

रेलवे भर्ती बोर्ड / RAILWAY RECRUITMENT BOARDS ०५/२०२४ - एनटीपीसी स्नातक स्तर - CEN - 05/2024 - NTPC Graduate Level



Test Date	05/06/2025
Test Time	4:30 PM - 6:00 PM
Subject	RRB NTPC Graduate Level I

* Note

Correct Answer will carry 1 mark per Question.

Incorrect Answer will carry 1/3 Negative mark per Question.

- 1. Options shown in green color with a tick icon are correct.
- 2. Chosen option on the right of the question indicates the option selected by the candidate.

Section: RRB NTPC Graduate Level I

Q.1 A group of numbers and symbols is coded using letter codes as per the codes given below and the conditions that follow. Study the given codes and conditions and answer the question that follows.

Note: If none of the conditions apply, then codes for the respective number/symbol are to be followed directly as given in the table.

Number/ Symbol	3	9	@	&	2	7	5	%	1	8	Δ	4	6
Code	L	С	Z	М	D	W	Α	Р	R	Т	F	В	К

Conditions:

- (i) If the first element is a symbol and the last a number, the codes for these two (the first and the last elements) are to be interchanged.
- (ii) If the first element is an odd number and the last an even number, the first and last elements are to be coded as ©.
- (iii) If both second and third elements are perfect squares, the third element is to be coded as the code for the second element.

What will be the code for the following group?

@9385

Ans

X 1. Z C B T A

X 2. A C B T Z

X 3. Z B C T A

Q.2 Who among the following received the Padma shri award in 2025 in the category of 'Others-Spiritualism' Posthumously?

Ans

X 1. Libia Lobo Sardesai

X 2. MD Srinivas

3. Lama Lobzang

X 4. Madugula Nagaphani Sarma

Q.3 What is the mean of the following distribution?

Marks	19	36	60	69	85
No. of Students	63	62	59	17	70

Ans

X 1.54

X 2.34

X 3.77

4. 52

Q.4	On 26 March 2025, where was the 8 th State Level Coordination Committee (SLCC) meeting conducted by the Reserve Bank of India (RBI)?
Ans	× 1. Imphal
	✓ 2. Gangtok
	💢 3. Guwahati
	X 4. Kolkata
Q.5	Two pipes, A and B, can fill a tank of 7800 litres in 12 hours and 10 hours, respectively. If they are opened together, how many hours will they take to fill an empty tank of 8800 litres?
Ans	\times 1. $\frac{70}{13}$ hours
	\times 2. $\frac{89}{13}$ hours
	\times 3. $\frac{88}{13}$ hours
	\checkmark 4. $\frac{80}{13}$ hours
Q.6	Who among the following was recognised in the 2025 TIME Earth Awards for environmental justice advocacy for marginalised communities?
Ans	✓ 1. Catherine Coleman Flowers
	X 2. Jay Inslee
	X 3. Michael Bloomberg
	X 4. Selassie Atadika
Q.7	From a taxi stand, two cabs start at a speed of 54 km/hr at an interval of 29 minutes, both cabs travelling in the same direction. A man coming in the opposite direction towards the taxi stand meets the cabs at an interval of 12 minutes. Find the speed (in km/hr) of the man.
Ans	X 1. 74.8
	★ 2. 82.1
	✓ 3. 76.5
	★ 4. 80.4
Q.8	If the selling price of a bed is 2-times of initial, then the profit is 10-times of initial. Find the initial profit percentage (in %).
Ans	X 1. 400
	× 2. 20
	√ 3. 12.5
	X 4. 500
Q.9	Refer to the following number and symbol series and answer the question that follows. Counting to be done from left to right only. All numbers are single-digit numbers.
	(Left) 2 * 3 & @ @ 6 4 \$ @ 3 * % 6 2 1 3 9 7 8 2 € (Right)
	How many such numbers are there each of which is immediately preceded by a number and also immediately followed by a symbol?
Ans	X 1.4
	★ 2.5
	★ 3. 3
	✓ 4.2

