

## ADMISSION CUM SCHOLARSHIP TEST

## SAMPLE TEST PAPER

(For Students Going to Class 8th IN 2025)

## COURSE OFFERED : FIRST STEP

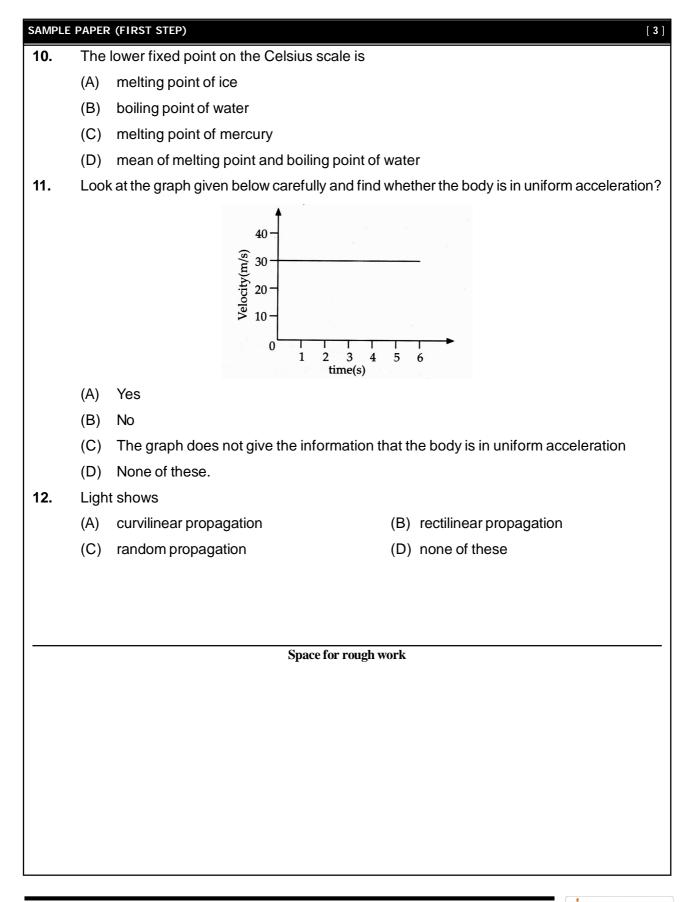
Time : 2 hours

Maximum Marks: 240

ATOR.	(A)	General :									
NVIGIL/	1.	This Question paper contains <b>FIVE</b> Parts (Physics, Chemistry, Mathematics, Biology & Mental Ability) containing 60 questions in all. This Question Paper contains 12 pages, other than the OMR.									
тне і	2.										
S FROM	3.	The Question Paper has blank spaces at the bottom of each page for rough work.No additional sheets will be provided for rough work.									
ICTIONS	4.	Blank papers, clip boards, log tables, slide rule, calculators, cellular phones, pagers and electronic gadgets, in any form, are <b>NOT</b> allowed.									
STRL	5.	This booklet also contains the <b>OMR</b> answer sheet (i.e., A machine gradable Response Sheet).									
	<b>(B)</b>	Answering on the OMR:									
, AW/	6.	Each question will have <b>4 choices</b> in both the Sections, out of which <b>only one choice is correct</b> .									
ЧЕТ	7.	Darken the bubble with Ball Pen (Blue or Black) ONLY.									
300	(C)	Filling – in Name and Registration No.	$\mathcal{O}$								
SEALS ON THIS BOOKLET, AWAIT INSTRUCTIONS FROM THE INVIGILATOR.	8.	On the <b>OMR sheet</b> , write your Name and Registration No. in ink. Also, put your signature in the appropriate box in ink.									
VLSO	(D)	Marking Scheme:									
HE SEA	9.	(a) For each question, you will be awarded +4 marks if you have darkened only one bubble corresponding to the right answer.									
NK TI		(b) In case you have not darkened any bubble, you will be awarded 0 mark for that question.									
3RE/		(c) In all other cases, you will be awarded –1 mark.									
DO NOT B	<ul> <li>corresponding to the right answer.</li> <li>(b) In case you have not darkened any bubble, you will be awarded 0 mark for that que</li> <li>(c) In all other cases, you will be awarded –1 mark.</li> </ul> Name :										
	Reç	gistration No.:									

