26
15. The sides of a triangle are $56 \mathrm{~cm}, 60 \mathrm{~cm}$ and 52 cm long. Then the area of the triangle is
(A) $1322 \mathrm{~cm}^{2}$
(B) $1311 \mathrm{~cm}^{2}$
(C) $1344 \mathrm{~cm}^{2}$
(D) $1392 \mathrm{~cm}^{2}$
16. The radii of two cylinders are in the ratio of $2: 3$ and their heights are in the ratio of $5: 3$. The ratio of their volumes is:
(A) $10: 17$
(B) $20: 27$
(C) $17: 27$
(D) $20: 37$
17. If $a+b+c=0$, then $a^{3}+b^{3}+c^{3}$ is equal to
(A) 0
(B) abc
(C) 3 abc
(D) 2 abc
18. The point at which the two coordinate axes meet is called the
(A) abscissa
(B) ordinate
(C) origin
(D) quadrant
19. $2 \sqrt{3}+\sqrt{3}$ is equal to
(A) $2 \sqrt{6}$
(B) 6
(C) $3 \sqrt{3}$
(D) $4 \sqrt{6}$
20. The figure obtained by joining the mid-points of the adjacent sides of a rectangle of sides 8 cm and 6 cm is :
(A) a rectangle of area $24 \mathrm{~cm}^{2}$
(B) a square of area $25 \mathrm{~cm}^{2}$
(C) a trapezium of area $24 \mathrm{~cm}^{2}$
(D) a rhombus of area $24 \mathrm{~cm}^{2}$

## Section B

21. Locate $\sqrt{5}$ on the number line.
22. Find the value of the polynomial $5 x-4 x^{2}+3$ at (i) $x=0$ (ii) $x=-1$.
23. Point $C$ is called a mid-point of line segment $A B$. Prove that every line segment has one and only one mid-point.

## OR

Over the past 200 working days, the number of defective parts produced by a machine is given in the following table:

| Number of <br> defective parts | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Days | 50 | 32 | 22 | 18 | 12 | 12 | 10 | 10 | 10 | 8 | 6 | 6 | 2 | 2 |

Determine the probability that tomorrow's output will have
(i) no defective part
(ii) at least one defective part
(iii) not more than 5 defective parts
(iv) more than 13 defective parts
24. A cylindrical pillar is 50 cm in diameter and 3.5 m in height. Find the cost of painting the curved surface of the pillar at the rate of Rs 12.50 per $\mathrm{m}^{2}$.
25. Find the cost of laying grass in a triangular field of sides $50 \mathrm{~m}, 65 \mathrm{~m}$ and 65 m at the rate of Rs 7 per $\mathrm{m}^{2}$.
26. ABCD is a trapezium in which $\mathrm{AB} \| \mathrm{DC}$ and $\angle \mathrm{A}=\angle \mathrm{B}=45^{\circ}$. Find angles C and D of the trapezium.

## Section C

27. By Remainder Theorem find the remainder, when $p(x)$ is divided by $g(x)$, where
$p(x)=x^{3}-2 x^{2}-4 x-1, \quad g(x)=x+1$
28. Points $\mathrm{A}(5,3), \mathrm{B}(-2,3)$ and $\mathrm{D}(5,-4)$ are three vertices of a square ABCD . Plot these points on a graph paper and hence find the coordinates of the vertex C .
29. In Fig., $\mathrm{DE} \| \mathrm{QR}$ and AP and BP are bisectors of $\angle \mathrm{EAB}$ and $\angle \mathrm{RBA}$, respectively. Find $\angle A P B$.


## OR

In Fig., POQ is a line. Ray OR is perpendicular to line PQ. OS is another ray lying between rays OP and OR. Prove that $\angle \mathrm{ROS}=\frac{1}{2}(\angle \mathrm{QOS}-\angle \mathrm{POS})$.

30. Construct a triangle ABC in which $\mathrm{BC}=5 \mathrm{~cm}, \angle \mathrm{~B}=60^{\circ}$ and $\mathrm{AC}+\mathrm{AB}=7.5 \mathrm{~cm}$.
31. Factorise $x^{3}+13 x^{2}+32 x+20$
32. Diagonals $A C$ and $B D$ of a quadrilateral $A B C D$ intersect at $O$ in such a way that ar $(A O D)=a r$ (BOC). Prove that $A B C D$ is a trapezium.
33. Three girls Reshma, Salma and Mandip are playing a game by standing on a circle of radius 5 m drawn in a park. Reshma throws a ball to Salma, Salma to Mandip, Mandip to Reshma. If the distance between Reshma and Salma and between Salma and Mandip is 6 m each, what is the distance between Reshma and Mandip?
34. Draw the graph of the linear equation $3 x+4 y=6$. At what points, the graph cuts the $x$-axis and the y -axis.

