रेलवे भर्ती बोर्ड | RAILWAY RECRUITMENT BOARD

सीईएन ०१/२०२६ सहायक लोको पायलट (एएलपी) के पद पर भर्ती

CEN 01/2026 Recruitment of Assistant Loco Pilot (ALP)

Test Date	03/11/2026
Test Time	9:00 AM - 10:00 AM
Subject	RRB ALP 2026 CBT 1

*** 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 ALP**

Q.1 **A car's radiator should contain a solution of 83% antifreeze. A motorist has 13 litres of 33% antifreeze. How many litres (rounded off to 2 decimal places) of 95% antifreeze liquid should he add to his solution to produce a 83% antifreeze?**

Ans
✗ A. 49.14
✗ B. 56.14
✗ C. 50.39
✓ D. 54.17

Q.2 **If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', then what will come in place of the question mark (?) in the following equation?**
13 D 95 C 8 B 270 A 18 = ?

Ans
✗ A. 32
✗ B. 31
✓ C. 38
✗ D. 34

Q.3 **In this question, a group of numbers/symbols is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then the codes for the respective number/symbol are to be followed directly as given in the table.**

Number/Symbol * ? + # 3 6 5 % @ 9

Code M E F D X Z B V P U

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange the codes for the first and last elements.
(ii) If the second and third elements are odd numbers, code the third element as the code of the second element.
(iii) If the fourth element is a symbol and the fifth element is a number, code both fourth and fifth elements as ©.

How is the following group of number-symbols coded?
***?+63**

Ans
✗ A. MEYDX
✗ B. PEFDX
✓ C. XEFZM
✗ D. MEFZX

Q.4 **The slant height of a right circular cone is 40 cm and its height is 32 cm. Find the area (in cm^2) of its curved surface. (Use π = 3.14)**

Ans

✔ A. 3014.4

✘ B. 3024.4

✘ C. 3034.4

✘ D. 3044.4

Q.5 **Each letter in the word JUMBLED is arranged in the English alphabetical order. How many letters are there in the English alphabetical order between the letter which is second from the left and the one which is first from the right in the new letter cluster thus formed?**

Ans

✔ A. 16

✘ B. 19

✘ C. 15

✘ D. 17

Q.6 **Seven people, E, F, G, H, W, X and Y, are sitting around a circular table, facing the centre of the table. Y is an immediate neighbour of both E and G. G sits third to the left of F. X sits to the immediate left of F. W is not an immediate neighbour of G. Who sits second to the right of H?**

Ans

✘ A. G

✔ B. F

✘ C. E

✘ D. W

Q.7 **Seven people, A, B, C, I, J, K and L are sitting in a row, facing north. Only five people sit between L and K. C sits to the immediate left of K. Only one person sits between C and A. J sits at some place to the left of I but at some place to the right of B. Who sits third from the left end of the line?**

Ans

✔ A. J

✘ B. C

✘ C. I

✘ D. A

Q.8 **A question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.**

Question:
Among 5 sticks, Y, S, D, L and W, each having a different height, which stick is the tallest?

Statements:
(I) Y is shorter than S but taller than D. D is taller than only one stick.
(II) L is taller than W.

Ans

✘ A. Data in statement II alone is sufficient to answer the question while data in statement I is not.

✔ B. Data in both statements I and II together are NOT sufficient to answer the question.

✘ C. Data in statement I alone is sufficient to answer the question while data in statement II is not.

✘ D. Data in both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.

Q.9 **A polygon is a combination of a parallelogram and a trapezium. The parallelogram has a base of 16 cm and a height of 9 cm, while the trapezium has parallel sides measuring 8 cm and 12 cm with a height of 6 cm. What percentage of the total area of the polygon is occupied by the trapezium?**

Ans

✔ A. $29\frac{21}{51}\%$

✘ B. $29\frac{23}{51}\%$

✘ C. $28\frac{23}{51}\%$

✘ D. $28\frac{21}{51}\%$

Q.10 **FCBY is related to CZYV in a certain way based on the English alphabetical order. In the same way, HEDA is related to EBAX. To which of the following is KHGD related, following the same logic?**

Ans

✘ A. HDCA

✘ B. HECA

✔ C. HEDA

✘ D. HFCJ

Q.11 **Refer to the following letter and symbol series and answer the question that follows. Counting to be done from left to right only.**

(Left) O G # E A @ $ R & U Ω T £ D H ! Y (Right)

How many such vowels are there, each of which is immediately preceded by a vowel and also immediately followed by a symbol?

Ans

✔ A. One

✘ B. Two

✘ C. None

✘ D. Three

Q.12 **M and N are going on a road trip from city A to city D, passing through cities B and C. The time taken to travel between the cities is as follows: it takes 5 hours to get from A to B, 7 hours from B to C, and 9 hours from C to D. Their average speed is 20 m/s, and the distance from C to D is 567 km. Additionally, they travel from A to B at a speed of 25 m/s. If the distance between B and C is denoted as 'L' meters, find $\sqrt{L-5000}$.**

Ans

✔ A. 700

✘ B. 500

✘ C. 200

✘ D. 600

Q.13 **A tap fills a tank in 7 hours. Another tap empties the full tank in 56 hours. How long (in hours) will it take to fill half of the tank, if the tank is empty initially and both the taps are opened together?**

Ans

✘ A. 8

✘ B. 9

✘ C. 5

✔ D. 4

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Q.14 **TU 8 is related to YZ 17 in a certain way. In the same way, PH 14 is related to UM 23. To which of the given options is KC 17 related, following the same logic?**

Ans

✗ A. OH 26

✗ B. PG 26

✓ C. PH 26

✗ D. OG 27

Q.15 **Two numbers are in the ratio of 3 : 4. If 10 is added to both the numbers, then the ratio between two numbers becomes 11 : 13. Find the greater number.**

Ans

✗ A. 12

✗ B. 20

✗ C. 8

✓ D. 16

Q.16 **A shopkeeper allows a trade discount of 20% on an article with marked price of ₹5000. He further offers an extra cash discount of 5% on the reduced price for cash payment. What is the final amount to be paid in cash?**

Ans

✗ A. ₹4200

✗ B. ₹3500

✓ C. ₹3800

✗ D. ₹4000

Q.17 **In uniform circular motion, the acceleration is:**

Ans

✗ A. Along the radius outward

✗ B. Tangential to the path

✓ C. Along the radius inward

✗ D. Zero

Q.18 **B, E, G, R, U and V 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. E lives on an odd numbered floor but not 5. The sum of floors on which E and R live is 5. Only 3 people live between R and G. B lives immediately above V. How many people live below R?**

Ans

✗ A. 4

✗ B. 3

✓ C. 1

✗ D. 2

Q.19 **Refer to the following letter and symbol series and answer the question that follows. Counting to be done from left to right only.**
(Left) B L © H D * # $ Y S V * £ Q $ I # X I & # I (Right)
How many such symbols are there, each of which is immediately preceded by a letter and also immediately followed by a letter?

Ans

✗ A. 5

✓ B. 3

✗ C. 4

✗ D. 6

Q.20 **What should come in place of '?' in the given series?**
23 30 41 48 59 ?

Ans

✗ A. 62

✓ B. 66

✗ C. 64

✗ D. 68

Blackbook

Q.21 **Which of the following categories includes organisms that break down dead and waste matter?**

Ans
- ✗ A. Consumers
- ✗ B. Herbivores
- ✗ C. Producers
- ✓ D. Decomposers

Q.22 **Puja starts from point A and drives 17 km towards the North. She then takes a right turn and drives 15 km. She then takes a left turn and drives 19 km, takes a right turn and drives 18 km. She takes a final right turn and drives 36 km and stops at point B. How far (shortest distance) and towards which direction should she drive in order to reach Point A again? (All turns are 90-degree turns only unless specified.)**

Ans
- ✗ A. 32 km to the South
- ✗ B. 31 km to the West
- ✗ C. 30 km to the East
- ✓ D. 33 km to the West

Q.23 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol 1 # 6 @ 3 % 8 & 5 $ 2 + 9 4

Code H M B T K P A F U R D W L Q

Conditions –
(i) If the second element is a symbol, code the fourth element as ©.
(ii) If the fourth element is a symbol, code the second element as ©.
(iii) If the last element is a symbol, code the first element as ©.