Q.10	If the ratio of two numbers is 17: 6 and the product of their LCM and their HCF is 102, then the sum of the reciprocals of the LCM and the HCF is:
Ans	× 1. 103
	× 1. 109
	$\times 2.\frac{103}{105}$
	$\sim 2. \frac{105}{105}$
	✓ 3. 103
	102
	× 4. 103 132
	132
Q.11	What is the capital expenditure (CAPEX) allocated for Indian Railways in the financial year 2024-25?
Ans	X 1. ₹3.00 lakh crore
	X 3. ₹1.76 lakh crore
	X 4. ₹2.20 lakh crore
0.12	What happens when you prose the Delete key ofter colecting a file in File Explorer in
Q.12	What happens when you press the Delete key after selecting a file in File Explorer in Windows OS?
Ans	X 1. The file is opened.
	X 2. The file is renamed.
	X 3. The file is permanently deleted.
	✓ 4. The file is sent to the Recycle Bin.
Q.13	A, B, C, D, E and F live on six different floors of the same building. The lowermost floor in the building is numbered 1, the floor above it, number 2 and so on till the topmost floor is numbered 6. The product of floors on which F and E live is 15. C lives immediately above B. The sum of floors on which D and E live is 7. How many people live between B and D?
Ans	X 1.3
	◆ 2. 2
	X 3. 1
	× 4.4
Q.14	Who authored the book 'Hind Swaraj', which outlined the principles of non-violent resistance and self-rule?
Ans	X 1. Bal Gangadhar Tilak
	✓ 2. Mahatma Gandhi
	X 3. Gopal Krishna Gokhale
	X 4. Jawaharlal Nehru
Q.15	What is the fundamental difference between a 'cold boot' and a 'warm boot' of a computer system?
Ans	★ 1. A cold boot preserves the current state of applications, while a warm boot closes them.
	2. A cold boot restarts the operating system from a powered-off state, while a warm boot restarts it from a running state.
	✗ 3. A cold boot is initiated by the user, while a warm boot is initiated by the operating system due to an error.
	★ 4. A cold boot only reloads the kernel, while a warm boot reinitializes all hardware components.
Q.16	Eklavya Model Residential Schools (EMRSs), the Government of India's education
Ans	initiatives for tribal communities, were introduced in which year? 1. 2018-19
	× 2. 1974-75
	★ 3. 2014-15
	✓ 4. 1997-98
i .	w · · · · ·

Q.17	Seven people, I, J, K, L, O, P and Q are sitting in a row, facing north. Only five people sit between L and Q. P sits to the immediate left of Q. Only one person sits between P and I. O sits at some place to the left of K but at some place to the right of J. Who sits third
	from the left end of the line?
Ans	X 1. P
	X 2. Q
	✓ 3. O
	※ 4. J
Q.18	Based on the English alphabetical order, three of the following four letter-cluster pairs are alike in a certain way and thus form a group. Which letter-cluster pair DOES NOT belong to that group? (Note: The odd one out is not based on the number of consonants/vowels or their position in the letter-cluster.)
Ans	✓ 1. NQ - RM
	X 2. NM - PO
	X 3. SR - UT
	★ 4. UT - WV
Q.19	Who will be the first Indian astronaut to travel to the International Space Station (ISS) as part of Axiom Mission 4?
Ans	X 1. Ashish Khanna
	✓ 2. Shubhanshu Shukla
	X 3. Sunita Williams
	X 4. Rakesh Sharma
Q.20	Which of the following ratios is greatest?
Ans	X 1. 41 : 64
	√ 2. 50 : 59
	★ 3. 26 : 90
	X 4. 40 : 70
Q.21	What was the theme of the 18 th Pravasi Bharatiya Divas (PBD) Convention held in January 2025?
Ans	★ 1. Strengthening Bonds: The Indian Diaspora and India@75
	X 2. Redefining Engagement with the Indian Diaspora
	X 3. Engaging Diaspora for a Self-Reliant India
	✓ 4. Diaspora's contribution to a Viksit Bharat
Q.22	AB is parallel to CD. A transversal PQ intersects AB and CD at E and F, respectively, and \angle PEB = 59°. G is a point between AB and CD such that \angle BEG = 50° and \angle GFE = 33°. What is the measure of \angle EGF?
Ans	√ 1. 76°
	★ 2.80°
	★ 3. 74°
	★ 4.88°
Q.23	Which state has the longest coastline in mainland India?
Ans	X 1. Andhra Pradesh
	× 2. Tamil Nadu
	✓ 3. Gujarat