## Section D

35. In a parallelogram $\mathrm{ABCD}, \mathrm{E}$ and F are the mid-points of sides AB and CD respectively (see Fig.). Show that the line segments AF and EC trisect the diagonal BD .

36. AB and CD are respectively the smallest and longest sides of a quadrilateral ABCD (see Fig. Show that $\angle \mathrm{A}>\angle \mathrm{C}$ and $\angle \mathrm{B}>\angle \mathrm{D}$.

37. Construct a triangle if its perimeter is 10.4 cm and two angles are $45^{\circ}$ and $120^{\circ}$.
38. Find the area of the trapezium PQRS with height PQ given in Fig.


The triangular side walls of a flyover have been used for advertisements. The sides of the walls are $13 \mathrm{~m}, 14 \mathrm{~m}$ and 15 m . The advertisements yield an earning of Rs $2000 \mathrm{per}^{2} \mathrm{~m}^{2}$ year. A company hired one of its walls for 6 months. How much rent did it pay?
39. It costs Rs 2200 to paint the inner curved surface of a cylindrical vessel 10 m deep. If the cost of painting is at the rate of Rs 20 per $\mathrm{m}^{2}$, find
(i) inner curved surface area of the vessel
(ii) radius of the base
(iii) capacity of the vessel
40. Following is the frequency distribution of total marks obtained by the students of different sections of Class IX. Draw a histogram for the distribution above.

| Marks | $100-150$ | $150-200$ | $200-300$ | $300-500$ | $500-800$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Number of students | 60 | 100 | 100 | 80 | 180 |

Following table shows a frequency distribution for the speed of cars passing through at a particular spot on a high way:

| Class interval (km/h) | Frequency |
| :---: | :---: |
| $30-40$ | 3 |
| $40-50$ | 6 |
| $50-60$ | 25 |
| $60-70$ | 65 |
| $70-80$ | 50 |
| $80-90$ | 28 |
| $90-100$ | 14 |

Draw a histogram and frequency polygon representing the data above.

## General Instructions:

- Answer all the questions. Some questions have internal choice. Marks are indicated against each question.
- Question number 1 to 20 (Part-A) are objective type questions carrying 1 mark should be one word or one sentence each.
- Answer to questions carrying 2 and 3 marks (Part-B Question 21 to 27) should not exceed 100 words each.
- Answer to questions carrying 5 marks (Part-C Question 28 to 34 ) should not exceed 350 words each.
- Question number 35 (Part-D) is a Map question that includes identification and location of significant test items. Attach the map with the answer book.


## SECTION -A

## I.CHOOSE THE CORRECT OPTION

(1×20=20)
Q1. Shifting agriculture is also known as
a) Swidden Agriculture
b) Pargana
c) Jhum Agriculture
d) a and c

Q2. A system of cutting trees controlled by forest department, in which different varities of trees are cut and one type of trees are planted
a) scientific forestry
b) reserved forest
c) modern forestry
d) none

Q3 Alluri Sitaram Raju who was one of the rebellions against the colonial domination of the forest area was from
a) Andhra Pradesh
b) Bengal
c) Bombay
d) Madras

Q4.BirsaMunda who was one of the rebellions against the colonial domination of the forest area was from
a) Chhotanagpur
b) Bengal
c) Bombay
d) Madras

Q5. The wind blowing in the Northern Plain in summer is known as
(a) KaalBaisakhi
(b) Loo
(c) Trade winds
(d) none of the above

Q6. Pargana in the Bastar region was a
(a) centre of district
(b) cluster of villages
(c) group of gods
(d) method of cultivation

Q7. The sandy soils of the desert support
(a) Cactus and thorny bushes
(b) Mangroves
(c) Bamboos and Sal
(d) Peepal and Neem

Q8. The word $\qquad$ is used to denote plants of a particular region or period.
(a) Fauna
(b) Flora
(c) bio reserve
(d) ecosystem

Q9. A very large ecosystem on land having distinct type of vegetation and animal life is called
(a) Biome
(d) ecology
(c) reserved forest
(b) bio reserve

Q10. Demography is the study of
(a) infrastructure
(b) human behaviour
(c) human rights
(d) changing number of birth, death, diseases in a community over a period of time

Q11.What are the $\mathbf{3}$ dimension of food security?

Q12.Who is a person who puts together land ,labour , and capital?
(a) Moneylender
(b) Entrepreneur
(c) Zamindar
(d)Manager

Q13. Define "Social Exclusion".