What is the code for the following group of number-symbols?
859@2

Ans
- ✓ A. A©LTD
- ✗ B. AUUTD
- ✗ C. A©UTD
- ✗ D. AUUTW

Q.24 **After six weekly quizzes, a student's average score stood at 18 marks. What was the student's cumulative score across these quizzes?**

Ans
- ✗ A. 96
- ✗ B. 114
- ✓ C. 108
- ✗ D. 112

Q.25 **A bank offers a fixed deposit scheme with 12% compound interest per annum, compounded half-yearly. If ₹10,000 is invested for one year, what will be the maturity amount (in ₹)?**

Ans
- ✗ A. 11,200
- ✗ B. 10,600
- ✓ C. 11,236
- ✗ D. 11,272

Q.26 **Where does gametogenesis occur in the human male and female reproductive organs, respectively?**

Ans
- ✗ A. In the urethra and the ovaries
- ✗ B. In the testes and the fallopian tube
- ✗ C. In the urethra and the cervix
- ✓ D. In the testes and the ovaries

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Q.27 **14 is related to 70 following a certain logic. Following the same logic, 22 is related to 110. To which of the given options is 55 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 etc. 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

✔ A. 275

✘ B. 225

✘ C. 255

✘ D. 235

Q.28 **Evaluate the following.**

$$2 + (\sin A + \operatorname{cosec} A)^2 + (\cos A + \sec A)^2$$

Ans

✔ A. $9 + \tan^2 A + \cot^2 A$

✘ B. $7 + \tan^2 A + \cot^2 A$

✘ C. $\tan^2 A + \cot^2 A$

✘ D. $5 + \tan^2 A + \cot^2 A$

Q.29 **The procedure for amendment of the Indian Constitution is borrowed from which of the following countries constitutions?**

Ans

✘ A. United Kingdom

✔ B. South Africa

✘ C. Canada

✘ D. Japan

Q.30 **Select the pair that follows the same pattern as that followed by the two pairs given below. Both pairs follow the same pattern.**

IHJ–FEG
JIK–GFH

Ans

✘ A. WUV–SRT

✘ B. WVX–SST

✔ C. WVX–TSU

✘ D. WUV–TSU

Q.31 **What should come in place of the '?' in the given series?**

1 -1 -5 -13 -29 ?

Ans

✘ A. -60

✘ B. -65

✔ C. -61

✘ D. -62

Q.32 **An online learning platform reports that a large batch of students has a mean mathematics score of 68 and a median score of 72. Assuming the empirical relation is valid for this dataset, what is the most likely modal score?**

Ans

✘ A. 88

✘ B. 84

✔ C. 80

✘ D. 76

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Q.33 **This question is based on the five, three-digit numbers given below.**

(Left) 214 785 698 759 472 (Right)

(Example: 697 – First digit = 6, second digit = 9 and third digit = 7)
(NOTE: All operations to be done from left to right.)

If all the numbers are arranged in ascending order, the position of how many numbers will remain unchanged?

Ans
- ✗ A. 4
- ✓ B. 3
- ✗ C. 1
- ✗ D. 2

Q.34 **What should come in place of '?' in the given series?**

77 66 54 41 27 12 ?

Ans
- ✗ A. -3
- ✗ B. -5
- ✗ C. -1
- ✓ D. -4

Q.35 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**

FIG 50 CFD 58 ZCA 66 WZX 74 ?

Ans
- ✗ A. TXT 84
- ✗ B. TVT 81
- ✓ C. TWU 82
- ✗ D. TUW 87

Q.36 **A person invested ₹56,500 at a rate of 8% per annum simple interest for 4 years. Find the amount (in ₹) that he will receive after 4 years.**

Ans
- ✗ A. 75,580
- ✗ B. 73,580
- ✓ C. 74,580
- ✗ D. 72,580

Q.37 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**

QLH36 PKG47 OJF58 NIE69 ?

Ans
- ✗ A. MGD80
- ✗ B. MHD81
- ✓ C. MHD80
- ✗ D. MGD81

Q.38 **Simplify:**
$(48 \div 6 + 10 - 9 \times 2) + (15 \times 5 - 6)$

Ans
- ✗ A. 75
- ✗ B. 25
- ✗ C. -15
- ✓ D. 69

Q.39 **Below are given two sets of numbers. In each set of numbers, a certain mathematical operation on first number results in the second number. Similarly, certain mathematical operation on second number results in the third number and so on. Which of the given options follows the same set of operations as in question?**
(NOTE – A two/three digit number cannot be broken into individual digits for operations e.g. if 37 is followed by 10, the operation cannot be 3+7 as a two digit number cannot be broken into individual digits)
18 - 14 - 70 - 73
11 - 7 - 35 - 38

Ans
- ✗ A. 2 -2 -14 -8
- ✗ B. 50 - 47 - 188 - 195
- ✗ C. 50 - 45 - 225 - 231
- ✓ D. 18 - 14 - 70 - 73

Q.40 **If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', what will come in place of the question mark (?) in the following equation?**

2 D 19 C 48 A 27 B 45 = ?

Ans
- ✗ A. 65
- ✗ B. 64
- ✓ C. 63
- ✗ D. 61

Q.41 **If 2 is added to each odd digit and 1 is subtracted from each even digit in the number 7854132, what will be the difference between the highest and lowest digits in the number thus formed?**

Ans
- ✗ A. 7
- ✗ B. 6
- ✗ C. 5
- ✓ D. 8

Q.42 **The sum of the present ages of Stan and Benedict is 74 years. Four years ago from now, Benedict's age was half of Stan's then age. How old (in years) is Stan at present?**

Ans
- ✗ A. 50
- ✓ B. 48
- ✗ C. 44
- ✗ D. 42

Q.43 **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
- ✓ A. LH – CZ
- ✗ B. EA – VR
- ✗ C. PL – GC
- ✗ D. VR – MI

Q.44 **Vanraj is three times as old as his son, and his daughter is 3 years younger than the son. If the sum of the ages of these three people 3 years ago was 123 years, then Vanraj's present age (in years) is:**

Ans
- ✗ A. 78
- ✓ B. 81
- ✗ C. 41
- ✗ D. 48

black

Q.45 **A sum is invested in two education savings schemes that both provide 10% compound interest per annum. Scheme A compounds annually, whereas Scheme B compounds half-yearly. After one year, the maturity amount under Scheme B exceeds that of Scheme A by ₹12.50. Find the principal amount (in ₹).**

Ans

✗ A. 10,000

✓ B. 5,000

✗ C. 12,500

✗ D. 2,500

Q.46 **In a circle of radius 17 cm, a chord is at a distance of 8 cm from its centre. What is the length (in cm) of the chord?**

Ans

✗ A. 35

✓ B. 30

✗ C. 40

✗ D. 25

Q.47 **Which type of joint is present in the knee, enabling it to bend and straighten?**

Ans

✓ A. Hinge joint

✗ B. Pivot joint

✗ C. Ball and socket joint

✗ D. Fixed joint

Q.48 **A, B, C, D, E and F each scored different marks. E was the second lowest scorer. B scored less than F but more than C. D did not score more than E. A did not score less than F. How many people scored less than B?**

Ans

✗ A. Two

✗ B. One

✓ C. Three

✗ D. Four

Q.49 **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 is the one that 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

✓ A. QS–TY

✗ B. JL–NP

✗ C. HJ–LN

✗ D. BD–FH

Q.50 **Refer to the following letter series and answer the question that follows. Counting to be done from left to right only.**
(Left) Z I I H U V U I I J W O L U Q L E P S E J E (Right)
How many such consonants are there, each of which is immediately preceded by a vowel and also immediately followed by a vowel?

Ans

✗ A. 6

✗ B. 3

✗ C. 5

✓ D. 4

Q.51 **Which type of lever has the load positioned between the fulcrum and the effort?**

Ans

✗ A. First class lever

✓ B. Second class lever

✗ C. Fourth class lever

✗ D. Third class lever

blackbook

Q.52 **AB is parallel to CD. A transversal PQ intersects AB and CD at E and F, respectively, and ∠PEB = 25°. G is a point between AB and CD such that ∠BEG = 43° and ∠GFE = 10°. What is the measure of ∠EGF?**

Ans

✗ A. 70°

✗ B. 43°

✗ C. 48°

✓ D. 58°

Q.53 **Given below are two statements. Read the statements carefully and select the correct option.**

Statement I: Mixtures that contain physically distinct parts and have non-uniform compositions are called heterogeneous mixtures.
Statement II: Mixtures of sodium chloride and iron filings, salt and sulphur, and oil and water are examples of heterogeneous mixtures.

Ans

✗ A. Both Statements I and II are false.

✗ B. Statement I is true but Statement II is false.

✓ C. Both Statements I and II are true.

✗ D. Statement I is false but Statement II is true.

Q.54 **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 is numbered 2 and so on, till the topmost floor is numbered 6. Only three people live between C and F. A lives immediately above F. A lives on an even-numbered floor. C does not live on the lowermost floor. B lives immediately above D. On which floor does E live?**

Ans

✗ A. Floor number 2

✗ B. Floor number 1

✓ C. Floor number 6

✗ D. Floor number 5

Q.55 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol	6	$	4	#	@	9	!	+	8	5
Code	L	K	T	D	X	Q	I	P	V	E

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange the codes of the first and the last elements.
(ii) If the second and third elements are odd numbers, code the third element as the code of the second element.
(iii) If the fourth element is a symbol and the fifth element is a number, code both elements as ©.

What is the code for the following group of number-symbols?
6 $ 4 # @

Ans

✗ A. LITDX

✓ B. LKTDX

✗ C. LKTFX

✗ D. LKTDQ

Q.56 **In this question, a group of numbers/symbols is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then the codes for the respective number/symbol are to be followed directly as given in the table.**

Number/Symbol	9	@	%	&	8	*	4	2	$	+
Code	Q	P	I		W	N	S	Y	D	A	G

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange their codes.
(ii) If the second and third elements are odd numbers, code the third as the code of the second.
(iii) If the fourth element is a symbol and the fifth element is a number, code both as ©.