Q.24	Which of the following numbers is divisible by 7?
Ans	X 1. 894
	★ 2.87
	→ 3. 875
	★ 4. 687
Q.25	Bhawani Pathak and Devi Choudhurani were famous leaders associated with which of the following?
Ans	X 1. Indigo Rebellion
	× 2. Munda Rebellion
	X 3. Chuar Rebellion
Q.26	Based on the English alphabetical order, three of the following four letter-cluster pairs are alike in a certain way and thus form a group. Which letter-cluster pair DOES NOT belong to that group? (Note: The odd one out is NOT based on the number of consonants/vowels or their position in the letter cluster)
Ans	X 1. PS - QT
	X 2. KN − LO
	★ 3. GJ - HK
	✓ 4. DH - FP
Q.27	What should come in place of the question mark (?) in the given series?
	1001 1000 997 992 985 ?
Ans	X 1. 975
	✓ 2. 976
	★ 3. 978
	★ 4. 977
Q.28	L, M, N, O, P, Q, and R are sitting around a circular table facing the centre. M is sitting to the immediate right of Q and immediate left of O. N is sitting to the immediate right of O. P is sitting to the immediate left of L. R is sitting to the immediate right of L and immediate left of Q. The position of how many persons will remain unchanged if all the persons are arranged in alphabetical order in clockwise direction starting from L (including L)?
Ans	★ 1.4
	× 2.3
	X 3. 1
	√ 4. 5
	•
Q.29	According to the Future of Jobs Report 2025, which of the following is identified as the most transformative trend for businesses by 2030?
Ans	X 1. Robotics and automation
	X 2. Energy generation and storage
	X 3. Health and information processing
	✓ 4. Broadening digital access
Q.30	A boat takes 51 minutes to go 10.2 km upstream. The ratio of the speed of the boat in still water to that of the stream is 7 : 6. How much total time (in hours) will the boat take to go 17.7 km upstream and 66.3 km downstream?
Ans	★ 1. 3.4
	★ 2. 2.1
	✓ 3. 1.9
	★ 4. 0.3