Mentors Eduserv : Parus Lok Complex, Boring Road Crossing, Patna-1

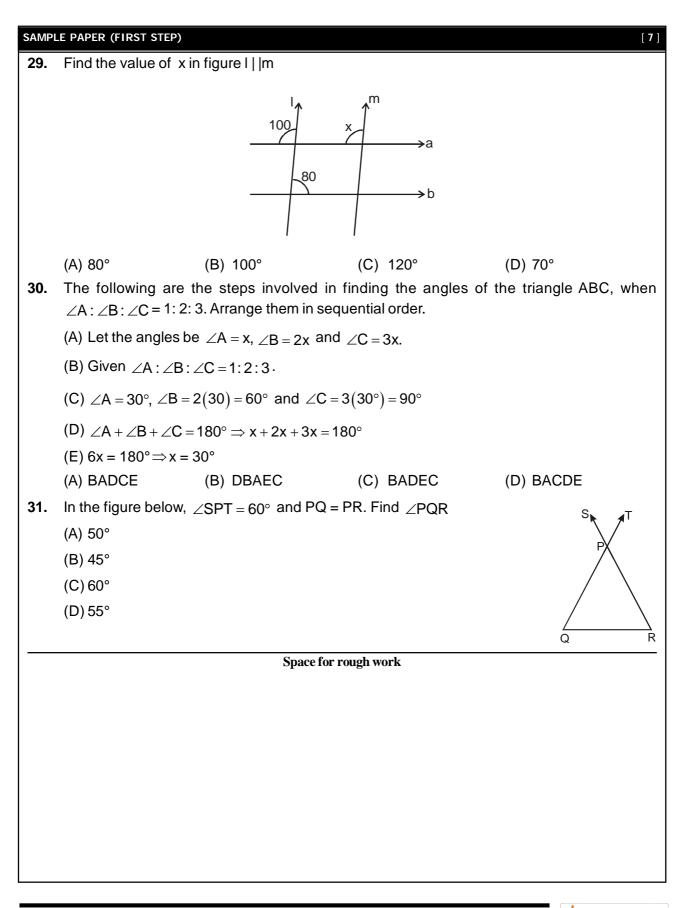
[2]		SAMPLE PAPER (FIRST STE	P)
	PART-A : PH	IYSICS	
1.	Which one of the following scale has lower fixe	ked point at 0°C ?	-
	(A) Kelvin scale (B) Fahrenheit scale	e (C) Celsius scale (D) All of these	
2.	In solid substances, heat is transferred by		
	(A) Conduction (B) Convection	(C) Radiation (D) (A) and (C)	
3.	Which of the following is used to measure the o	distance travelled by a moving vehicle?	
	(A) Speedometer (B) Kilometer	(C) Meter (D) Odometer	
4.	Motion of Mars around the Sun is an example o	of	
	(A) Rectilinear motion	(B) Oscillatory motion	
	(C) Periodic motion	(D) Rotatory motion	
5.	In an electric circuit, the current starts from		
	(A) the negative terminal of the battery.		
	(B) the positive terminal of the battery.		
	(C) either of the terminals of the battery.		
	(D) none of the terminals of the battery.		
6.	The device used to prevent the flow of excess	s current in the circuit is	
	(A) switch (B) fuse	(C) bulb (D) coil	
7.	Which of the following is a natural source of lig	ght ?	
	(A) Electric lamp (B) Electric filament	t (C) Torch light (D) Sunlight	
8.	Which of the following is not a luminous object	xt?	
	(A) Sun (B) Moon	(C) Candle (D) Bulb	
9.	Which of the following devices is used for the r		
	(A) Barometer	(B) Thermometer	
	(C) Potentiometer	(D) None of these	
	Space for rough	h work	-



