PRE SECO	NDA	RY	SCE	IOL	ARS	SHIP	EX	AM	INA	TIO	N (St	d. 8 th),	FEB	RUAF	RY 2	023
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Paper No. I

Time: 11:00 to 12:30 Medium: English

Total Marks: 150 First Language and Mathematics Pages: 16

Read the following instructions carefully before you answer the questions.

- (1) This question paper contains **two** sections. In Section I there are 1 to 25 questions of First Language and in Section II there are 26 to 75 questions of Mathematics. All 75 questions are compulsory.
- (2) All questions carry 2 marks each.
- (3) Time limit to solve the question paper is **90** minutes.
- (4) Separate answer sheet is given to record the answers. Each question has been given four alternatives. Read them carefully. Select and darken the correct answer in the answer sheet. For Example :- If the correct alternative for Q. No. 6 is 2, then record your answer as follows: Question No. 6 (1) (3) (4)
- (5) Maximum 20% questions are having two correct alternatives. Candidate has to darken both the circles with correct answers. These questions will have the instruction 'Select two correct alternatives'.

For Example:- If the correct alternative for Q. No. 8 is 2 & 3, then record your answer as follows: Question No. 8 - \bigcirc \bigcirc \bigcirc \bigcirc

- (6) Answer recorded in any other form will not be considered. Such answer will be credited with 'Zero' mark. (2) (4)
- (7) Use blue or black ball pen to darken the circle. Circles darkened by pencil will not be credited.
- (8) Answer once recorded can not be changed.
- (9) The rough work is to be done in the space given under each page or on the last page of the question paper.
- (10) The exam has limited time, in case you are not able to solve a question, kindly solve the next question. In the end if time permits you can try to solve the unsolved questions.
- (11) If incomplete or wrong question found in a question paper, you are not permitted to ask the same to Supervisor or Centre Incharge.
- (12) School or parents should not send written application to Block Education Officer or Education Officer for any error, mistake or objection issues. These error / mistake / objection issues should be registered online through respective school login only.
- (13) The error / mistake / objection issues should be registered online within 10 days from the publication of Interim answer key on MSCE website.
- (14) Suggestion and decision of expert committee will be applicable on printing or any other mistake in question paper.

SECTION - I

				ENGLISI	1							
01.	seas		nat you see in			shta' refers to the sticks or stem of many Non English words are used						
	(1)	3			(2)	2						
	(3)	4			(4)	1						
Passa	ge for	Question No	o. 02 and 03.									
	and have	ole residing la Odisha States e lived in India	rgely in the Mac of India. From t	dhya Prades their tradition f years ever	sh, Ma onal ta n befo	oped and preserved by the Gond tribat aharashtra, Telangana, Andhra Pradesh ales and mythology, we learn that they ore the other inhabitants came here. The nguage.						
	colo smo	he earthen wal urs and use of othly flowing	lls of their houses several mediums process. Gond art	s. Most folk s. They are t t is no excep	arts it transfe trans t	Originally, people used to draw pictures involve natural techniques of preparing erred from generation to generation in a to this. A house decorated with beautiful a medium of recording and preserving						
02.	Gon	d art has bee	en developed an	d preserve	d by	the Gond people.						
	(1)	local			(2)	habitant						
	(3)	city			(4)	tribal						
03.	Gon	Gond art creates when house is decorated with beautiful pictures.										
	(1)	a pleasant a	atmosphere		(2)	an unpleasant atmosphere						
	(3)	large atmos	phere		(4)	smooth atmosphere						
			SPACE F	OR ROU	GH V	WORK						

A poem for Question No. 04 and 05.

To a butterfly

STAY near me - do not take thy flight! A little longer stay in sight! Much converse do I find in thee, Historian of my infancy! Float near me; do not yet depart! Dead times revive in thee: Thou bring'st, gay creature as thou art! A solemn image to my heart, My father's family! Oh! pleasant, pleasant were the days, The time, when, in our childish plays, My sister Emmeline and I Together chased the butterfly! A very hunter did I rush Upon the prey-with leaps and springs I followed on from brake to bush; But she, God love her, feared to brush The dust from off its wings.