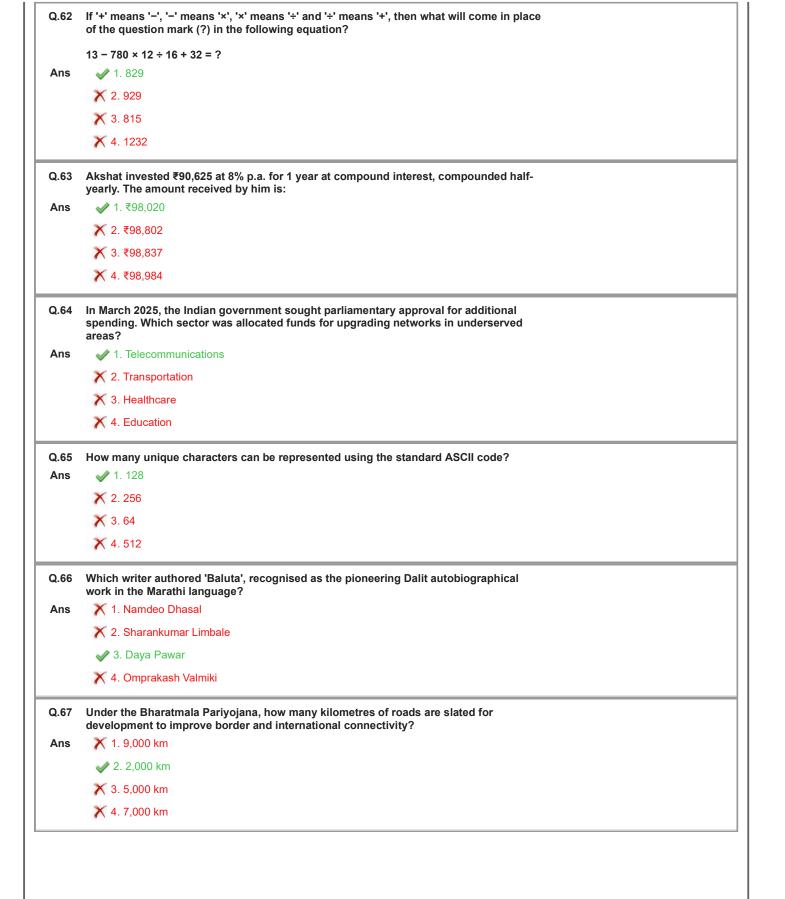
Q.31 If 'A' stands for '÷', 'B' stands for 'x', 'C' stands for '+', and 'D' stands for '-', what will come in place of the question mark (?) in the following equation? 45 B 14 A 21 D 17 C 25 = ? X 1. 54 Ans X 2.42 X 3.36 4. 38 An article was bought for ₹1,300. Its price was marked up by 35%. Thereafter it was sold at a discount of 20% on the marked price. What was the percentage profit on the transaction? X 1.7% Ans X 2. 10% X 3.6% 4.8% At what rate of interest (in percentage) per year will a sum of money double itself in 5 Q.33 years on simple interest? Ans X 1.40% 2. 20% X 3. 22% X 4. 18% Simplify: Q.34 144 ÷ $\left[\frac{8}{4} \times \left\{7 + 7 - \left(5 + 8 - (9 + 2)\right)\right\}\right]$ Ans X 2.9 **3**.6 X 4.3 What should come in place of the question mark (?) in the given series based on the English alphabetical order? SKC WOG ASK EWO? 1. IAS Ans X 2. AIS X 3. ASI X 4. ISA Each of O, P, Q, R, S, T and U has an exam on a different day of a week starting from Monday and ending on Sunday of the same week. S has an exam on Wednesday. R has an exam on one of the days after P and T has an exam on one of the days before Q. U has an exam immediately after O and S has an exam immediately before O. T has an exam on one of the days after U. How many people have an exam between S and Q? Ans X 1. Two X 2. Four X 3. Five 4. Three

Q.37	In India, irrigation projects with a Cultivable Command Area (CCA) of more than 10,000 hectares are classified as:
Ans	X 1. Micro Projects
	X 2. Minor Projects
	X 3. Local Projects
	✓ 4. Major Projects
Q.38	This question is based on the words given below.
	(Left) BAD FIG ICE NOT (Right)
	In each of the words, each vowel is changed to the letter immediately following it in the English alphabetical order and each consonant is changed to the letter immediately preceding in the English alphabetical order. In how many letter clusters thus formed, will no vowel appear?
Ans	√ 1. Two
	× 2. None
	X 3. Three
	X 4. One
Q.39	The length of a vertical rod and its shadow are in the ratio of $2:\sqrt{12}$. Find the angle of elevation of the sun.
Ans	× 1.75°
	× 2.45°
	× 3.60°
	✓ 4.30°
Q.40	This question is based on the five, three-digit numbers given below.
	(Left) 662 268 547 409 909 (Right)
	(Example: 697 – First digit = 6, second digit = 9 and third digit = 7) (NOTE: All operations to be done from left to right.)
	What will be the resultant if the third digit of the highest number is subtracted from the first digit of the lowest number?
Ans	X 1. −8
	× 2. −6
	× 3. −4
	◆ 4. −7
Q.41	If $x - \frac{1}{x} = 10$, then the value of $x^3 - \frac{1}{x^3}$ is:
Ans	X 1. 986
	✓ 2. 1030
	※ 3. 992
	★ 4. 1386
Q.42	Each of C, D, E, F, S, T and U has an exam on a different day of a week starting from Monday and ending on Sunday of the same week. F has the exam on Friday. Only two people have their exams between T and F. Only four people have their exams between E and T. S has the exam immediately after U. D does not have the exam on Monday. How many people have their exams before D and after C?
Ans	√ 1. Four
	X 2. One
	X 3. Two
	X 4. Three