What will be the code for the following group?
9 @ % & 8

Ans
- ✔ A. QPI©©
- ✘ B. QPIWK
- ✘ C. GPIWN
- ✘ D. QPIWD

Q.57 **This question is based on the following words**
BIG FAN JET ROD
In each of the words, each vowel is changed to the letter immediately preceding it in the English alphabetical order and each consonant is changed to the letter immediately following it in the English alphabetical order. How many letter-clusters thus formed begin and end with consonants?

Ans
- ✘ A. 3
- ✘ B. 4
- ✘ C. 2
- ✔ D. 1

Q.58 **The Vizhinjam International Deepwater Multipurpose Seaport, highlighted in 2026 government releases as part of the Maritime Amrit Kaal Vision 2047, is located in which state?**

Ans
- ✔ A. Kerala
- ✘ B. Andhra Pradesh
- ✘ C. Tamil Nadu
- ✘ D. Karnataka

Q.59 **11 is related to 120 following a certain logic. Following the same logic, 12 is related to 143. To which of the following is 8 related, following the same logic?**
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding / subtracting /multiplying etc. 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
- ✘ A. 65
- ✘ B. 64
- ✔ C. 63
- ✘ D. 68

Q.60 **Why are the impurities removed from ores, before extraction?**

Ans
- ✘ A. To improve ore taste
- ✘ B. To make ore colorful
- ✔ C. To obtain pure metal from it
- ✘ D. To increase ore weight

blackbook

Q.61 The 7-digit number 33A292B is divisible by 12. What is the minimum value of (A + B)?

Ans

✗ A. 4

✗ B. 5

✗ C. 3

✓ D. 2

Q.62 F, G, H, M, N and O 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.
G lives on floor numbered 4. Only two people live between G and M. Only F lives between G and O. H lives immediately below G. How many people live between N and O?

Ans

✓ A. Three

✗ B. Four

✗ C. Two

✗ D. One

Q.63 If '+' means '−', '−' means '×', '×' means '÷', '÷' means '+', then what will come in place of the question mark (?) in the following equation?

23 ÷ 75 × 5 − 4 + 28 = ?

Ans

✗ A. 56

✗ B. 57

✗ C. 54

✓ D. 55

Q.64 This question is based on the five, three-digit numbers given below.
(Left) 579 513 520 297 273 (Right)
(Example- 697 – First digit = 6, second digit = 9 and third digit = 7)

What will be the resultant if the second digit of the highest number is added to the second digit of the lowest number?

Ans

✗ A. 13

✗ B. 17

✓ C. 14

✗ D. 15

Q.65 Out of 1500 students in a school, 300 did not participate in the voting. Candidate X got 40% of the valid votes, and Candidate Y got 28% of the valid votes. What is the difference in votes between Candidate X and Candidate Y?

Ans

✗ A. 240

✗ B. 348

✓ C. 144

✗ D. 120

Q.66 Which of the following numbers is divisible by both 9 and 22?

Ans

✗ A. 5152

✓ B. 5544

✗ C. 6464

✗ D. 4642

Q.67 **Mohan starts from Point A and drives 81 km towards the North. He then takes a left turn, drives 83 km, then turns left and drives 92 km. He then takes a left turn and drives 94 km. He takes a final left turn, drives 11 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 degrees turns only, unless specified.)**

Ans
- ✔ A. 11 km to the west
- ✘ B. 13 km to the east
- ✘ C. 10 km to the west
- ✘ D. 12 km to the east

Q.68 **A wholesale fruit merchant purchased a crate of apples for ₹8,000 and sold it at a 25% profit. How much profit (in ₹) did the merchant earn?**

Ans
- ✘ A. 3,000
- ✘ B. 2,500
- ✘ C. 1,600
- ✔ D. 2,000

Q.69 **The position(s) of how many letters will remain unchanged if each letter in the word CHEMIST is arranged in the English alphabetical order?**

Ans
- ✔ A. Three
- ✘ B. One
- ✘ C. None
- ✘ D. Two

Q.70 **The position(s) of how many letters will remain unchanged if each letter in the word BLASTED is arranged in the English alphabetical order?**

Ans
- ✘ A. One
- ✔ B. None
- ✘ C. Three
- ✘ D. Two

Q.71 **A shopkeeper bought six identical mobile phones for ₹75,000. He sold two of them for ₹54,000. What was his gain percentage on the two mobile phones sold?**

Ans
- ✘ A. 117%
- ✔ B. 116%
- ✘ C. 119%
- ✘ D. 118%

Q.72 **In a certain code language, 'fight your fear' is coded as 'pw vq em' and 'fear blocks growth' is coded as 'hj bk pw'. How is 'fear' coded in the given language?**

Ans
- ✘ A. em
- ✔ B. pw
- ✘ C. vq
- ✘ D. hj

Q.73 **The price of identical notebooks is constant. If the ratio of notebooks to cost is 8 : 64, and the same ratio is maintained for a purchase worth ₹40, how many notebooks can be bought?**

Ans
- ✘ A. 4
- ✘ B. 6
- ✘ C. 7
- ✔ D. 5

blackbook

Q.74 If $15 \sin y + \cos y = \sqrt{15} \sin y$, find the value of $\tan y$.

Ans

✗ A. $\frac{-16 - \sqrt{15}}{210}$

✗ B. $\frac{-15 - \sqrt{15}}{220}$

✓ C. $\frac{-15 - \sqrt{15}}{210}$

✗ D. $\frac{-15 - \sqrt{15}}{215}$

Q.75 **Which of the following statements about the speed of sound is correct?**

Ans

✗ A. Temperature has no effect on the speed of sound in any medium.

✗ B. The speed of sound increases when a substance changes from solid to gas.

✓ C. The speed of sound in a medium increases as its temperature rises.

✗ D. The speed of sound is the same in solids, liquids, and gases.

"

Blackbook

सत्यमेव जयते

रेलवे भर्ती बोर्ड | RAILWAY RECRUITMENT BOARD

सीईएन ०१/२०२६ सहायक लोको पायलट (एएलपी) के पद पर भर्ती

CEN 01/2026 Recruitment of Assistant Loco Pilot (ALP)

Test Date	03/11/2026
Test Time	12:30 PM - 1:30 PM
Subject	RRB ALP 2026 CBT 1

*** 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 ALP**

Q.1 **If 2 is added to each odd digit and 1 is subtracted from each even digit in the number 678214, then how many digits will appear more than once in the new number thus formed?**

Ans
✗ A. Three
✓ B. One
✗ C. Two
✗ D. None

Q.2 **P, Q, R, S and T scored different marks. Only two people scored more than S. P scored more than T but less than R. Q scored the highest.**
Who scored the second highest?

Ans
✗ A. S
✗ B. T
✓ C. R
✗ D. P

Q.3 **Which gas is released when dilute hydrochloric acid reacts with sodium carbonate?**

Ans
✓ A. Carbon dioxide is released
✗ B. Hydrogen gas is released
✗ C. Chlorine gas is released
✗ D. Sulfur dioxide is released

Q.4 The sides of a triangle are 10 units, 9 units, and x units. Find the value of the triangle is maximum.

Ans
✗ A. $\sqrt{151}$
✗ B. $\sqrt{171}$
✓ C. $\sqrt{181}$
✗ D. $\sqrt{161}$

Q.5 **The sum of the present ages of Tony and Chris is 20 years. Four years ago from now, Chris's age was half of Tony's then age. How old (in years) is Tony at present?**

Ans

✗ A. 17

✗ B. 5

✗ C. 2

✓ D. 12

Q.6 **Why might a classroom with bare walls and a tiled floor have more reverberation compared to one with carpets and curtains?**

Ans

✗ A. Student noise is amplified by the room

✓ B. Hard surfaces reflect more sound, increasing reverberation

✗ C. Larger rooms always cause more reverberation

✗ D. Thicker walls trap more sound, causing echoes

Q.7 **Eight friends, E, F, G, H, I, J, K and L, are sitting around a circular table, facing the center.**
K sits third to the right of J.
I sits second to the left of L.
F is an immediate neighbor of K and I.
G sits third to the left of H.

What is the position of E with respect to L?

Ans

✗ A. Fourth to the right

✗ B. Second to the right

✓ C. Third to the right

✗ D. Third to the left

Q.8 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**

EFG10 FHI12 GJK14 HLM16 ?