Q14. When more people are employed than required for particular job ,it is known as $\qquad$ .
(a)Unemployment
(b) Employment
(c) Disguised unemployment
(d) None of the above

Q15.Buffer stock is the stock of food grains procured by the Government through $\qquad$
(d)FICCI

Q16. Green revolution of 1960 's was associated with:
(a) Use of HYV seeds
(b) Tree plantation program
(c) Fisheries development
(d) None of the above

Q17. Match the following:
Countries with non-democratic practice:
(i) China
(ii) Zimbabwe
(iii) Estonia
(iv) Pakistan
(a) Referendum
(b) Russian minorities face challenge to get voting right
(c) Kwame Nkrumah
(d) National people's congress

Q18. What is By-election?
A) Election after every 5 years
B) Mid-term election
C) Election after death of a leader
D) None of above

Q19. In which part of the constitution of India has Fundamental duties?
A) 3
B) 4
C) 5
D) 2

Q20. Who is called the first citizen of India?
A) President
B) P.M
C) Governor
D) C. J. I

## SECTION -B

## II. Answer the following questions in brief :

Q21. Describe the main causes of the Revolt of Bastar?
OR
Name the three leaders of the tribal rebellion against the Forest Act in $20^{\text {th }}$ century, India.
Q22. Who was appointed as the first Inspector General of Forest in India?Explain any two reforms introduced by him.

## OR

"The Treaty of Versailles was humiliating on the Germans." Give three examples in support of your statement.
Q23. Distinguish between Thorn Forest and Mangrove Forests.
Q24. Write the main Characteristics of Tropical Deciduous Forest.
Q25. List down the three challenges to free and fair elections in India.

## OR

Discuss the challenges faced by black people in South Africa.
Q26. Discuss any three major reasons for poverty in India.
OR
What are the main features of NREGA 2005?
Q27. How is human resource different from other resources like land and physical capital ?

## SECTION -C

## III. Answer the following questions in detail :

(5x7=35)
Q28. What do you mean by the term executive? How many types of executive do we have? Which one you find more powerful and why? Discuss some of major functions of an executive.

## OR

Write a short note on freedom of religion? Do you think India is a secular country? Give reason to your answer.
Q29. Who were the Kalangs of Java? How did Samins challenge the Dutch?
Q30. Distinguish between Tropical Evergreen and Deciduous Forests.

## OR

What is migration? What are the two types of migration? Describe the trends of migration in India.
Q31. Discuss the power and functions of president of India. Why he is called nominal head?
Q32. Why was the Second Backward Classes Commission appointed? What was the report given by this Commission? How was it implemented? What was the decision given by this Supreme Court?

## OR

Write two importance of election campaign. Discuss any three functions of Election commission of India.
Q33. Discuss any 5 ways of increasing farm production on the same piece of land.

## Q34. Write short note on:

a)PDS
b)Buffer stock
c)Green revolution

## SECTION - D

Q35. (A) Two places A and B are marked on the outline political map of India. Identify these places with the help of following information.
(a) Identify the type of forest in the shaded region
(b) Name the National Park.
(B) Locate and label any three of the following on the outline political map of India:
(a) Kaziranga National Park.
(c) Periyar Wildlife sanctuary
(b) Ranthambore National Park
(d) Rajgir National Park


## General instructions:

- The Question paper comprises of three sections A,B and C, Attempt all the sections.
- All questions are compulsory.
- Internal Choice is given in each sections.
- Section-A (Physics) - 27 Marks

Section B (Chemistry) - 26 Marks
Section C (Biology) - 27 Marks

- Draw diagram wherever needed.
- Numbering of questions should be proper.


## Section-A (Physics)

## 1. Choose the correct option :

(1X7 = 7)
i) Which of the following requires medium?
(a) Radiowaves
(b) Microwaves
(c) Sound Waves
(d) Electromagnetic waves
ii) A 1 kg mass falls from a height of 10 m into a sand box. What is the speed of the mass just before hitting the sand box?
(a) $12 \mathrm{~ms}^{-1}$
(b) $14 \mathrm{~ms}^{-1}$
(c) $16 \mathrm{~ms}^{-1}$
(d) $18 \mathrm{~ms}^{-1}$
iii) Sound wave cannot pass through-
(a)metals
(b) water
(c) air
(d) vacuum
iv) If the weight of a man on the surface of the earth is 600 N then what will be its weight on the surface of the moon
(a) 60 N
(b) 90 N
(c) 98 N
(d) 6 N
v) The persistence of hearing for human beings is not more than
(a) 1 s
(b) $1 \mathrm{~s} / 5$
(c) $1 \mathrm{~s} / 10$
(d) $1 \mathrm{~s} / 2$
vi) Why do bicycles begin to slow down when we stop pedaling?
vii) The work done on an object does not depend upon the-
(a) displacement
(b) force applied
(c) angle between force and displacement
(d) initial velocity of the object
2. Find the energy possessed by an object of mass 10 kg when it is at a height of 6 metre above the ground. Given $-\mathrm{g}=9.8 \mathrm{~ms}^{-2}$
3. What is reverberation? How can it be reduced?
4. a) What happens to the force between two objects, if :
i) the mass of one object is doubled
ii) the distance between the object is doubled and tripled
b) Why does a block of plastic released under water come up to the surface of water?
5. a) How does the sound produced by a vibrating object in a medium reach your ear?
b) What is the audible range of the average human ear?
6. State and prove the work energy theorem and also show that the total energy of a freely falling object. Always remain same .
7. (a) Describe (i) Echo and (ii) SONAR and give their practical uses.
(b) A stone is dropped in to the well which is 40 m deep. The sound of splash is heard 2.95 s after the stone is dropped. Find the speed of sound