Q.43 Select the pair that follows the same pattern as that followed by the two sets of pairs given below. Both pairs follow the same pattern. PIL: TMP NAP: RET X 1. NLI : JPM Ans 2. SWT : WAX X 3. SPL: WLH X 4. BGM : GKQ Q.44 A cook earns ₹8,400 per month. If she spends 60% of it each month, how much will she save (in ₹) by one-fourth of a year? **1.** 10,080 Ans **X** 2. 7,200 X 3. 12000 **X** 4. 5,040 KF 17 is related to HB 6 in a certain way. In the same way, KH 12 is related to HD 1. To Q.45 which of the following is LP -6 related following the same logic? Ans X 1. HI -18 X 2. PL -19 X 4. MP -13 Q.46 Which of the following regions in India is known for the Shola forests? Ans X 1. Sundarbans X 2. Eastern Ghats 3. Western Ghats X 4. Thar Desert Which of the following letter-clusters should replace # and % so that the pattern and Q.47 relationship followed between the letter-cluster pair on the left side of :: is the same as that on the right side of ::? #: LQT :: AJM : % Ans X 1. # = JQM, % = CPK X 2. # = JPT, % = CKR X 3. # = JRM, % = COP ✓ 4. # = JPR, % = CKO Q.48 In 2025, which Indian state initiated scientific coal mining after a decade-long ban on unscientific mining practices? Ans 1. Jharkhand 2. Meghalaya X 3. Chhattisgarh X 4. Odisha Sudeep starts from Point A and drives 3 km towards south. He then takes a left turn, Q.49 drives 4 km, turns right and drives 4 km. He then takes a left turn and drives 3 km. He takes a final left turn, drives 7 km and stops at Point P. How far (shortest distance) and towards which direction should he drive in order to reach Point A again (all turns are 90° turns only unless specified)? Ans X 1. 7 km; East X 2. 6 km; East 3. 7 km; West X 4. 6 km; West

Q.50	A group of numbers and symbols is coded using letter codes as per the codes given below and the conditions that follow. Study the given codes and conditions and answer the question that follows.															
	Note: If not								for the	e resp	ective	num	ber/s	ymbo	ol are	
		2	@	9	5	\$	&	3	%	#	7	+	4	8	6]
		Г	F	Α	J	L	E	W	Q	D	Р	R	В	U	S	=
	Conditions: If the first element is a symbol and the last a number, the codes for these two (the first and the last elements) are to be interchanged. If the first element is an odd number and the last an even number, the first and last elements are to be coded as ©. If both second and third elements are perfect squares, the third element is to be coded as the code for the second element. If none of the above conditions are met, then the elements are to be simply coded as per the codes given in the question. What will be the code for the following group? @ 2 4 7 + X 1. RTBPF															
	_															
Ans																
	X 2. RBE															
	※ 3. FBE															
	√ 4. FTE	3PR														
Q.51	(INC)? a) The INC was founded in 1885 by Allan Octavian Hume. b) The first session of the INC was held in Pune under the presidency of WC Bonnerjee.															
	× 2. Neit		a nor	b												
	X 3. Only															
			and b													
Q.52	 4. Both a and b Which Article of the Indian Constitution explicitly declares laws violating Fundamental Rights as void? 															
Ans	X 1. Artic	cle 3	32													
	× 2. Artic	cle 1	43													
	X 3. Artic	cle 2	226													
	4. Arti	cle 1	13													
Q.53	What type	of n	nemo	ry is u	ısed t	o stor	e data	tempo	orarily	while	a com	pute	is ru	ınnin	g?	
Ans	√ 1. RAI	M														
	X 2. Cac	he														
	✗ 3. ROI	M														
	X 4. Har	d D	isk													
Q.54	MILK is related same way, following the	PO	T is re	elated	to W											
Ans	√ 1. UH.	ΑP\	/U													
	X 2. UHA	APU	V													
	X 3. UHA	ΔЫΙ														
	0.011	~i	U													