13.						
	Dissolve some common salt in water and the solution in an open and sunny place for What do you observe?	a day				
	(A) The whole of the solution evaporates					
	(B) Water evaporates leaving behind salt					
	(C) Salt evaporates leaving behind water					
	(D) No change of any form in the salt solution					
4.	Mark the incorrect statement.					
	(A) A crystal is a solid in its pure form.					
	(B) Galvanisation is zinc coating on iron.					
	(C) Rusting is a chemical reversible change.					
	(D) Reaction of iron and copper sulphate is a displacement reaction.					
5.	Identify the correct statement.					
	(A) Rusting and burning are reversible changes					
	(B) Physical change is always in irreversibale change					
	(C) Oxygen gas turns limewater milky					
	(D) Cutting of an apple is an irreversible chemical change					
6.	When added to acids, phenolphthalein					
	(A) changes to pink (B) changes to green					
	(C) remains colourless (D) changes to orange					
7.	Acids and bases should not be stored in metal containers because					
	(A) they are corrosive in nature and react with metals.					
	(B) they cannot be seen from outside.					
	(C) they become brown in colour when stored in metal containers.					
	(D) metal containers are heavy and cannot be lifted when filled with acids and bases.					
	Space for rough work					

SAMP	LE PAPER (FIRST STEP)		[5]		
18.	Calamine solution is app	plied on the area of ant b	ite. Calamine solution contains		
	(A) sodium carbonate		(B) sodium hydrogencarbonate		
	(C) zinc carbonate		(D) sodium chloride		
19.	Which of the following a	cids are not present in a	cid rain?		
	(A) Sulphuric acid		(B) Nitric acid		
	(C) Carbonic acid		(D) Hydrochloric acid		
20.	weaves a net to hold its of <u>(iii)</u> . Select the co	elf. Then it swings its <u>(i</u> rrect words for above fill	stage of its life history called <u>(i)</u> , it first ii) from side to side in the form of the figure l-ups.		
	(i)	(ii)	(iii)		
	(A) Pupa	Head	Eight		
	(B) Cocoon	Head	Seven		
	(C) Pupa	Tail	Eight		
	(D) Adult moth	Head	Eight		
21.	Which of the following c	ptions shows the correc	t arrangement of layers of the soil?		
	(A) Sub soil Topsoil Bedrock Parent rock	(B) Parent rock Bedrock Topsoil Subsoil	(C) Subsoil (D) Topsoil Bedrock Subsoil Topsoil Parent rock Parent rock Bedrock		
22.	Lichens secrete acids a example of	and cause breakdown o	n of rocks into smaller soil particles. This is an		
	(A) physical weathering		(B) chemical weathering		
	(C) biological weatherin	g	(D) both (A) and (C).		
23.	Which of the following ty	/pes of soil is most suital	ble for growth of paddy?		
	(A) Loamy soil		(B) Sandy soil		
	(C) Silt soil		(D) Clayey soil		
		Space for rough	work		

[6]				SAMPLE PAPER (FIRST STEP)						
24.	Earthworms are	e called farmer's friends	because they							
	(A) improve tex	cture of the soil								
		prosity of the soil								
		els in the soil for roots t	o spread through							
	(D) all of these.									
		PART-C:I	MATHEMATICS	5						
25.	use the sign in t	he box								
	(-8) + (- 4)	(-8) - (- 4)								
	(A) >	(B) <	(C) ≤	(D) =						
26.	Sahil wants to	put a picture in a frame	e. The picture is $7\frac{3}{5}$ cm	n wide. To fit in the frame the						
	picture cannot l	be more than $7\frac{3}{10}$ cm v	vide. How much should	the picture be trimmed?.						
	(A) $\frac{3}{10}$ cm	(B) $\frac{3}{11}$ cm	(C) $\frac{5}{11}$ cm	(D) $\frac{6}{11}$ cm						
27.	Find 20% of Rs	. 2500								
	(A) 400	(B) 500	(C) 600	(D) 700						
28.	Find the value of	of x in $-4(2 + x) = 8$								
	(A) – 4	(B) 4	(C) 5	(D) – 5						
		Space	e for rough work							