Ans

✗ A. IMO18

✗ B. JMO18

✗ C. JNO18

✓ D. INO18

Q.9 **A sound wave has a frequency of 500 Hz and travels at a speed of 340 meters per second. What would the wavelength be if the frequency is reduced to 250 Hz, assuming the speed remains unchanged?**

Ans

✓ A. It is doubled

✗ B. It becomes zero

✗ C. It remains the same

✗ D. It is halved

Q.10 **EHFJ is related to FIGK in a certain way based on the English alphabetical order. In the same way, WZXB is related to XAYC. To which of the following is ADBF related, following the same logic?**

Ans

✓ A. BECG

✗ B. BFBI

✗ C. BEBG

✗ D. BDBG

blackbook

Q.11 **If an epithelial tissue is damaged and the underlying tissues become exposed, what is a likely immediate consequence?**

Ans

✔ A. Increased risk of germ entry and infection

✘ B. Increased secretion of hormones

✘ C. Immediate healing of damaged tissue

✘ D. Enhanced absorption of substances

Q.12 **A person travels for some time at 37 km/hr and for the equal time at 58 km/hr. What is the average speed for the entire journey?**

Ans

✘ A. 48 km/hr

✔ B. 47.5 km/hr

✘ C. 42 km/hr

✘ D. 45.5 km/hr

Q.13 **The numbers 27, 18, and 36 form a proportion. What is the fourth proportional?**

Ans

✘ A. 22

✔ B. 24

✘ C. 20

✘ D. 26

Q.14 $PQ \parallel RS$ and AB is the transversal that touches PQ at X and RS at Y

Ans

✘ A. 30°

✘ B. 90°

✘ C. 120°

✔ D. 60°

Q.15 **Let x be a real number and Sin A =** $\frac{x}{\sqrt{x^2+1}}$**, tan B =** $\frac{\sqrt{x^2+2}}{x}$**. If Sec^2 A + Cosec^2 B =** $\frac{85}{36}$**, then what is the value of $32x^4+5$?**

Ans

✘ A. 11

✔ B. 7

✘ C. 9.6

✘ D. 12

Q.16 **A cylindrical pillar is 140 cm in diameter and 50 m in height. Find the cost of painting the curved surface of the pillar at the rate of ₹17 per m^2.**

$\left(\text{Take } \pi = \frac{22}{7}\right)$

Ans

✘ A. ₹3,761

✘ B. ₹3,786

✘ C. ₹3,697

✔ D. ₹3,740

Q.17 **A sum of ₹10,000 is invested at 10% per annum, for 2 years. What is the difference between the compound interest, compounded annually, and the simple interest earned at the end of 2 years?**

Ans

✔ A. ₹100

✘ B. ₹150

✘ C. ₹200

✘ D. ₹50

blackbook

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 is the one that 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
- ✗ A. NK–GD
- ✗ B. LI–EB
- ✓ C. TQ–LL
- ✗ D. IF–BY

Q.19 **What should come in place of the question mark (?) in the given series?**

35, 39, 47, 59, 75, ?

Ans
- ✗ A. 96
- ✗ B. 94
- ✗ C. 97
- ✓ D. 95

Q.20 **A question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.**

Question:
Among 5 sticks, K, S, P, H and T, each having a different height, which stick is the tallest?

Statements:
(I) K is taller than H but shorter than T. K is shorter than only one stick.
(II) H is taller than S.

Ans
- ✓ A. Data in statement I alone is sufficient to answer the question while data in statement II is not.
- ✗ B. Data in both statements I and II together are NOT sufficient to answer the question.
- ✗ C. Data in statement II alone is sufficient to answer the question while data in statement I is not.
- ✗ D. Data in both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.

Q.21 **The relative strength of the magnetic field is indicated by the degree of _____.**

Ans
- ✗ A. Length of the field lines
- ✗ B. Colour of the filings
- ✗ C. Number of poles involved
- ✓ D. Closeness of the field lines

Q.22 **Seven boxes, C, D, E, F, X, Y and Z, are kept one over the other but not necessarily in the same order. Only three boxes are kept above X. Only one box is kept between F and X. Only three boxes are kept between F and C. C is kept at some place above X. E is kept immediately below C. Z is kept at one of the places above D. Y is not kept immediately above or below F. Which box is kept at the lowermost position?**

Ans
- ✗ A. Y
- ✓ B. D
- ✗ C. C
- ✗ D. X

Q.23 **The species name in binomial nomenclature indicates a group of organisms capable of _____ and producing offspring.**

Ans
- ✓ A. interbreeding
- ✗ B. competing
- ✗ C. hibernating
- ✗ D. migrating

black

Q.24 The position(s) of how many letters will remain unchanged if each letter in the word FORGETS is arranged in the English alphabetical order?

Ans
- ✗ A. 1
- ✗ B. 3
- ✓ C. 0
- ✗ D. 2

Q.25 A tap fills a tank in 6 hours. Another tap empties the full tank in 12 hours. How long (in hours) will it take to fill three-fourths of the tank, if the tank is empty initially and both the taps are opened together?

Ans
- ✗ A. 27
- ✗ B. 36
- ✗ C. 18
- ✓ D. 9

Q.26 Refer to the following letter series and answer the question
(Left) B E H K M Z U X J C A P D F W J I V N U R O Y (Right)

How many such consonants are there each of which is immediately preceded by a vowel and
also immediately followed by a vowel?

Ans
- ✗ A. Two
- ✗ B. Three
- ✗ C. None
- ✓ D. One

Q.27 If $4x + 5y = 174$ and $\frac{3x}{2y} = \frac{12}{11}$, then what is the value of $y^2 - x^2$?

Ans
- ✓ A. 228
- ✗ B. 208
- ✗ C. 168
- ✗ D. 154

Q.28 Given that $75^{0.58} = x$, $75^{0.76} = y$ and $x^z = y^9$, then the value of z is: (Round off to the nearest integer)

Ans
- ✗ A. 14
- ✗ B. 11
- ✗ C. 13
- ✓ D. 12

Q.29 Refer to the following letter series and answer the question
(Left) Y Z T G N K E B A P L O Y U N E O B F V T K S A O D X (Right)
How many letters are there in the English alphabetical series between the letter which is fourth from the right end and fourth from the left end of the series?

Ans
- ✓ A. Five
- ✗ B. Four
- ✗ C. Six
- ✗ D. Three

Q.30 **B, E, G, R, U and V 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. U lives on an odd numbered floor but not 3. The sum of floors on which U and E live is 7. G lives immediately below B. V lives on the top floor. How many people live below B?**

Ans

✗ A. 1

✗ B. 4

✓ C. 3

✗ D. 2

Q.31 **Why do food chains generally consist of only three or four steps?**

Ans

✗ A. Producers cannot make enough food

✓ B. Significant energy loss occurs at each trophic level

✗ C. Herbivores outnumber carnivores

✗ D. Only a few species exist in ecosystems

Q.32 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**
BSP 13, DPR 21, FMT 29, HJV 37, ?

Ans

✗ A. HGY 43

✗ B. GHX 43

✓ C. JGX 45

✗ D. KHW 41

Q.33 **If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', then what will come in place of question mark (?) in the following equation?**

1 B 2 D 6 A 2 C 3 = ?

Ans

✗ A. 3

✗ B. 4

✗ C. 5

✓ D. 2

Q.34 **In May 2026, which Kerala-based fabless semiconductor startup launched India's first indigenous AI system-on-chip (SoC) designed for smart surveillance cameras, edge AI boxes, and video gateways?**

Ans

✗ A. InCore Semiconductors

✗ B. Mindgrove Technologies

✗ C. Saankhya Labs

✓ D. Netrasemi

Q.35 **This question is based on the five, three-digit numbers given below.**
(Left) 594 247 578 426 947 (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 added to the third digit of the lowest number?

Ans

✗ A. 10

✗ B. 18

✓ C. 14

✗ D. 6

blackbook

Q.36 Find the value of

$$\frac{\sqrt{\sec^2 A-1}}{1-\cot A}+\frac{\sqrt{\operatorname{cosec}^2 A-1}}{1-\tan A}-1-\sqrt{\sec^2 A-1}-\sqrt{\operatorname{cosec}^2 A-1}$$

Ans
- ✗ A. tan A
- ✓ B. 4
- ✗ C. tan A + cot A
- ✗ D. 3

Q.37 **18 is related to 325 following a certain logic. Following the same logic, 6 is related to 37. To which of the following is 17 related, following the same logic?**
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding / subtracting /multiplying etc. 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
- ✗ A. 291
- ✗ B. 288
- ✗ C. 292
- ✓ D. 290

Q.38 **What should come in place of '?' in the given series?**
235 172 141 126 119 ?

Ans
- ✓ A. 116
- ✗ B. 120
- ✗ C. 121
- ✗ D. 115

Q.39 **Seven people Pihu, Qunur, Rita, Siya, Tina, Umesh and Vivek are sitting around a circular table facing the centre. Umesh sits second to the right of Siya and second to the left of Qunur. Vivek sits third to the left of Qunur. Pihu sits second to the right of Tina. How many people sit between Siya and Tina when counted from the left of Tina?**

Ans
- ✗ A. One
- ✓ B. Two
- ✗ C. None
- ✗ D. Three

Q.40 **AROW is related to HYVD in a certain way based on the English alphabetical order. In the same way, CTQY is related to JAXF. To which of the given options is XOLT related, following the same logic?**

Ans
- ✓ A. EVSA
- ✗ B. EASW
- ✗ C. ESQW
- ✗ D. EXCD

Q.41 **A sum of ₹5,000 is kept in a fixed deposit account for 3 years at a compound interest rate of 6% per annum, compounded half-yearly. What will be the maturity amount (rounded off to the nearest integer)?**

Ans
- ✗ A. ₹6,100
- ✗ B. ₹6,050
- ✗ C. ₹5,940
- ✓ D. ₹5,970

blackbook

Q.42 **Refer to the following letter and symbol series and answer the question that follows. Counting to be done from left to right only.**

(Left) F & R T @ J Y C * S # U K L P $ B M (Right)

How many such letters are there, each of which is immediately preceded by a symbol and also immediately followed by a symbol?