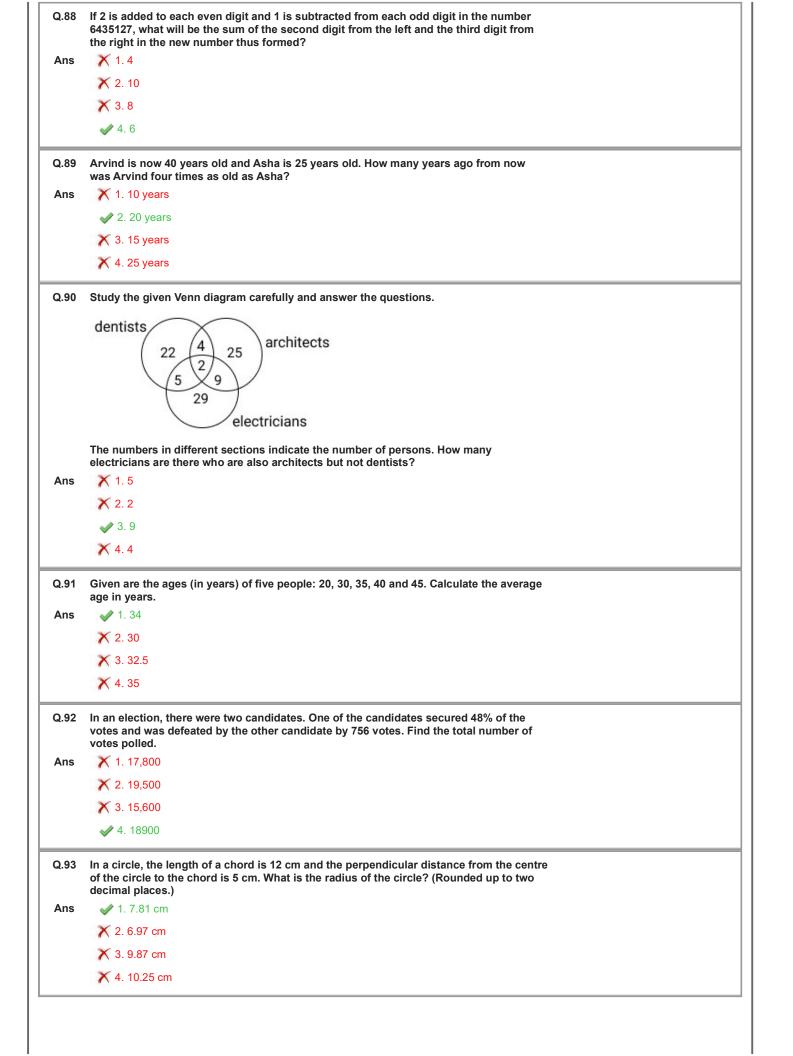
Q.55	PM Modi's visit to which country in November 2024 marked the first by an Indian Prime Minister in 17 years?
Ans	✓ 1. Nigeria
	X 2. Ethiopia
	X 3. Ghana
	× 4. Tanzania
Q.56	The Shakas were defeated by which tribal group before entering India?
Ans	X 1. The Huns
	✓ 2. The Yueh-chis
	X 3. The Parthians
	X 4. The Greeks
Q.57	$\frac{\sqrt[3]{1331}}{\sqrt[4]{10000}} \times \frac{5}{33} \times 30 =$
	$\sqrt[4]{10000}$ 33
Ans	X 1.9
	× 2.13
	√ 3. 5
	★ 4.6
Q.58	Who succeeded Chandragupta I as the ruler of the Gupta Empire?
Ans	X 1. Ramagupta
	X 2. Skandagupta
	X 3. Kumaragupta
	√ 4. Samudragupta
Q.59	Select the number from among the given options that can replace the question mark (?) in the following series. 62 61.1 60.2 59.3 58.4 57.5 ?
Ans	✓ 1. 56.6
	× 2.56.2
	★ 3. 56.8
	★ 4. 56.4
Q.60	Which institution has been established by the 74 th Constitutional Amendment, 1992, to
	conduct municipal elections in each State?
Ans	X 1. Regional Election Commission
	X 2. Local Election Commission
	X 4. National Election Commission
Q.61	54 is related to 59 following a certain logic. Following the same logic, 30 is related to 35. To which of the following is 11 related, following the same logic?
	(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 – Operations on 13 such as adding/subtracting/multiplying to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)
Ans	★ 1.18
	√ 2. 16
	★ 3. 15
	× 4. 17