				SAMPLE PAPER (FIRST STEP)
32.	The measures of t Find the perimeter		e integers in cm. If two	of its sides are 1 cm each.
	•	(B) 4 cm	(C) 5 cm	(D) 6 cm
33.	$(25^2 - 15^2)^{\frac{3}{2}} = $			
	(A) 4000	(B) 8000	(C) 3125	(D) 1024
34.	There are three and third angle is half o	gles. The second angle is	s one-third of the compl irst angle. The third ang	iment of the first angle. The le is half of the supplement
	(A) 45°	(B) 60°	(C) 75°	(D) 90°
35.	Which of the follow	ving is the descending o	rder of (4) <sup>26</sup> , (64) <sup>9</sup> and (	256) <sup>7</sup> ?
	(A) (64) <sup>9</sup> , (256) <sup>7</sup> , (4		(B) $(4)^{26}$ , $(64)^{9}$ , $(25)^{10}$	6) <sup>7</sup>
	(C) (256) <sup>7</sup> , (64) <sup>9</sup> , (4	<b>1</b> ) <sup>26</sup>	(D) None of these	
36.	$\left(\frac{a}{b}\right)^{x+y+z} \times \left[\left(\sqrt{\frac{a}{b}}\right)^{-x}\right]$	$\times \left( \sqrt{\frac{a}{b}} \right)^{-y} \times \left( \sqrt{\frac{a}{b}} \right)^{-z} \right] = -$		
	(A) $\left[a^3 / b^3\right]^{x+y+z}$	(B) $\left[a^2/b^2\right]^{x+y+z}$	(C) $[a/b]^{(x+y+z)/2}$	(D) [a/b] <sup>3(x+y+z)/2</sup>
		PART-D :	BIOLOGY	
37.	Leaves of a plan	t can be destarched b	у	
	(A) Putting them	n in boiled alcohol		
	(B) Boiling them	n in water		
	$(\mathbf{C})$ Dissing the	plant in a dark place f	for 2-3 days	
	(C) Placing the		,	
		e plant to sunlight for	5-6 hours.	
		e plant to sunlight for	-	
		e plant to sunlight for	5-6 hours.	
		e plant to sunlight for	5-6 hours.	
		e plant to sunlight for	5-6 hours.	
		e plant to sunlight for	5-6 hours.	
		e plant to sunlight for	5-6 hours.	
		e plant to sunlight for	5-6 hours.	
		e plant to sunlight for	5-6 hours.	

SAMP	LE PAPER (FIRST STEP) [9]									
38.	The complete digestion and absorption of food occurs in									
	(A) Large intestine (B) Small intestine									
	(C) Oesophagus (D) Stomach									
39.	Which of the following statements is not true?									
	(A) Mode of taking food into the body varies in different organisms.									
	(B) Bees and humming birds suck the nectar of flowers.									
	(C) Hydra catches food with the help of its tentacles.									
	(D) Lice and mosquitoes chew their food by grinding with teeth.									
40.	Streamlined body is one of the adaptations found in									
	(A) Aquatic animals (B) Desert animals									
	(C) Mountain animals (D) Rainforest animals.									
41.	Which of the following statements is not true?									
	(A) The earth's weather is driven by the sun.									
	(B) A meteorologist is a person who studies weather.									
	(C) In weather reports, maximum and minimum temperatures are recorded everyday.									
	(D) The land far away from the equator is hotter than the land near to it.									
42.	In muscle cells, the end product of anaerobic respiration is									
	(A) Carbon dioxide (B) Lactic acid									
	(C) Ethanol (D) Water									
43.	What happens when we breathe in?									
	I. Size of our chest increases									
	II. Size of our chest decreases									
	III. Carbon dioxide is removed from our body									
	IV. Air enters our lungs									
	(A) I and III are correct (B) I and IV are correct									
	(C) II and III are correct (D) II and IV are correct									
	Space for rough work									