- William Wordsworth

04.	Who	together chased a butterfly?		
	(1)	My sister Emmeline	(2)	The poet
	(3)	My sister Emmeline and I	(4)	I
05.	'Dea	ad time revive in thee' what	days does the	poet want to mention?
	(1)	Dead days	(2)	Childhood days
	(3)	Elderly days	(4)	Father's days
06.	Find	l out two correct alternatives _ I borrow your umbrella?	for the follow	ring sentence.
	(1)	Ought	(2)	Can
	(3)	May	(4)	Do

News for Question No. 07 and 08.

War against pollution

Air pollution kills 30k in capital city of India every year. New Delhi shocking CSE study says air quality in capital was bad through out November. CSE puts focus on revamping city's transport system and reducing use of solid fuels. Air pollution is responsible for 10,000 - 30,000 deaths in Delhi annually and is the fifth largest case of death in country, states the body Burden 2015' report released by the Centre for Science and Environment (CSE) on Tuesday.

Outdoor air pollution kills 6,00,000 people and indoor air pollution kills 1.5 million people in India annually.

- **07.** To reduce pollution, CSE suggested _____.
 - (1) stopping indoor air pollution.
 - (2) revamping city's transport system and reducing use of solid fuels.
 - (3) Stopping outdoor pollution.
 - (4) Walking is the best way.
- **08.** Which city is mentioned in the news regarding pollution?
 - (1) Mumbai

(2) Pune

(3) Hyderabad

(4) New Delhi

Letter for Question No. 09 and 10.

18, Patel Road,

New Delhi - 400014,

16th January 2023.

I have just remembered that it is your birthday on Saturday and so I must send you a birthday letter at once. And I begin with old greetings. Many happy returns of the day. I hope the day itself will be peaceful and happy for you that you will be spared in happiness and health to us all for years yet.

I am sending you a book which I think you will like. You were always a great reader and I am glad that your eyesight remains as good as ever. Sneh.

- **09.** Sneh gives a book as a birthday present. Give reason.
 - (1) The day will be peaceful and happy.
 - (2) He must send birthday present.
 - (3) He is always great reader and has good eyesight.
 - (4) He just remembered that his birthday was on Saturday.

10. Choose two correct alternatives. The heading consist of date. (2) The courteous greeting or salutation. (3) The body of letter. (4) The subscription or courteous leave taking. Advertisement for Question No. 11 and 12. Sports day 15th January 2023 Sanas Ground, Pune. Events for the day-Foot ball games Basket ball, Volley ball games Athletics, Cricket, Tennis **Active games** Age group - Girls and Boys under 10 and 15 years. Time: - 9 A.M. to 6. P.M. / Free Entry www.website.com 11. Many games are mentioned in the advertisement. These games are described as _____. (1) inactive games still games (2) active games (4) inside games (3) Sports day was held on _____. 12. 15th January 2023 (2) 15th January 2022 (1) 15th February 2023 16th February 2022 (3) (4) 13. Choose one correct alternative of underlined word. The fragrance mingles in the air when Nisha spread the scent in the room. Smell Bad smell (1) (2) Saint Pleasant Smell (3) (4)

	(1)	- ion		(2)	- ly						
15	(3)	- sion	:-1- :41-4-1	(4)	- ive						
15.	Choose one option which is not related to the following diagram. Doctors treating humans										
		Dentist	↓ Cardiologist		* ?	Orthopedic					
	(1) (3)	Neurologist Veterinarian		(2) (4)	Pediatrician Cardiologis						
16.		l out the correct al e you read 'Gulliv		ollowin	g sentence.						
	(1) (3)	Past perfect tense Future perfect ter		(2) (4)	Present pe Past contin	rfect tense nuous tense					
17.	He (1) (3)	is the man whom Adverb clause Noun clause	we all respect.	(2) (4)	Adjective Adverbial						
18.		d the following ser y rested when ever Simple statement Compound statem	ning came.	(2) (4)	of sentence. Complex s Co-ordinat	statement					
19.	His (1) (2) (3) (4)	His angry mother His angry mother His angry mother	jeered that he support told if you support asked if he support jeered and asked	posed hose you ose he	im know better know better	etter than your own mother?" etter than your own father. er than your own father. r than his own father. osed that he knew better					
20.					should be in	for the underlined word the court the next day. making official statement eryone					
			SPACE FOR RO	UGH V	WORK						

Find out the correct option which has correct suffix for the word - eliminate.