Ans

✗ A. Three

✗ B. None

✗ C. Two

✓ D. One

Q.43 **Each of L, M, N, O, G, H and I has exam on a different day of a week starting from Monday and ending on Sunday of the same week. Only three people have exam after M. Only one person has exam between O and M. O has exam before M. Only four people have exams between N and O. L has exam on one of the days after O. H has exam on the day immediately before G. How many people have exam between G and L?**

Ans

✓ A. Two

✗ B. One

✗ C. Four

✗ D. Three

Q.44 **In a certain code language, 'GLOW' is coded as '5928' and 'LOWS' is coded as '2894'. What is the code for 'S' in the given code language?**

Ans

✗ A. 2

✗ B. 5

✓ C. 4

✗ D. 9

Q.45 **If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', then what will come in place of the question mark (?) in the following equation?**

25 D 8 B 12 A 6 C 34 = ?

Ans

✗ A. 45

✓ B. 43

✗ C. 44

✗ D. 41

Q.46 **In a certain code language, 'card log data' is coded as 'sw dr ej' and 'royal card ant' is coded as 'dr wq og'. How is 'card' coded in the given language?**

Ans

✓ A. dr

✗ B. sw

✗ C. ej

✗ D. wq

Q.47 **A shopkeeper marks his goods at a certain percentage above cost price. After offering a 15% discount on the marked price, he earns a profit of 5%. What percentage above the cost price did he mark his goods? (Round off the answer to two decimal places.)**

Ans

✗ A. 30.37%

✓ B. 23.53%

✗ C. 17.04%

✗ D. 20.28%

blackbook

Q.48 **What should come in place of '?' in the given series?**
6 16 46 136 406 ?

Ans
✗ A. 1218
✓ B. 1216
✗ C. 1214
✗ D. 1220

Q.49 **A company team of 16 members has an average age of 40 years, while another team of 4 members has an average age of 30 years. What is the combined average age of all 20 team members?**

Ans
✗ A. 40 years
✓ B. 38 years
✗ C. 34 years
✗ D. 36 years

Q.50 **Anand, Arvind and Navdeep entered in a partnership and invested in the ratio 8 : 10 : 9. At the end of the business term, they shared their total profit in the ratio 10 : 11 : 15. Find the ratio of time for which they invested.**

Ans
✗ A. 85 : 66 : 100
✓ B. 75 : 66 : 100
✗ C. 75 : 66 : 90
✗ D. 75 : 76 : 100

Q.51 **You want to design a cube-based art sculpture with a total visible surface area of 150 square centimeters. If only three faces of the cube will be visible, what should be the edge length of the cube (in centimeters)?**

Ans
✗ A. $2\sqrt{5}$
✗ B. 5
✓ C. $5\sqrt{2}$
✗ D. $7\sqrt{2}$

Q.52 **What will come in place of the question mark (?) in the following equation if '+' and '−' are interchanged and '×' and '÷' are interchanged?**

12 ÷ 14 − 13 + 120 × 5 = ?

Ans
✗ A. 115
✗ B. 189
✓ C. 157
✗ D. 129

Q.53 **A question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.**

Question:
Among 5 sticks, E, B, I, C and Q, each having a different height, which stick is the tallest?

Statements:
(I) E is shorter than B but taller than I.
(II) I is taller than C but shorter than Q.

Ans
✗ A. Data in both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.
✗ B. Data in statement II alone is sufficient to answer the question while data in statement I is not.
✗ C. Data in statement I alone is sufficient to answer the question while data in statement II is not.
✓ D. Data in both statements I and II together are NOT sufficient to answer the question.

Q.54 **Find the median for the following grouped data.**

Class Interval	15-23	23-31	31-39	39-47	47-55
Frequency	3	7	10	6	4

Ans
- ✗ A. 36
- ✓ B. 35
- ✗ C. 28
- ✗ D. 24

Q.55 **In a certain code language, 'GEAR' is coded as '7543' and 'REAP' is coded as '3257'. What is the code for 'P' in the given code language?**

Ans
- ✓ A. 2
- ✗ B. 7
- ✗ C. 4
- ✗ D. 3

Q.56 **The number 16611 is divisible by which of the following numbers?**

Ans
- ✗ A. 54
- ✗ B. 55
- ✓ C. 49
- ✗ D. 42

Q.57 **Each vowel in the word TRASHED is changed to the letter immediately following it in the English alphabetical order and each consonant is changed to the letter immediately preceding it in the English alphabetical order. Which of the following letters will be third from the left in the new group of letters thus formed?**

Ans
- ✗ A. G
- ✗ B. Q
- ✗ C. R
- ✓ D. B

Q.58 **Based on the English alphabetical order, three of the following four letter-clusters are alike in a certain way and thus form a group. Which is the letter-cluster that does NOT belong to that group?**
(Note: The odd one out is not based on the number of consonants/vowels or their positions in the letter-cluster.)

Ans
- ✗ A. EHK
- ✓ B. FLI
- ✗ C. TWZ
- ✗ D. YBE

Q.59 **Select the pair that follows the same pattern as that followed by the two pairs given below. Both pairs follow the same pattern.**

OLH–LIE
EBX–BYU

Ans
- ✗ A. TPK–QNJ
- ✗ B. TQM–PNI
- ✗ C. TPK–PMI
- ✓ D. TQM–QNJ

Q.60 **Anil starts from Point A and drives 10 km towards East. He then takes a right turn, drives 7 km, turns right and drives 13 km. He then takes a right turn and drives 12 km. He takes a final right turn, drives 3 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 degrees turns only unless specified)**

Ans

✗ A. 4 km to the South

✗ B. 2 km to the South

✗ C. 3 km to the South

✓ D. 5 km to the South

Q.61 **A shopkeeper blends two varieties of rice priced at ₹50 per kg and ₹70 per kg in the ratio 3:2. If the mixture is sold at ₹66 per kg, what is the profit percentage? (Round off your answer to two decimal places.)**

Ans

✓ A. 13.79%

✗ B. 10.48%

✗ C. 8.23%

✗ D. 15.62%

Q.62 **12 is related to 48 following a certain logic. Following the same logic, 14 is related to 56. To which of the following is 23 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 to/subtracting from/multiplying with 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

Ans

✗ A. 82

✗ B. 88

✓ C. 92

✗ D. 98

Q.63 **Keshav starts from Point A and drives 13 km towards West. He then takes a left turn, drives 11 km, turns left and drives 15 km. He then takes a left turn and drives 16 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.)**

Ans

✗ A. 4 km to the North

✓ B. 5 km to the South

✗ C. 3 km to the North

✗ D. 4 km to the South

Q.64 **Ethanol oxidises in the presence of hot alkaline $KMnO_4$ to form _____.**

Ans

✗ A. Ethyl acetate

✗ B. Ethanal

✗ C. Acetone

✓ D. Ethanoic acid

Q.65 **A shopkeeper bought six identical mobile phones for ₹75,000. He sold two of them for ₹66,000. What was his gain percentage on the two mobile phones sold?**

Ans

✗ A. 165%

✓ B. 164%

✗ C. 166%

✗ D. 167%

Q.66 **A freelancer spends 72% of his monthly income and saves the rest. If his monthly income is ₹25,000, then how much does he save each month (in ₹)?**

Ans

✗ A. 6,500

✓ B. 7,000

✗ C. 8,000

✗ D. 7,500

Q.67 **This question is based on the following words.**

COX VIE IRE HOD

In each of the words, each vowel is changed to the second letter preceding it in the English alphabetical order and each consonant is changed to the letter immediately following it in the English alphabetical order. In how many letter-clusters thus formed, will no vowel appear?

Ans

✓ A. Three

✗ B. Four

✗ C. One

✗ D. Two

Q.68 **Which Article of the Indian Constitution directs the state to promote cottage industries?**

Ans

✗ A. Article 44

✗ B. Article 40

✗ C. Article 48

✓ D. Article 43

Q.69 **Below are given two sets of numbers. In each set of numbers, a certain mathematical operation on first number results in the second number. Similarly, certain mathematical operation on second number results in the third number and so on. Which of the given options follows the same set of operations as in question?**
(NOTE – A two/three digit number cannot be broken into individual digits for operations e.g. if 37 is followed by 10, the operation cannot be 3+7 as a two digit number cannot be broken into individual digits)
39 - 273 - 278 - 277
30 - 210 - 215 - 214

Ans

✗ A. 16 - 114 - 121 - 120

✗ B. 1 - 8 - 13 - 14

✗ C. 10 - 82 - 87 - 86

✓ D. 27 - 189 - 194 - 193

Q.70 **This question is based on the following words.**

OAK JOE FED IMP

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 it in the English alphabetical order. In how many letter clusters thus formed, will no vowel appear?

Ans

✗ A. Three

✗ B. Two

✓ C. One

✗ D. Four

Q.71 Each letter in the word HARMFUL is arranged in the English alphabetical order. How many letters are there in the English alphabetical order between the letter which is third from the left and the one which is third from the right in the new letter cluster thus formed?

Ans

✗ A. 7

✗ B. 5

✓ C. 4

✗ D. 3

Q.72 A person invested ₹56,500 at a rate of 6% per annum simple interest for 4 years. Find the amount (in ₹) he will receive after 4 years.

Ans

✓ A. 70,060

✗ B. 72,060

✗ C. 72,600

✗ D. 70,600

Q.73 In a certain code language, 'HVBN' is coded as '46' and 'LAQJ' is coded as '40'. What is the code for 'ITCR' in the given code language?