44.				RST STEP)							
	The thinnest blood vessels in the human	body	' are								
	(A) Arteries (B) Veins	(C)	Capillaries (D) Any of the	se							
45.	Which of the following is an example of e	excret	tion?								
	(A) Removal of urine from the body										
	(B) Release of saliva from the salivary glands										
	(C) Release of Hcl from the stomach										
	(D) None of these										
46.	The given figure illustrates a stage during	sexu	ual reproduction in flowering pla	ants.							
		– Style – Ova									
	What is structure X?										
	(A) An ovule before pollination, but after	fertili	zation.								
	(B) An ovule before fertilization, but after										
	(C) A pollen grain before pollination, but	after	fertilization.								
	(D) A pollen grain before fertilization, but	after	pollination.								
47.	If forests are disturbed										
	(A) Only human beings are affected	(B)	Only animals are affected								
	(C) Only plants are affected	(D)	All living organisms are affected								
48.	Which of the following is not fit for drinking?										
	(A) Ground water	(B)	Mineral water								
	(C) Sea water	(D)	Water from well								
	Space for rou	ıgh wo	ork								

	E PAPER (FIRST STEP)	PART-E : MEN	ITAL ABILITY	1
Find	the missing numbe			
49.	3, 5, 7, 9, 11, 13, 1	5, 17, ?		
	(A) 14	(B) 19	(C) 15	(D) 21
50.	2, 3, 5, 7, 11, ?, 17			
	(A) 14	(B) 13	(C) 10	(D) 12
51.	A, C, ?, G, I			
	(A) E	(B) D	(C) F	(D) H
52.	V, T, R, ?, N, ?			
	(A) O, M	(B) P, M	(C) L, P	(D) P, L
53.	a_ab_ba_a_a	a b		
	(A) babb	(B) abba	(C) baba	(D) aabb
54.	a _cab_ a _ c _ b	C		
	(A) bbac	(B) abab	(C) abba	(D) acba
55.	256 2 128 4 ? 32 16	)		
	(A) 64	(B) 36	(C) 34	(D) 60
		Space for r	ough work	

[ 12 ]	3 15 1 16 441 6			SAMPLE PAPER (FIRST ST
56.	10 225 ? 10 5 12			
	(A) 125	(B) 25	(C) 625	(D) 156
57.	What is the value of	of (48 – 12) ÷ 4 + 6 ÷ 2	x 3 = ?	
	(A) 10	(B) 0.6	(C) 2	(D) 18
58.	What is the value of	of 116 + 92 ÷ 46 – 28 ÷ 7	<i>'</i> = ?	
	(A) 120	(B) 116	(C) 112	(D) 114
59.	-	es is written in a reverse ighth letter from your rig		following will be the seven
	(A) L	(B) M	(C) O	(D) P
60.	followed by the nex	t four rewritten in the rev	verse order followed	rewritten in the reverse ord by the next four letters in tl t end in the rewritten orde
	(A) O	(B) H	(C) M	(D) P
		Space for re	ough work	

SAMPL	E PAPER (I	FIRST STE	P)							[ 13 ]	
				AN	ISW	ER K	EYS	•			
	SAMPLE TEST PAPER										
	(For Students Going to Class 8 <sup>th</sup> IN 2025)										
			<u>COU</u>	RSE O	FFER	<u>RED</u> :	FIRS	ST STEP			
					PH	SIC	S				
1.	(C)	2.	(D)	3.	(D)	4.	(C)	5. (B)	6. (B)		
7.	(D)	8.	(B)	9.	(A)	10.	(A)	11. (B)	12. (B)		
				C	HEN	/IST	RY				
13.	(B)				• •		• •	17. (A)			
19.	(D)	20.	(B)	21.	(D)	22.	(C)	23. (D)	24. (D)		
				MA	атне	EMA	FICS	5			
25.	(B)	26.	(A)	27.	(B)	28.	(A)	29. (B)	30. (C)		
31.	(C)	32.	(A)	33.	(B)	34.	(B)	35. (C)	36. (C)		
					BIO	LOG	Y				
37.	(C)	38.	(B)	39.	(D)	40.	(A)	41. (D)	42. (B)		
43.	(B)	44.	(C)		(A)	46.	(D)	47. (D)	48. (C)	1	
			_								
			A	NAL	YIIC	AL A					
49.	(B)	50.	(B)	51.	(A)	52.	(D)	53. (A)	54. (D)		
55.	(A)	56.	(C)	57.	(D)	58.	(D)	59. (C)	60. (C)		

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