14.

21.	Choose correct option of comparitive degree. Alpana is very poor girl. Her friend is than Alpana.							
	(1) richer	$\frac{1}{(2)}$	rich					
	(3) more rich	(4)						
22.	Choose correct punctuation mark to me. How beautiful the planet earth is (1)?	(2)	,					
	(3) ;	(4)	!					
23.	Power saved is power (1) created (3) wasted	(2) (4)	generated got					
24.	I wish 'Good Bye' to my friend. She Please help me to find out meaning. (1) See you later (3) See you latter	(2) (4)	see you late See you					
Diala	ogue for Question No. 25.	(4)	See you					
	Teacher: Well Narain, I hear you are taking Pupil: Yes Sir. I came to give me some Teacher: Never learn it by heart. Always Pupil: But; why sir? Teacher: You should watch your audiency you can add and emphasize and Pupil: Thanks sir. It seems so much ear	carefully per to see what change so	the art of public speaking. prepare what you want to say. hether they understand. If they are not,					
25.	The teacher advised the student to impressive. (1) speak not looking at audience. (2) watch to see if they understand. (3) Don't watch but speak fearlessly (4) add but don't emphasize and characteristics.	Add, emp						
	SPACE FOR I	ROUGH V	WORK					

MATHEMATICS

26. Factors of a polynomial are (x - 7) (x - 8). Find the polynomial.

$$(1)$$
 $x^2 + 15x + 56$

(2)
$$x^2 + 15x - 56$$

(3)
$$x^2 - 15x + 56$$

(4)
$$x^2 - 15x - 56$$

27. Reena had some flowers. She prepared garlands from them. When she made every garland of 12 flowers, she was left with 11 flowers. If she had used 16 flowers for each garland then she would have left with 15 flowers. If she had used 18 flowers for each garland then she would have left with 17 flowers. Find the minimum number of flowers that she may have.

- (4) 145
- 28. The sides forming right angle of a right angled triangle are 7 cm and 24 cm. Find the radius of the circumcircle of the triangle.

- (4) 13.5 cm
- 29. Every year the population of a town decreases by 5% due to migration of the people. In the year 2022 the population was 9025. Find the population of the town in the year 2020?

- (4) 10,250
- 30. The denominator of a fraction is greater than its numerator by 6. If the numerator is decreased by 1 and the denominator is increased by 9, then the new fraction is equivalent with $\frac{1}{2}$. Find the original fraction.

$$(1) \frac{15}{23}$$

(2)
$$\frac{17}{23}$$

(3)
$$\frac{13}{19}$$

(4) $\frac{23}{17}$

31. Solve. (Select two correct options)

$$\frac{3x+2}{6} + \frac{2x}{3} + \frac{x+1}{2} = 5$$

$$(1) \frac{5}{2}$$

- (4) $3\frac{1}{2}$
- 32. If an article is sold for Rs. 150, certain loss is incurred. But if the article is sold for Rs. 275, the profit is one and half times the loss. Find the original price of the article.
 - (1) 225
- (2) 250
- (3) 175
- (4) 200

33.	Simplify		$2x^2$	+	7 <i>x</i>	+	6
	Simplify	_	x^2 –	1	3x	_	30

- (1) $\frac{2x+3}{x-15}$ (2) $\frac{2x-3}{x+15}$ (3) $\frac{2x-3}{x-15}$ (4) $\frac{2x+3}{x+15}$