Ans

✗ A. 41

✗ B. 44

✓ C. 50

✗ D. 56

Q.74 Find the value of $\frac{3.8^4 - 4.9^4}{3.8^2 + 4.9^2}$

Ans

✗ A. -7.56

✗ B. 1.18

✓ C. -9.57

✗ D. 8.75

Q.75 A car's radiator should contain a solution of 62% antifreeze. A motorist has 13 litres of 33% antifreeze. How many litres (rounded off to 2 decimal places) of 97% antifreeze liquid should he add to his solution to produce a 62% antifreeze?

Ans

✗ A. 7.76

✗ B. 14.64

✗ C. 13.29

✓ D. 10.77

"

Blackbook

सत्यमेव जयते

रेलवे भर्ती बोर्ड | RAILWAY RECRUITMENT BOARD

सीईएन ०१/२०२६ सहायक लोको पायलट (एएलपी) के पद पर भर्ती

CEN 01/2026 Recruitment of Assistant Loco Pilot (ALP)

Test Date	03/11/2026
Test Time	4:00 PM - 5:00 PM
Subject	RRB ALP 2026 CBT 1

*** 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 ALP**

Q.1 **The marked price of a chair is ₹2000. If two successive discounts of 15% and 10% are given, what is the final price paid by the customer?**

Ans
✗ A. ₹1600
✗ B. ₹1500
✓ C. ₹1530
✗ D. ₹1550

Q.2 **In this question, a question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.**
Among 5 poles, W,O,K,G and Y each having a different height, which pole is the shortest?
(I)K is taller than only two poles. W is shorter than K and O is shorter than W
(II)G is taller than Y

Ans
✓ A. Data in Statement I alone is sufficient to answer the question while data in statement II is not
✗ B. Data in Statement II alone is sufficient to answer the question while data in statement I is not
✗ C. Both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.
✗ D. Both statements I and II together are NOT sufficient to answer the question

Q.3 **If the mean proportional between two numbers is 24 and one of the numbers is 6, what is the other number?**

Ans
✗ A. 48
✓ B. 96
✗ C. 144
✗ D. 12

Q.4 **Refer to the following series and answer the question. (Counting to be done from left to right only.) (All numbers are single-digit numbers only.)**
(Left) 1 3 4 6 7 3 9 7 8 5 8 3 2 4 6 6 7 3 5 9 6 7 1 3 4 8 3 (Right)
How many such even digits are there, each of which is immediately preceded by a perfect square and immediately followed by an odd digit? (NOTE: 1 is also a perfect square.)

Ans
- ✗ A. One
- ✓ B. More than two
- ✗ C. None
- ✗ D. Two

Q.5 **The position(s) of how many letters will remain unchanged if each letter in the word UNLEASH is arranged in the English alphabetical order?**

Ans
- ✗ A. THREE
- ✓ B. ONE
- ✗ C. ZERO
- ✗ D. TWO

Q.6 **A car's radiator should contain a solution of 62% antifreeze. A motorist has 6 litres of 21% antifreeze. How many litres (rounded off to 2 decimal places) of 71% antifreeze liquid should he add to his solution to produce a 62% antifreeze?**

Ans
- ✗ A. 30.46
- ✗ B. 23.51
- ✓ C. 27.33
- ✗ D. 29.31

Q.7 **Each vowel in the word GIMLETS is changed to the letter immediately following it in the English alphabetical order and each consonant is changed to the letter immediately preceding it in the English alphabetical order. How many letters will appear exactly twice in the new group of letters thus formed?**

Ans
- ✗ A. 0
- ✓ B. 1
- ✗ C. 2
- ✗ D. 3

Q.8 **AB is parallel to CD. A transversal PQ intersects AB and CD at E and F, respectively, and ∠PEB = 69°. G is a point between AB and CD such that ∠BEG = 33° and ∠GFE = 17°. What is the measure of ∠EGF?**

Ans
- ✗ A. 93°
- ✓ B. 85°
- ✗ C. 71°
- ✗ D. 86°

Q.9 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol	7	&	8	$	#	@	*	4	?	%
Code	I	H	A	K	M	J	S	W	Y	F

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange the codes of the first and the last elements.
(ii) If the second and third elements are odd numbers, code the third element as the code of the second element.
(iii) If the fourth element is a symbol and the fifth element is a number, code both elements as ©.

What is the code for the following group of number-symbols?
7 & 8 $ #

Ans
- ✗ A. IHYKM
- ✗ B. IFAKM
- ✓ C. IHAKM
- ✗ D. IHAKW

Q.10 **A solid right circular cone has base radius 6 cm and height 8 cm. It is completely melted and the metal is recast into small solid spheres, each of radius 2 cm.**
What is the maximum number of complete spheres that can be made? (Use π = 22/7)

Ans
- ✗ A. 12
- ✗ B. 10
- ✓ C. 9
- ✗ D. 8

Q.11 **Each of A, B, E, F, G, H and I has exam on a different day of a week starting from Monday and ending on Sunday of the same week. Only three people have exam between F and H. Only one person has exam between H and E. A has exam on Wednesday. G has exam on one of the days after B but on one of the days before I. F has exam on Monday. How many people have exam between G and E?**

Ans
- ✓ A. Two
- ✗ B. One
- ✗ C. Three
- ✗ D. Four

Q.12 **Seven people, A, B, C, I, J, K and L are sitting in a row, facing north.**
No one sits to the right of C. Only three people sit between C and I. Only two people sit between I and B. J sits third to the left of K. L sits to the immediate right of K.
How many people sit between A and B?

Ans
- ✓ A. Three
- ✗ B. Two
- ✗ C. One
- ✗ D. Four

Q.13 **A parent invests a certain amount in a children's future fund at 10% per annum. After 2 years, the maturity amount under compound interest, compounded annually is ₹50 more than it would have been under simple interest. Find the original investment (in ₹).**

Ans
- ✗ A. 2,500
- ✗ B. 12,500
- ✓ C. 5,000
- ✗ D. 10,000

black book

Q.14 **OQTU is related to SUXY in a certain way based on the English alphabetical order. In the same way, EGJK is related to IKNO. To which of the following is FHKL related, following the same logic?**

Ans

✗ A. JKNP

✗ B. JMNQ

✗ C. JLNP

✓ D. JLOP

Q.15 **The cost of a bag is raised by 15% in January and then by 5% in February. If the original cost was ₹800, what is the price after both increases?**

Ans

✗ A. ₹1000

✗ B. ₹900

✗ C. ₹960

✓ D. ₹966

Q.16 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**

RNI26 QMH37 PLG48 OKF59 ?

Ans

✗ A. NJF71

✗ B. NJF70

✗ C. NJE71

✓ D. NJE70

Q.17 **A student has four strips: magnesium, copper, aluminum, and zinc. If each is placed in a solution of iron sulfate, which will show no reaction based on the reactivity series?**

Ans

✗ A. Magnesium

✗ B. Zinc

✗ C. Aluminum

✓ D. Copper

Q.18 **This question is based on the following words**
MAT COP RUG DEN
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 it in the English alphabetical order. How many letter-clusters thus formed contain no vowel?

Ans

✗ A. 4

✗ B. 2

✓ C. 3

✗ D. 1

Q.19 **BWDK is related to FAHO in a certain way based on the English alphabetical order. In the same way, MLGI is related to QPKM. To which of the given options is NKHO related, following the same logic?**

Ans

✗ A. OMKS

✓ B. ROLS

✗ C. SPMT

✗ D. ROLT

Q.20 **371 is related to 421 following a certain logic. Following the same logic, 428 is related to 478. To which of the given options is 116 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 etc. 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

✗ A. 186

✓ B. 166

✗ C. 126

✗ D. 146

Q.21 **This question is based on the five, three-digit numbers given below.**
(Left) 147 158 126 139 197 (Right)
(Example- 697 – First digit = 6, second digit = 9 and third digit = 7)

What will be the resultant if the third digit of the highest number is added to the second digit of the lowest number?

Ans

✓ A. 9

✗ B. 6

✗ C. 8

✗ D. 5

Q.22 **If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', what will be come in place of question mark '?' in the following equation?**

16 B 3 D 38 A 19 C 18 = ?

Ans

✗ A. 68

✗ B. 62

✓ C. 64

✗ D. 66

Q.23 **Refer to the following letter series and answer the question that follows. Counting to be done from left to right only.**

(Left) A H D E Z C K W L R N G D O E Y U L B J E A R Z N U H S O (Right)

How many such vowels are there, each of which is immediately preceded by a consonant and also immediately followed by a consonant?

Ans

✓ A. Three

✗ B. Four

✗ C. Two

✗ D. One

Q.24 **PQRS is a trapezium in which PQ is parallel to SR. The perpendicular from Q meets SR at T. The lengths of non-parallel sides, PS = QR = 24 cm and ∠QRT = 45°, then find the distance of PQ from SR.**

Ans

✗ A. $25\sqrt{2}$ cm

✗ B. 6 cm

✗ C. $24\sqrt{3}$ cm

✓ D. $12\sqrt{2}$ cm

Q.25 **Based on the English alphabetical order, three of the following four letter-clusters are alike in a certain way and thus form a group. Which letter-cluster 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
- ✗ A. UPK
- ✓ B. JEA
- ✗ C. KFA
- ✗ D. NID

Q.26 **A shopkeeper sells sugar at ₹100 in July, ₹80 in August, and ₹120 in September. If the quantities sold were 10 kg, 16 kg, and 14 kg, respectively, what is the average selling price per kg across these months?**

Ans
- ✗ A. ₹105
- ✓ B. ₹99
- ✗ C. ₹98
- ✗ D. ₹95

Q.27 **What should come in place of '?' in the given series?**
5 49 88 122 151 175 ?

