FINAL TERM EXAMINATION 2019-2020 SUBJECT-ENGLISH CLASS – IX

TIME: 3 Hrs. MAXIMUM MARKS: 80

General Instructions:

- 1. This paper is divided into three sections: A, 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

(Reading)

20

1. Read the passage carefully:

Read the following passage and answer the questions that follow.

[8]

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 middle-income 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.

[12]

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 Poem-Making. 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:

[2×4=8]

- (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)

30

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.

[10]

5. Read the sentence given below and fill in the blanks by choosing the most appropriate options from the ones that follow. (1×4=4)

Kamal was scared. Kally no more remembered (i) he (ii) his admit card. (iii) the passage of each hour, he was going closer to the time of his examination. He (iv) find his admit card as life may not give him another chance to prove himself.

- (i) (a) what (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. $[1 \times 4 = 4]$

Eg . 'Let's read together' is/effort by the famous	an
(i) Book Lovers Association/develop an intrinsic	_
(ii) love for reading/children and youth. A member	
(iii) of the association presides/a reading session	
(iv) in / children read aloud some passages of a bool	<

- 7. Rearrange the following groups of jumbled words/ phrases into meaningful sentences. (1×4=4)
- (i) a great/Hussain's/was astounded/in such/I/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.

(8)

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.

(8)

What do you think appealed the Swallow to be the messenger of the happy prince?

OR

Describe the character of Sergei.

FINAL TERM EXAMINATION

(2019-2020)

SUBJECT: MATHEMATICS

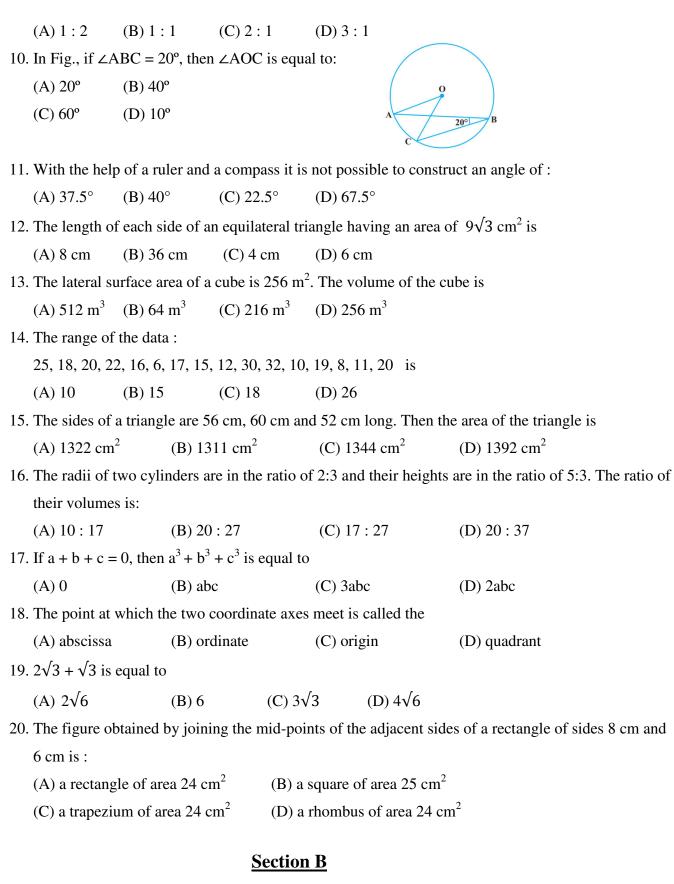
CLASS - IX

Time: 3 Hours Maximum Marks: 80

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General	Inctrii	ctions
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- (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	on A		
1.	The number of dimensions, a point ha	s:		
	(A) 0 (B) 1 (C) 2	(D) 3		
2.	Median of the following numbers :4, 4	4, 5, 7, 6, 7,	7, 12, 3 is	
	(A) 4 (B) 5	(C) 6		(D) 7
3.	The value of the polynomial $6x + 4x^2$	- 3, when x =	= -1 is	
	(A) - 6 $(B) 6$ (C)	C) 2	(D) -2	
4.	Point $(-3, 5)$ lies in the			
	(A) first quadrant ((B) second qu	ıadrant	
	(C) third quadrant (D) fourth qu	adrant	
5.	If (2, 0) is a solution of the linear equa	ation $2x + 3y$	y = k, then the v	value of k is
	(A) 4 (B) 6 (C) 5	(D) 2		
6.	The angles of a triangle are in the ratio	o 5 : 3 : 7. Th	ne triangle is	
	(A) an acute angled triangle (I	B) an obtuse	angled triangle	
	(C) a right triangle (I	D) an isoscel	es triangle	
7.	In \triangle ABC, BC = AB and \angle B = 80°. The	hen ∠A is ec	ual to	
	(A) 80° (B) 40° (C) 50°	(D) 10	0°	
8.	If angles A, B, C and D of the quadrila	ateral ABCD	, taken in order	r, are in the ratio 3:7:6:4, then
	ABCD is a			
	(A) rhombus ((B) parallelog	gram	
	(C) trapezium (D) kite		
9.	Two parallelograms are on equal base	s and between	n the same para	allels. The ratio of their areas is