- 34. To complete a job, 'A' requires 12 days. For the same job, 'B' requires 20 days to complete the job. Both of them worked together for 3 days and then A left the job. To complete the remaining job, how many days 'B' will require?
 - (1) 18
- (2) 15
- (3)
- 10
- 35. Mrs. Desai purchased 30 tables. Out of that she sold 25 tables and received the same amount which she had spent to purchase 30 tables. Find the percentage of profit or loss in this transaction.
 - (1) 25% profit
- (2) 20% profit
- (3) 20% loss
- (4) 25% loss
- 36. $3^x = 27^y = 9^z = 729$. Find the value of $(xyz)^{\frac{3}{2}}$.
 - (1) 36
- (2) 216
- (3) 6
- (4) 11
- 37. Which of the following polynomial has the co-efficient form (2, 0, 0, 0, -5)?
 - (1) $2x^4 5$
- (2) $2x^6 5$ (3) $2x^5 5$ (4) $x^5 5$
- A ditch 20 m. long 10 m. wide and 5 m. deep was dug and soil was spread evenly 38. over a ground that was 25 m. long and 20 m. wide. What was the thickness of the soil spread? (Choose two correct options)
 - 20 decimeter (1)
- (2) 20 cm.
- (3) 2.0 m.
- 20 m. (4)
- **39.** The diameter of a ball is 20 cm. Find the volume of the air in the ball. ($\pi = 3.14$)
 - 41866.7 cubic cm. (1)

(2) 4186.67 sq. cm.

(3) 418.67 cm³.

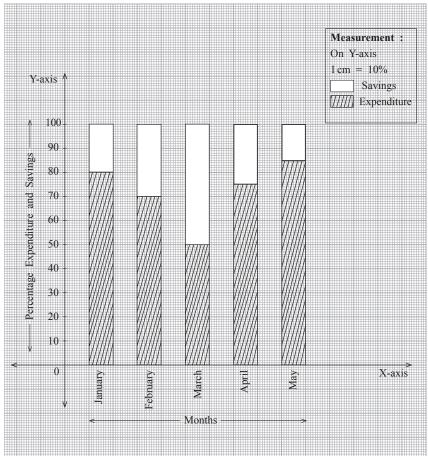
- (4) 4186.67 cubic cm.
- 40. The price of a washing machine is Rs. $\left(\frac{5}{y} + \frac{x}{6}\right)$. Find the price of $\left(\frac{x}{6} - \frac{5}{y}\right)$ washing machines.

- (1) $\left(\frac{x^2}{36} \frac{25}{v^2}\right)$ (2) $\left(\frac{x^2}{36} + \frac{25}{v^2}\right)$ (3) $\left(\frac{x^2}{36} \frac{y^2}{25}\right)$ (4) $\left(\frac{25}{v^2} \frac{x^2}{36}\right)$

- 41. A car travelled the distance 38 km, 27 km, 40 km, 35 km in the first four hours respectively. How much distance the car should travel in the fifth hour, so that the average speed of the car will be 35 km/hr?
 - (1) 25 km
- (2) 40 km
- (3) 45 km
- (4) 35 km

Directions for Question 42 and 43.

In the following 'Percentage Bar Diagram' the percentage of expenditure and savings of Shri Tushar is shown. Observe the graph and answer the questions that follow.



- 42. Shri. Tushar's income in the month of February was Rs. 40,500. Find his savings in that month.
 - (1) 12,150
- (2) 28,350
- (3) 12,500
- (4) 28,000

- 43. Find the ratio of savings to expenses for the month of 'May'.
 - (1) 17:3
- (2) 5:17
- (3) 17:5
- (4) 3:17
- **44.** Laxmanrao purchased shares worth Rs. 10,500 and paid 0.5% brokerage. Find the amount spent to purchase the shares including brokerage.
 - (1) 15,052.50
- (2) 52.50
- (3) 10,552.50
- (4) 1,044.50
- 45. Choose the correct alternative in which all the pairs are matched correctly.
 - A) $v^2 17v 60$

a.
$$(y-12)(y-5)$$

B) $y^2 - 17y + 60$

b. (y+20)(y-3)

C) $y^2 + 17y - 60$

c. (y-20)(y+3)