		he question that follows. Note: If none of the conditions apply, then codes for the respective number/symbol are															
	Note: If to be fo								for th	ie resp	ective	num	ber/s	ymbo	l are		
	Nu	4	@	7	#	3	&	8	*	2	٨	9	\$	6	+		
	mbe r/sy mbo																
	Cod e	Н	Α	J	В	K	С	L	D	M	E	N	F	Р	G		
	Conditi If the fit and the If the fit elemen If both s be the c What w	est ele last e est ele ts are secon code f	element in to be defined and or the	ts) are s an e coded third e secon	to be ven n as '('. elemen d eler	inter umbe nts ar nent.	chang r and t	jed. the las	st an o	dd nu	mber,	the fir	st an	d last			
Ans	✓ 1.X 2.X 3.X 4.	(KJ(HKJN															
Q.69	Accord is the e							report	on In	dia's p	overt	y rate	for 20)24, w	hat		
Ans	is the estimated national poverty rate? 1. 5.5% to 6.0%																
	✓ 2. 4.0% to 4.5%																
	X 3.	3.5% t	o 4.0%)													
	X 4.	4.5% t	o 5.0%														
Q.70	.70 Robin and Varun together can paint a hall in 6 days. Robin alone can paint it in 42 days. In how many days can Varun alone paint it?																
Ans	v 1.	-	, .			۰۰ ۲											
	X 2.	9															
	X 3.																
	X 4.																
Q.71	What w									follov	/ing e	quatio	n, if '	+' and	d '–'		
	54 ÷ 11		× 8 – ′	114 = ?	?												
Ans	√ 1.																
	X 2.																
	X 3.																
	X 4.	673															
Q.72	A group 50% are and 50	wom	en an	d the r	est ar	e chil	dren, a	and th	eir av	erage v	weigh	ts are					
Ans	X 1.	51															
	X 2.	50															
	X 3.	48															

Q.73	What should come in place of the question mark (?) in the given series based on the English alphabetical order?	
	JGM KHN LIO MJP ?	
Ans	X 1. NKR	
	X 2. NLR	
	✗ 3. NLQ	
	✓ 4. NKQ	
Q.74	The term 'complementary' in the context of DNA refers to which of the following	
	properties?	
Ans	X 1. Identical chemical composition of both strands	
	X 2. Parallel orientation of nucleotide chains	
	X 3. Matching number of sugar-phosphate units	
Q.75	Which of the following foods would you advise to neutralise excess stomach acids?	
Ans	√ 1. Baking soda	
	X 2. Vinegar	
	X 3. Lemon juice	
	X 4. Spicy peppers	
Q.76	Under the Fifth Schedule, the Governor's regulations in Scheduled Areas can prohibit or restrict which of the following?	
Ans	X 1. Tax collection	
	✓ 2. Land transfers	
	X 3. Water usage	
	X 4. Freedom of speech	
Q.77	In a bag containing red, green, and pink tokens, the ratio of red to green tokens was 7: 20, while the ratio of pink to red tokens was 15: 12. What was the ratio of green to pink tokens?	
Ans	X 1. 19: 12	
	X 2. 11 : 5	
	√ 3. 16:7	
	★ 4. 25 : 7	
Q.78	Alok, Gita, and Suresh invest ₹56,000, ₹52,000, and ₹69,000 respectively to start a business. At the end of the year, the total profit earned is ₹76,700. 31% of the total profit earned is given to charity and the rest is divided among them in the ratio of their investment. What will be the share of Suresh (in ₹)?	
Ans	√ 1. 20,631	
	★ 2. 20,693	
	★ 3. 20,551	
	★ 4. 20,727	
Q.79	What happens if you try to open a MS PowerPoint presentation created in a newer version (e.g., MS PowerPoint 2021) in an older version (e.g., MS PowerPoint 2010)?	
Ans	X 1. The file will be automatically converted to a PDF.	
	× 2. The file will open normally with all features intact.	
	X 3. MS PowerPoint will display an error and refuse to open the file.	