Ans
- ✗ A. 176
- ✗ B. 186
- ✓ C. 194
- ✗ D. 182

Q.28 **A, B, C, D and E scored different marks. C scored more than exactly three people. A scored less than D and D scored less than E. Only one person scored less than B. Who scored the highest?**

Ans
- ✗ A. C
- ✗ B. A
- ✓ C. E
- ✗ D. B

Q.29 **What will come in place of the question mark (?) in the following equation if '+' and '−' are interchanged and '×' and '÷' are interchanged?**

105 − 117 × 9 + 14 ÷ 4 = ?

Ans
- ✗ A. 65
- ✗ B. 68
- ✗ C. 64
- ✓ D. 62

Q.30 **Yashraj is three times as old as his son, and his daughter is 3 years younger than the son. If the sum of the ages of these three people 3 years ago was 93 years, then Yashraj's present age (in years) is:**

Ans
- ✗ A. 79
- ✗ B. 73
- ✗ C. 85
- ✓ D. 63

Q.31 **Nikhil starts from Point A and drives 10 km towards south. He then takes a left turn, drives 14 km, turns left and drives 13 km. He then takes a left turn and drives 17 km. He takes a final left turn, drives 3 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.)**

Ans

✗ A. 6 km to the west

✗ B. 7 km to the west

✗ C. 6 km to the east

✓ D. 3 km to the east

Q.32 **A sound wave has frequency f and wavelength λ in air. Without changing the source, the wavelength becomes 2λ in another medium. What happens to the speed of sound?**

Ans

✗ A. Speed becomes four times

✗ B. Speed becomes half

✓ C. Speed becomes double

✗ D. Speed remains same

Q.33 **The value of $2\ \text{cosec}^2 31° \cot^2 59° - \sin^2 31° - \sin^2 59° - \cot^2 59°$ is equal to:**

Ans

✓ A. $\sec^2 31°$

✗ B. $\cot^2 31°$

✗ C. $\sec^2 59°$

✗ D. $\tan^2 59°$

Q.34 **30 is related to 298 following a certain logic. Following the same logic, 7 is related to 68. To which of the following is 14 related, following the same logic?**
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding / subtracting /multiplying etc. 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

✓ A. 138

✗ B. 140

✗ C. 139

✗ D. 136

Q.35 **This question is based on the five, three-digit numbers given below.**
(Left) 592 847 316 925 684 (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 added to the second digit of the lowest number?

Ans

✗ A. 12

✗ B. 11

✗ C. 4

✓ D. 6

Q.36 **What should come in place of the '?' in the given series?**

34,45,67,100,144, ?

Ans

✓ A. 199

✗ B. 197

✗ C. 196

✗ D. 198

blackbook

Q.37 **The volume of a cylinder having diameter 16 cm and height 21 cm is:**

$$\pi = \frac{22}{7}$$

Ans

✗ A. 4182 cm^3

✗ B. 4311 cm^3

✓ C. 4224 cm^3

✗ D. 4189 cm^3

Q.38 **What should come in place of '?' in the given series?**
69 60 49 36 21 ?

Ans

✗ A. 3

✓ B. 4

✗ C. 5

✗ D. 7

Q.39 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol 5 @ 2 9 $ # 8 % 1 & 4 7 3 6

Code L F B A R D U Q H E T P K M

Conditions –
(i) If the first element is a symbol, code the second element as ©.
(ii) If the third element is a symbol, code the fifth element as ©.
(iii) If the fourth element is an odd digit, code the third element as ©.

What is the code for the following group of number-symbols?
84291

Ans

✗ A. UTBA©

✓ B. UT©AH

✗ C. UTBAH

✗ D. U©BAH

Q.40 **Vasu starts from Point A and drives 47 km towards the East. He then takes a left turn, drives 41 km, then turns left and drives 64 km. He then takes a left turn and drives 65 km. He takes a final left turn, drives 17 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 degrees turns only, unless specified.)**

Ans

✗ A. 26 km to the South

✗ B. 27 km to the South

✗ C. 25 km to the North

✓ D. 24 km to the North

Q.41 **What happens to the pH of the pure water when hydrochloric acid is added to it?**

Ans

✗ A. pH of the solution stays unchanged

✓ B. pH of the solution decreases

✗ C. pH of the solution increases

✗ D. pH of the solution becomes neutral

Q.42 **Which of the following numbers is divisible by both 35 and 9?**

Ans

✗ A. 32150

✓ B. 30870

✗ C. 30440

✗ D. 31578

Blackbook

Q.43 **What best describes the role of the principal axis in the formation of images by a concave mirror?**

Ans

✔ A. It acts as a reference line passing through the center of curvature and the pole

✘ B. It is a line perpendicular to the mirror surface at the pole only

✘ C. It passes through the focus and pole but not the center of curvature

✘ D. It is the tangent to the mirror at the center of curvature

Q.44 **A student has 2 tests of 80 marks each and 3 assignments of 60 marks each. What is the weighted arithmetic mean of these marks?**

Ans

✔ A. 68

✘ B. 70

✘ C. 64

✘ D. 72

Q.45 **The position (s) of how many letters will remain unchanged if each letter in the word "KURBASHING" is arranged in the English alphabetical order?**

Ans

✘ A. Two

✔ B. None

✘ C. Three

✘ D. One

Q.46 **Below are given two sets of numbers. In each set of numbers, a certain mathematical operation on first number results in the second number. Similarly, certain mathematical operation on second number results in the third number and so on. Which of the given options follows the same set of operations as in question?**
(NOTE – A two/three digit number cannot be broken into individual digits for operations e.g. if 37 is followed by 10, the operation cannot be 3+7 as a two digit number cannot be broken into individual digits)
25 - 31 - 19 - 95
41 - 47 - 35 - 175

Ans

✘ A. 12 - 18 - 4 - 24

✘ B. 40 - 45 - 33 - 165

✔ C. 17 - 23 - 11 - 55

✘ D. 39 - 46 - 34 - 204

Q.47 **MKIM is related to QOMQ in a certain way based on the English alphabetical order. In the same way, JHFJ is related to NLJN. To which of the given options is DBZD related, following the same logic?**

Ans

✘ A. HFCH

✘ B. HECH

✘ C. HGCJ

✔ D. HFDH

Q.48 If $7 \sin y + \cos y = \sqrt{4} \sin y$, find the value of $\tan y$.

Ans

✔ A. $-\frac{1}{5}$

✘ B. $-\frac{1}{4}$

✘ C. $-\frac{1}{1}$

✘ D. $-\frac{1}{13}$

blackbook

Q.49 Simplify: $75-\{18\div 3\times(4+2)-5\times 3\}+28\div 7$

Ans

✔ A. 58

✘ B. 56

✘ C. 52

✘ D. 54

Q.50 **A man invests ₹56,500 at a simple interest rate of 10% per annum for 2 years. Find the amount (in ₹) he will receive at the end of 2 years.**

Ans

✔ A. 67,800

✘ B. 67,080

✘ C. 64,080

✘ D. 64,800

Q.51 **Which famous Indian playback singer was honored with the Padma Bhushan at the Padma Awards 2026?**

Ans

✘ A. Kavita Krishnamurthy

✔ B. Alka Yagnik

✘ C. Shreya Ghoshal

✘ D. Sunidhi Chauhan

Q.52 **A car covers a distance of 840 km in 5 hours. The speed of a train is double the speed of the car. One-third the speed of the train is equal to the speed of a bike. How much distance will the bike cover in 3 hours?**

Ans

✔ A. 336 km

✘ B. 339 km

✘ C. 331 km

✘ D. 329 km

Q.53 **In a certain code language, 'LASH' is coded as '62' and 'MOVI' is coded as '43'. What is the code for 'XRGC' in the given code language?**

Ans

✔ A. 50

✘ B. 52

✘ C. 51

✘ D. 57

Q.54 **Three business partners P, Q, and R invest capitals of ₹4,40,000, ₹1,50,000 and ₹2,00,000, respectively, in a business. They are entitled to 5% per annum interest on their capitals before the division of profit. The remaining profit after paying interest on capital is to be distributed among them in the ratio of their capitals. At the end of the year, they make a total profit of ₹1,11,232. Find the share of profit received by R.**

Ans

✔ A. ₹28,160

✘ B. ₹35,620

✘ C. ₹47,452

✘ D. ₹18,160

Q.55 **A tap fills a tank in 6 hours. Another tap empties the full tank in 7 hours. How long (in hours) will it take to fill half of the tank, if the tank is empty initially and both the taps are opened together?**

Ans

✘ A. 14

✔ B. 21

✘ C. 28

✘ D. 42

Black book

Q.56 **A shopkeeper buys 57 dozen articles at ₹720 per dozen. He sells each article for ₹81. What is his profit percentage?**

Ans

✔ A. 35%

✘ B. 33%

✘ C. 37%

✘ D. 34%

Q.57 **In this question, a question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.**
Among 5 poles, A,W,V,G and E each having a different height, which pole is the shortest?
(I)G is shorter than only three poles. A is taller than W.
(II)G is taller than E

Ans

✘ A. Data in Statement I alone is sufficient to answer the question while data in statement II is not

✘ B. Both statements I and II together are NOT sufficient to answer the question

✔ C. Both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.