D) $y^2 + 17y + 60$

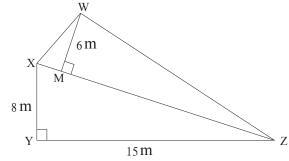
- d. (y+12)(y+5)
- (1) A-c, B-d, C-a, D-b
- (2) A-c, B-a, C-b, D-d
- (3) A-a, B-c, C-d, D-b
- (4) A-d, B-b, C-a, D-c
- **46.** The inner surface of a cylindrical well of height 14m and radius 250 cm is to be plastered with cement-sand layer. At the rate of Rs. 100 per square meter, what will be the total cost in rupees?
 - (1) 22,000
- (2) 22,00,000
- (3) 2,20,000
- (4) 220
- 47. A shopkeeper sold two articles with marked price Rs. 1900 to A and B. He sold one article to A by giving discount of Rs. 171 and sold another article to B by giving discount of Rs. 152. How much was the difference between the percentage of discount given to A and B?
 - (1) 0.5
- (2) 19
- (3)

(4) 0.1

48. In the adjoining figure $\angle y = 90^{\circ}$, l(xy) = 8m. l(yz) = 15m, WM \perp XZ, WM = 6m. Find the area of the figure.



- (2) 111
- (3) 162
- (4) 222



- 49. Two lines are intersecting each other. The measures of the vertically opposite angles in a pair are $(2x + 65)^{\circ}$ and $(7x 10)^{\circ}$. Find the measures of each remaining angle.
 - (1) 95°
- (2) 85°
- (3) 75°
- (4) 105°

50.	from the following. (Choose two correct options)						
	$(1) \angle BCA < 90^{\circ}$ $(3) \angle CAB > 90^{\circ}$	(2) (4)	ΔBCA is an a Measurement o				
51.	Two rectangular grounds have area 1541 the grounds have same breadth, find the (1) 33 m. (2) 69 m.	breadtl	-	-	ectively. If both 67 m.		
5 2				(4)	0 / 111.		
52.	If $(17 \times 19 \times 4) \div m = 161.5$ then find (1) 0.6 (2) 7.0	the v (3)		(4)	8.0		
53.	Find the value of $\sqrt{992\frac{1}{4}}$						
	(1) 31.05 (2) 31.5	(3)	31.25	(4)	32.5		
54.	Which of the following is an irrational n	umber'	?				
	(1) 3.14 (2) $\frac{22}{7}$	(3)	π	(4)	$3.\overline{142857}$		
55.	Where is the ortho centre of a right angle (1) In the interior of the triangle. (2) On the vertex of the right angle. (3) In the exterior of the triangle. (4) Anywhere on the triangle.	led tria	angle located?				
56.	Four numbers p, q, r and s are in proporthe following. (Choose two correct option	ıs)					
	$(1) \frac{p}{r} = \frac{q}{s} \qquad (2) \frac{p}{s} = \frac{q}{r}$	(3)	pq = rs	(4)	sp = qr		
57.	'x' years hence, Mariya's age will be 'y' $(1) y - x + 10$ $(3) y + x + 10$	(2)	Then find her a $y - x - 10$ $y + x - 10$	age 10) years before.		
58.	Find the value of 31.25%.						
	$(1) \frac{5}{16} \qquad (2) \frac{3}{16}$	(3)	$\frac{5}{16}\%$	(4)	12 40		
	SPACE FOR ROL	U GH	WORK				

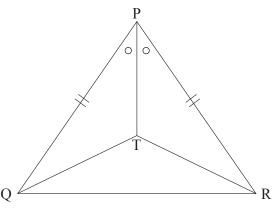
59. In the adjoining figure $\angle TPQ \cong \angle TPR$. Side PQ \cong side PR. Then by which test $\triangle QPT$ and $\triangle RPT$ are congruent?





(3) A-S-A

(4) S-A-A



The measure of an angle is $\frac{1}{5}$ times the measure of its supplementary angle. Find the measure of its complementary angle.