- 21. Locate $\sqrt{5}$ on the number line.
- 22. Find the value of the polynomial $5x 4x^2 + 3$ at (i) x = 0 (ii) x = -1.
- 23. Point C is called a mid-point of line segment AB. 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:

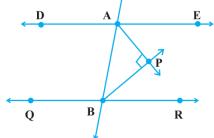
Number of defective parts	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Days	50	32	22	18	12	12	10	10	10	8	6	6	2	2

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 m².
- 25. Find the cost of laying grass in a triangular field of sides 50 m, 65 m and 65 m at the rate of Rs 7 per m².
- 26. ABCD is a trapezium in which AB \parallel DC and \angle A = \angle B = 45°. Find angles C and D of the trapezium.

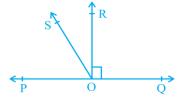
Section C

- 27. By Remainder Theorem find the remainder, when p(x) is divided by g(x), where $p(x) = x^3 2x^2 4x 1$, g(x) = x + 1
- 28. Points A (5, 3), B (-2, 3) and 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., DE \parallel QR and AP and BP are bisectors of \angle EAB and \angle RBA, respectively. Find \angle APB.



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 $\angle ROS = \frac{1}{2} (\angle QOS - \angle POS)$.

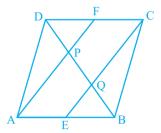


30. Construct a triangle ABC in which BC = 5 cm, \angle B = 60° and AC + AB = 7.5 cm.

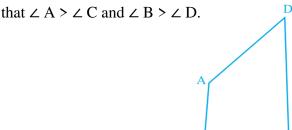
- 31. Factorise $x^3 + 13x^2 + 32x + 20$
- 32. Diagonals AC and BD of a quadrilateral ABCD intersect at O in such a way that ar (AOD) = ar (BOC). Prove that ABCD is a trapezium.
- 33. Three girls Reshma, Salma and Mandip are playing a game by standing on a circle of radius 5m drawn in a park. Reshma throws a ball to Salma, Salma to Mandip, Mandip to Reshma. If the distance between Reshma and Salma and between Salma and Mandip is 6m each, what is the distance between Reshma and Mandip?
- 34. Draw the graph of the linear equation 3x + 4y = 6. At what points, the graph cuts the x-axis and the y-axis.

Section D

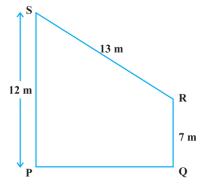
35. In a parallelogram ABCD, E and F are the mid-points of sides AB and CD respectively (see Fig.). Show that the line segments AF and EC trisect the diagonal BD.



36. AB and CD are respectively the smallest and longest sides of a quadrilateral ABCD (see Fig. Show



- 37. Construct a triangle if its perimeter is 10.4 cm and two angles are 45° and 120°.
- 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 m, 14 m and 15 m. The advertisements yield an earning of Rs 2000 per m² a 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 m², 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

OR

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.

FINAL TERM EXAMINATION

(2019-2020)

SUBJECT: SOCIAL SCIENCE CLASS - IX

Time: 3 Hours Maximum Marks: 80

General Instructions:

Q11. What are the 3 dimension of food security?

- 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 (1X20=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 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 d) Madras a) Chhotanagpur b) Bengal c) Bombay 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 (d) method of cultivation (c) group of gods O7. The sandy soils of the desert support (a) Cactus and thorny bushes (b) Mangroves (d) Peepal and Neem (c) Bamboos and Sal is used to denote plants of a particular region or period. Q8. The word __ (b) Flora (c) bio reserve (d) ecosystem (a) Fauna O9. 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