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What popular title is used to refer to the Bengali poet Jibanananda Das?
Q.80
Ans
        X 1. Jibon Kobi
         🥓 2. Rupashi Banglar Kabi
        X 3. Kobiraj of Kolkata
         X 4. Bhasha Shaheed Kabi
       Following are the marks obtained by 5 students in a test: 45, 67, 80, 56 and 72. What is
Q.81
       the range of the marks?
Ans
        X 1.40
        X 2.45
         X 3.80
         4. 35
Q.82
       A conical vessel has base radius 31 cm and height 45 cm. Water is poured into the vessel until it is \frac{2}{3} full. Find the volume (in cm<sup>3</sup>) of water in the vessel.
         Χ 1. 9614π
Ans
         Χ 2. 9611π
         3. 9610π
        Χ 4. 9606π
       The Waqf (Amendment) Act, 2025 introduced which significant change to the
Q.83
       composition of Waqf Boards?
        1. Abolition of State Waqf Boards
Ans
        2. Privatisation of Waqf properties
         3. Inclusion of non-Muslim members
        4. Exemption from government audits
       Which period in India's demographic history is marked by a sharp decline in mortality
Q.84
       and persistently high fertility rates?
Ans
        X 1. Phase II (1921–1951)
        X 2. Phase I (1901–1921)
         3. Phase III (1951–1981)
        X 4. Phase IV (1981-2001)
       When was the Protection of Human Rights Act passed in India?
Q.85
        X 1. 2003
Ans
         X 2. 1996
         X 3. 2006
         4. 1993
Q.86
       A vendor sold 4 chocolates for ₹1, thereby gaining 100%. How many chocolates did he
       buy for ₹1?
Ans
        X 1. 12
        X 2. 14
         3.8
        X 4. 10
Q.87
       India's first indigenous CAR-T therapy and gene therapy for Hemophilia, discussed
       during the 7<sup>th</sup> PM-STIAC meeting in January 2025, were presented by experts from
       which institutions?
        X 1. NIPER and PGIMER, Chandigarh
Ans
        X 2. CSIR and JIPMER, Puducherry
         3. IIT Bombay and St. John's Hospital, Bengaluru
        X 4. IISc, Bengaluru, and AIIMS, Delhi
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	A solid metallic sphere of radius 10 cm is melted and recast into 125 identical spheres. What is the ratio of the surface area of the original sphere to the total surface area of 6 smaller spheres so formed?
Ans	X 1. 49 : 108
Q.95	✓ 2. 25 : 6
	X 3. 109 : 84
	× 4. 25 : 96
	Which criticism highlights the parliamentary system's departure from the principle of separation of powers?
Ans	★ 1. Ministers are appointed based on expertise rather than political affiliation.
	X 2. The executive and legislature operate independently.
	★ 3. The cabinet simultaneously leads the executive and legislature, creating fusion of powers.
	√ 4. The President has absolute control over the Prime Minister.
Q.96	In a certain code language, A + B means 'A is the mother of B', A - B means 'A is the brother of B', A × B means 'A is the wife of B' and A ÷ B means 'A is the father of B'.
	How is M related to Q if 'M + N × O − P ÷ Q'?
Ans	X 1. Mother's brother's wife's sister
	X 2. Father's brother's wife's sister
	X 4. Mother's brother's wife's mother
Q.97	Rajendra starts from point A and drives 9 km towards the north. He then takes a left turn, drives 7 km, turns left and drives 11 km. He then takes a left turn and drives 10 km. He takes a final left turn, drives 2 km and stops at point P. How far (shortest distance) and towards which direction should he drive in order to reach point A again? (All turns are 90 degree turns only unless specified.)
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Q.100 If sum and product of the roots of a quadratic equation are $(4-3\sqrt{2})$ and -28, respectively, then find the quadratic equation.

Ans
$$\times 1 \cdot x^2 - (4 + 3\sqrt{2})x + 28 = 0$$

1.
$$x^2 - (4 + 3\sqrt{2})x + 28 = 0$$

2. $x^2 + (4 + 3\sqrt{2})x + 28 = 0$
3. $x^2 + (4 - 3\sqrt{2})x - 28 = 0$
4. $x^2 - (4 - 3\sqrt{2})x - 28 = 0$

$$\times$$
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$$\checkmark$$
 4. $x^2 - (4 - 3\sqrt{2})x - 28 = 0$