(1) 30°

(2) 90°

(3) 150°

(4) 60°

61. A school had arranged a trip and started on Saturday at 6.30 a.m. They returned the next day on Sunday, at 8.15 p.m. Duration of the trip was for how many hours?

(1) $25\frac{3}{4}$ hours

(2) $37\frac{3}{4}$ hours

(3) $37\frac{1}{4}$ hours

(4) 47 hours 45 minutes

62. A square piece of paper having length 8 cm. is taken, squares of size $1 \text{ cm} \times 1 \text{ cm}$ are cut at its four corner places. Find the difference between the perimeters of the original paper and the paper which is cut at its corner places in cms.

(1) 0

(2) 8

(3) 1

Ċ

(4) 4

D

В

63. Observe the following figure and select the correct statements.

(A) Line AB and line BA are different lines.

(B) Line AB and line DC intersect at 'O'.

(C) Point C, O and B are non-collinear points.



(2) 'B' and 'C' are correct.

O

(3) 'A', 'B' and 'C' are correct.

(4) 'A' and 'C' are correct.

	(1)	1 litre			(2)	1000 cubic ci	n	
	(3)	1000 litre			(4)	100 ml		
65.		a of a circle is		•		•		
	(1)	$A \propto r$	(2)	$A \propto \frac{1}{r^2}$	(3)	$A \propto \frac{1}{r}$	(4)	$A \propto r^2$
66.	of t	I the correct pair win prime numb 25.		•		_		
	(1)	71, 73	(2)	41, 83	(3)	59, 61	(4)	41, 43
67.		he ratio of the l the type of \square		•	of \square	ABCD taken	in orde	er is 7:8:4:5.
	(1)	Kite	(2)	Rhombus	(3)	Trapezium	(4)	Parallelogram
68.		I the smallest nu digit prime num			_		it is di	vided by every
	(1)	106	(2)	211	(3)	31	(4)	71
69.	inve		nt for e inter option d by	the same period rests earned by	l at the Saurab	same rate of i oh and Yashash Rs. 1655 than	nterest ri. Saura	with compound oh received.
	(3)		-	Saurabh was m				
	(4)		•	Saurabh was le	-			
70.	Whi	ch of the follow 45°	ring carried (2)	an be the meas	ure of (3)	an angle in th	e mino	r segment?
			SPA	ACE FOR RO	UGH V	WORK		

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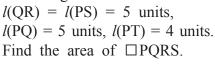
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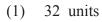
Find the capacity of a hollow cube whose side is 10 cm. (Choose two correct options)

64.

0511-English Set-A

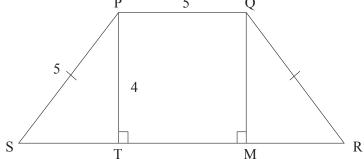
- 71. Find the value of $\frac{(4.9)^3 + (2.1)^3}{(4.9)^2 (10.29 \times 1) + 4.41}$
 - (1) 0.7
- (2) 2.8
- (3) 28.42
- (4) 7.0
- 72. There is a regular hexagon having each side 14 cm. On every side a semicircle is drawn from outside the hexagon, taking each side as the diameter. Find the perimeter of the figure so formed.
 - (1) 132 cm
- (2) 308 cm
- (3) 216 cm
- (4) 123 cm
- 73. In the adjoining figure, an isosceles trapezium is drawn. The measurements of sides of the figure are as follows.







- (3) 32 sq. units
- (4) 24 sq. units



- 74. Instead of investing Rs. 3000 with simple interest for two and half years, if Rs. 4000 are invested with simple interest for two years, interest of Rs. 25 is earned more. What is the rate of interest?
 - (1) 10%
- (2) 6%
- (3) 4%
- (4) 5%
- 75. Read the following statements and choose the correct alternative.
 - (A) 29, 31 are twin prime numbers.
 - (B) 29, 31 are co-prime numbers.
 - (C) 29, 31 are prime numbers.
 - (1) 'A', 'B', 'C' are correct.
- (2) Only 'A' and 'C' are correct.
- (3) Only 'B' and 'C' are correct.
- (4) Only 'A' and 'B' are correct.