Q12.V	Vho is a person who	o puts together lan	d ,labour , and	capital?			
((a) Moneylender	(b) Entrepreneur	(c) Z	amindar	(d)Manage	r	
Q13. l	Define "Social Excl	usion".					
014	When more people	are employed there	n magninad for n	antigular iah	it is known as		
Q14.	When more people (a)Unemployment			oisguised unen		None of the above	
0457							
Q15.E	Buffer stock is the st (a)IFCI	tock of food grains (b)FCI	s procured by th (c)ID			FICCI	
Q16.		of 1960's was asso		(a) Fisheriu	os davalanmant	(d) None of the above	
Q17.	Match the followi	eeds (b) Tree plan ing:	ttation program	(c) risherie	es development	(d) None of the above	;
C		n-democratic pract	ice:				
	(i) China		(a) R	Referendum			
	(ii) Zimbabwe				_	e to get voting right	
	(iii) Estonia		` '	wame Nkruma			
	(iv) Pakistan		(a) N	ational people	e's congress		
Q18. V	What is By-election?	?					
	A) Election after e		B) M	id-term electio	on		
	C) Election after d			one of above			
Q19. 1	In which part of the						
	A) 3	B) 4	C) 5	D)	2		
Ω20. 3	Who is called the fi	rst citizen of India	?				
Q _0.				D)			
	A) President	B) P.M	C) Governor	D)	C. J. I		
			SECT	ION -B			
II. <u>Ans</u>	wer the following q	uestions in brief:					(20)
Q21.	. Describe the main	causes of the Revo	lt of Bastar?				(2)
•			OR				()
I	Name the three leade	ers of the tribal rebe	ellion against the	Forest Act in	20 th century, Ind	ia.	
Q22.	. Who was appointe	ed as the first Inspec	ctor General of F	orest in India?	Explain any two	reforms introduced by	him.
			OR				
	•		-		ee examples in si	apport of your statemen	
Q23.	•	en Thorn Forest and	•				(3)
Q24.		naracteristics of Tro	_				(3)
Q25.	List down the thre	ee challenges to free		ns in India.			(3)
	Discuss the abella	ngos fossel by blast	OR	Africa			
026		nges faced by black		AITICA.			(2)
Q26.	Discuss any three	major reasons for p	OR				(3)
	What are the main	n features of NREG					
O27.	How is human res			like land and	physical capital	?	(3)

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. 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? (1x5=5)Q30. Distinguish between Tropical Evergreen and Deciduous Forests. (1x5=5)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? (1x5=5)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? 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. (1x5=5)Q34. Write short note on: a)PDS b)Buffer stock c)Green revolution SECTION - D (5) 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. (1x2=2)(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.

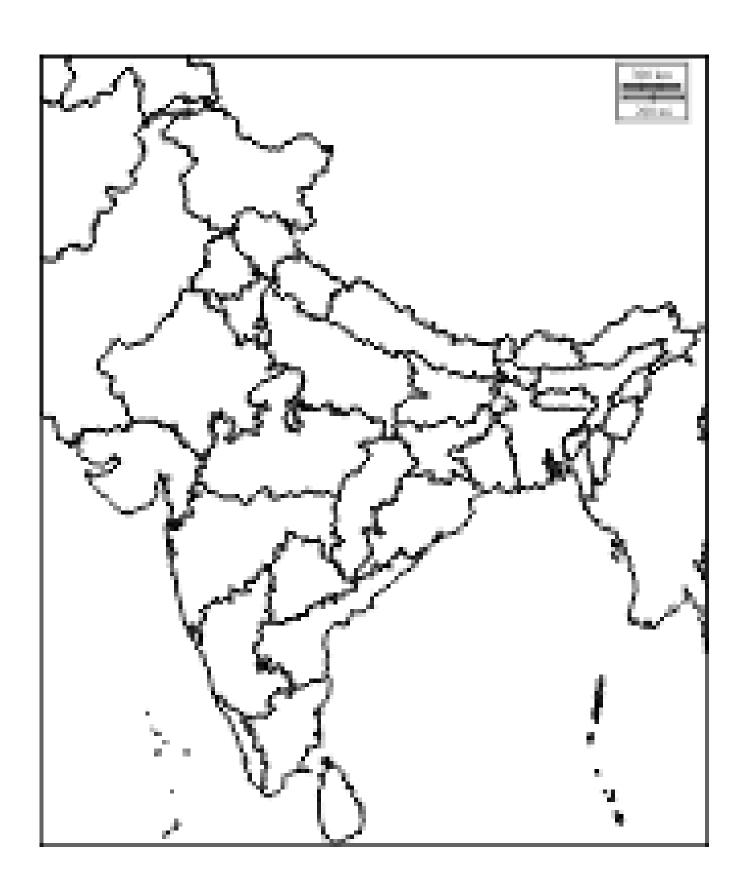
(b) Ranthambore National Park

(5)

(1x3=3)

(c) Periyar Wildlife sanctuary

(d) Rajgir National Park



FINAL TERM EXAMINATION (2019-2020) **SUBJECT: SCIENCE CLASS - IX**

Time: 3 Hours Maximum Marks: 80

\sim 1	• 4	4 •	
General	instr	nictions:	

- 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.