## Section B( Chemistry)

8. Convert the following temperatures to Celsius scale.
a) 300 K
b) 254 K
c) 573 K
9. What types of mixtures are separated by the technique of crystallisation?
10. What is the appropriate condition for liquefaction of gases?
a) High temperature , low pressure
b) High pressure , low temperature
c) Both high temperature and pressure
d) Both low temperature and pressure
11. The change of a liquid into vapours is called:
a) Vaporization
b) Solidification
c) Sublimation
d) None of these
12. The ratio of $\mathrm{H}: \mathrm{O}$ by mass in $\mathrm{H}_{2} \mathrm{O}$ is
a) $16: 1$
(b) $1: 8$
(c) $32: 1$
(d) 1:16
13. The element whose isotopes are used for dating of the fossils is
(a) Hydrogen
(b) Carbon
(c) nitrogen
(d) Sulphur
14. Differentiate between dispersed phase and dispersion medium with examples.

Or
Discuss various characteristics of solids, liquids and gases.
15. Calculate the molecular mass of $\mathrm{H}_{2}, \mathrm{O}_{2}, \mathrm{Cl}_{2}, \mathrm{CO}_{2}, \mathrm{CH}_{4}, \mathrm{NH}_{3}, \mathrm{C}_{2} \mathrm{H}_{6}$

Or
Discuss Daltons atomic theory in relation to law of conservation of mass
16. Explain emulsions and various types of emulsions

Explain with examples:-
a) Atomic number
c) Mass number
b) Isotopes and
d) Isobars
17. Explain empirical and molecular formula

Or
If the number of electrons in an atom is 8 and the number of protons is also 8 then,
a) What is the atomic number of the atom?
b) What is the charge on the atom?
18. (a) What was missing in Thomson's model of the atom?
(b) Write any two observations of Rutherford's model of atom.

> Or

Write the distribution of electrons in carbon, nitrogen, oxygen, sodium, potassium, and chlorine.
19. (a) List any four properties of a colloid and mention any two properties in which colloids differ from suspension.
(b) Why does solution of sodium chloride not show tyndall effect whereas the mixture of water and milk shows?
(c) Write one difference between concentration and solubility?

## Section C (Biology)

21. Man's activities which leads to environmental pollution.
(a) burning of fossil fuels.
(b) burning of crops
(c) both a and b
(d) none of the above
22. Diseases which continue for a few days and cause no long term effect on the body.
(a) infectious disease
(b) chronic disease
(c) acute disease
(d) all of the above
23. To which phylum do sponges belong?
24. Which is the smallest and the largest bird?
25. Give one word for the junction between two neurons.
26. Draw well labelled diagrams of various types of muscles found in human body.

OR
Differentiate between parenchyma, collenchymas and sclerenchyma on the basis of their cell wall.
27. What is immunization? Name any four diseases which can be prevented by immunization.
28. (a) Differentiate between biodegradable and non biodegradable substances.
(b) What is smog?

OR
Name the five classes of vertebrates. Compare any two on the basis of their
(a)Habitat
(b) Covering the skin
(c) Respiratory Organs
29. Answer the following questions on the basis of your understanding of the following paragraph and the related studies concepts.
Mohan had a biology practical exam. The biology laboratory in his school had lots of microscopes of different precision. When he reached the laboratory, he found that many microscopes were already mounted with a slide. Just for fun, he went and looked at a slide through the microscope and found the above image. He wasn't able to identify the organism or type of organism, so he called his friend Shyam to look at the slide. Shyam found our immediately what kind of organism this was.

(a) What is this organism?
(b) How did Shyam find out the kind of organism?
(c) Give two examples of such kind of organisms.
(d) What should a person ensure before looking at a slide through a microscope?

OR

Why is mitochondria called 'powerhouse of cell'? Give three similarities and one difference between mitochondria and plastid.
30. With diagram explain Oxygen cycle in nature.