3. What is reverberation? How can it be reduced?

		Section-A (Physic	cs)	
Choose the correct of	otion:			(1X7 = 7
i) Which of the follow	ing requires medium	?		
(a) Radiowaves(c) Sound Waves		(b) Microw (d) Electro	aves magnetic waves	
ii) A 1 kg mass falls fro sand box?	m a height of 10 m in	to a sand box. Wha	t is the speed of the mass jus	t before hitting the
(a) 12ms ⁻¹	(b) 14ms ⁻¹	(c) 16ms ⁻¹	(d) 18ms ⁻¹	
iii) Sound wave cannot	pass through-			
(a) metals	(b) water	(c) air	(d) vacuum	
iv) If the weight of a ma	an on the surface of t	he earth is 600 N th	en what will be its weight on	the surface of the
(a) 60 N	(b) 90 N	(c) 98 N	(d) 6 N	
v) The persistence of he	earing for human beir	ngs is not more than	l	
(a) 1s	(b) 1s/5	(c) 1s/10		
vi) Why do bicycles beg	gin to slow down whe	n we stop pedaling	?	
vii) The work done on a	an object does not de	pend upon the- (b) force a	annlied	
· · ·	orce and displacemen	` '	relocity of the object	

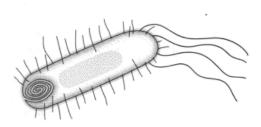
(1+1=2)

4. a) What happens to the force between two objects, if: i) the mass of one object is doubledii) the distance between the object is doubled and tripled						
b) Why does a block	_	•		of water?		
5 . a) How does the sou b) What is the audib	•		a medium reach you	ır ear?	(2+1=3)	
6 . State and prove the remain same .	work energy the	orem and also show	v that the total ener	gy of a freely falling ob	oject. Always (5)	
	• •	which is 40m deep		n is heard 2.95s after t	(2+3) he stone is	
		Section B(Ch	nemistry)			
8. Convert the followin	g temperatures t	o Celsius scale.				
a) 300K k	o) 254K	c) 573K			(1)	
9. What types of mixtu	res are separated	I by the technique o	of crystallisation?		(1)	
10. What is the appropa) High temperatureb) High pressure, loc) Both high temperd) Both low tempera11. The change of a liqu	e, low pressure w temperature ature and pressurature and pressur	re e	ses?		(1) (1)	
a) Vaporizationb) Solidificationc) Sublimationd) None of these						
12. The ratio of H:O by	mass in H ₂ O is				(1)	
a) 16:1	(b) 1:8	(c) 32:1	(d) 1:16			
13. The element whose (a) Hydrogen	e isotopes are use (b) Carb	-	fossils is (c) nitrogen	(d) Sulphur	(1)	
14. Differentiate between	een dispersed pha Or	ase and dispersion r	nedium with examp	les.	(2)	
Discuss various char	acteristics of soli	ds, liquids and gase	S.			
15. Calculate the molec	cular mass of H_2 , Or	O ₂ , Cl ₂ , CO ₂ , CH ₄ , NI	H ₃ , C₂H ₆		(2)	
Discuss Daltons ato	mic theory in rela	ition to law of conse	ervation of mass			
16. Explain emulsions a	and various types	of emulsions			(3)	

Explain with ex	amples:-			
a) Atomic nu	mber	c) Mass number		
b) Isotopes a	nd	d) Isobars		
17. Explain empiri	cal and molecular Or	formula		(3)
If the number		atom is 8 and the nu	umber of protons is also 8 then,	
a) What is	the atomic numbe the charge on the	er of the atom?	,	
	_	on's model of the ato of Rutherford's mo		(5)
Write the o	distribution of ele	ctrons in carbon, nit	rogen, oxygen, sodium, potassium, and chlorine.	
19 . (a) List any four suspension		colloid and mention	any two properties in which colloids differ from	
(b) Why does s shows?	olution of sodium	n chloride not show	tyndall effect whereas the mixture of water and r	milk
(c) Write one d	ifference betweer	n concentration and	solubility?	(5)
		Section	C (Biology)	
21. Man's activitie (a) burning of (c) both a and	fossil fuels.	environmental pollu (b) burning (d) none of	of crops	(1)
22. Diseases which (a) infectious d (c) acute disea	isease	ew days and cause n (b) chronic o (d) all of the		(1)
23. To which phylo	um do sponges be	elong?		(1)
24. Which is the si	mallest and the la	rgest bird?		(1)
25 . Give one word	for the junction l	between two neuro	ns.	(1)
26. Draw well labe	elled diagrams of	various types of mus	scles found in human body.	(3)
Differentiate b	etween parenchy	OR ma, collenchymas a	nd sclerenchyma on the basis of their cell wall.	
27. What is immu	nization? Name a	ny four diseases whi	ch can be prevented by immunization.	(3)
28. (a) Differentiation (b) What is sm		gradable and non bi	odegradable substances.	(3)
Name the five	classes of vertebr	ates. Compare any t	two on the basis of their	(3)
(a)Habitat	(b) Cove	ring 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.

(5)

(5)