✘ D. Data in Statement II alone is sufficient to answer the question while data in statement I is not

Q.58 **Which of the following is the reason for transporting sugars from roots to buds in spring?**

Ans

✔ A. Buds require energy to grow after dormancy

✘ B. Leaves need minerals for photosynthesis

✘ C. Roots need sugars to absorb water

✘ D. Stems store excess minerals

Q.59 **Match the following examples with their respective groups.**

Organism	Group
1. Marchantia	A. Thallophyta
2. Ferns	B. Bryophyta
3. Spirogyra	C. Pteridophya

Ans

✘ A. 1-C, 2-B, 3-A

✔ B. 1-B, 2-C, 3-A

✘ C. 1-B, 2-A, 3-C

✘ D. 1-A, 2-B, 3-C

Q.60 **Which condition will favour maximum photosynthesis?**

Ans

✘ A. Low light intensity, high CO_2, low temperature

✔ B. High light intensity, adequate CO_2, optimum temperature

✘ C. Low CO_2, high light intensity, optimum temperature

✘ D. High oxygen, low light intensity, high temperature

Q.61 **Six people H, I, J, K, U and V 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. Only U lives below I. Only three people live between K and I. V lives on an even numbered floor. J lives on an odd numbered floor but not on floor number 5. How many people live below H?**

Ans

✘ A. Two

✔ B. Four

✘ C. One

✘ D. Three

Q.62 **Each of B, O, U, G, H, T and S has an exam on a different day of a week starting from Monday and ending on Sunday of the same week. T has exam on Friday. Only two people have exam between U and T. Only four people have exam between H and U. G has exam immediately after B. S doesn't have exam on Monday. How many people have exam between O and S?**

Ans

✗ A. One

✗ B. Two

✗ C. Three

✓ D. Four

Q.63 **Seven friends, E, F, G, H, W, X and Y, are sitting in a straight line facing north. Only one person sits to the left of F. Only two people sit between E and F. Only two people sit between G and W. W sits to the immediate left of E. X sits to the immediate right of H. Who sits at the third position from the left end of the line?**

Ans

✓ A. Y

✗ B. E

✗ C. X

✗ D. W

Q.64 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**
CLX 13 GOS 9 KRN 5 ? SXD -3

Ans

✗ A. NWI 2

✗ B. OUJ 1

✗ C. OVI 2

✓ D. OUI 1

Q.65 **If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', what will come in place of the question mark (?) in the following equation?**

39 B 4 A 3 C 27 D 41 = ?

Ans

✗ A. 40

✗ B. 36

✗ C. 39

✓ D. 38

Q.66 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol 3 @ 8 # 1 % 6 & 9 $ 2 + 5 7

Code KT AMHP BF WRDULQ

Conditions –
(i) If the first element is a number and the last element is a symbol, interchange the codes of the first and last elements.
(ii) If the third element is an even number, the first element is coded as ©.
(iii) If the third element is a symbol, the last element is coded with the code for the first element.

What is the code for the following group of number-symbols?
958+1

Ans

✗ A. WLAUH

✗ B. ©LWUH

✓ C. ©LAUH

✗ D. ©LAUW

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Q.67 **The sum of the ages of Stan and Benedict is 98 years. Four years ago, Benedict's age was half of Stan's then age. How old (in years) is Stan at present?**

Ans

✗ A. 63

✗ B. 62

✗ C. 68

✓ D. 64

Q.68 **Which of the following best explains why two magnetic field lines cannot intersect at any point in the space surrounding a magnet?**

Ans

✗ A. Because it weakens the magnetic field

✓ B. Because a compass needle would be required to point in two directions at the same time

✗ C. Because it creates a new magnetic pole

✗ D. Because it means field lines are open curves

Q.69 **If + means -, - means ×, × means ÷, and ÷ means +, then what will come in place of the question mark (?) in the following equation?**

31 - 15 ÷ 22 + 153 × 9 = ?

Ans

✓ A. 470

✗ B. 450

✗ C. 420

✗ D. 490

Q.70 **Which one of the following words was added to the Preamble of India through the 42nd Constitutional Amendment, 1976?**

Ans

✗ A. Justice

✓ B. Integrity

✗ C. Fraternity

✗ D. Dignity

Q.71 **Refer to the following letter series and answer the question**
(Left) G J M P H F L U X I B E C O Q J N Y S Z W R T D (Right)

How many such consonants are there each of which is immediately preceded by a vowel and
also immediately followed by a vowel?

Ans

✗ A. Four

✗ B. One

✗ C. Two

✓ D. Three

Q.72 **A trader purchases an item for ₹200, sells it to a retailer for ₹220, who then sells it to a customer for ₹242. What is the total profit percentage from the original purchase price to the final selling price?**

Ans

✗ A. 22%

✗ B. 10%

✗ C. 20%

✓ D. 21%

Q.73 **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 is the one that 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

✗ A. RP–LJ

✗ B. XV–RP

✗ C. DB–XV

✓ D. IG–BC

Q.74 **The 7-digit number 54A177B is divisible by 12. What is the minimum value of (A + B)?**

Ans

✗ A. 6

✗ B. 7

✗ C. 4

✓ D. 3

Q.75 **Find the compound interest on ₹4,450 at the rate of 20% per annum, compounded half-yearly, for 1 year.**

Ans

✗ A. ₹967.25

✗ B. ₹914.50

✗ C. ₹985.25

✓ D. ₹934.50

"

Blackbook

सत्यमेव जयते

रेलवे भर्ती बोर्ड | RAILWAY RECRUITMENT BOARD

सीईएन ०१/२०२६ सहायक लोको पायलट (एएलपी) के पद पर भर्ती

CEN 01/2026 Recruitment of Assistant Loco Pilot (ALP)

Test Date	04/11/2026
Test Time	9:00 AM - 10:00 AM
Subject	RRB ALP 2026 CBT 1

*** 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 ALP**

Q.1 **This question is based on the following words.**
DIN GOD LAY DUB
In each of the words, each vowel is changed to the second letter preceding it in the English alphabetical order and each consonant is changed to the letter immediately following it in the English alphabetical order. In how many letter-clusters thus formed, will no vowel appear?

Ans
✗ A. Four
✗ B. Two
✓ C. One
✗ D. Three

Q.2 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**
YVX 9, URT 14, QNP 19, MJL 24, ?

Ans
✓ A. IFH 29
✗ B. IFG 28
✗ C. GFH 29
✗ D. IHF 28

Q.3 **A person invested ₹56,500 at a rate of 8% per annum simple interest for 2 years. Find the amount (in ₹) he will receive after 2 years.**

Ans
✓ A. 65,540
✗ B. 65,450
✗ C. 64,450
✗ D. 64,540

Q.4 **Six boxes A, B, F, G, H and I are kept one over the other but not necessarily in the same order. Only A is kept above I. Only two boxes are kept between A and F. Only G is kept below H. How many boxes are kept between B and G?**

Ans
✓ A. Two
✗ B. One
✗ C. Three
✗ D. Four

Q.5 **The diameter PQ of a circle with centre O is perpendicular to a chord RS at point M. Point Q is in the minor segment and P is in the major segment. If RS = 32 cm and QM = 6 cm, what is the length of PM (in cm)?**

Ans

✗ A. $48\frac{2}{3}$

✓ B. $42\frac{2}{3}$

✗ C. $24\frac{2}{3}$

✗ D. $32\frac{2}{3}$

Q.6 **A merchant mixes 30 kg of rice costing ₹40 per kg with 20 kg of rice costing ₹60 per kg. What is the average price per kg of the resulting mixture?**

Ans

✗ A. ₹52

✗ B. ₹45

✗ C. ₹50

✓ D. ₹48

Q.7 **What should come in place of '?' in the given series?**
514 393 293 212 148 ?

Ans

✗ A. 116

✗ B. 92

✗ C. 106

✓ D. 99

Q.8 **A student in a laboratory finds that sound travels faster in steel than in air. Which characteristic of the medium best explains this observation?**

Ans

✗ A. Thickness and color of the medium

✗ B. Shape and size of the medium

✗ C. Temperature and humidity of the medium

✓ D. Density and elasticity of the medium

Q.9 **Which compound is treated with water to obtain washing soda in its preparation process?**

Ans

✗ A. Sodium bicarbonate is treated with water to obtain washing soda

✗ B. Sodium chloride is treated with water to obtain washing soda

✓ C. Sodium carbonate is treated with water to obtain washing soda

✗ D. Sodium hydroxide is treated with water to obtain washing soda

Q.10 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol	4	@	7	#	2	%	9	&	1	$	8	+	5	6
Code	J	M	P	T	D	R	W	F	H	K	A	U	L	Q

Conditions –
(i) If the first element is a symbol, code the second element as ©.
(ii) If the third element is a symbol, code the fourth element as ©.
(iii) If the fifth element is a symbol, code the first element as ©.

What is the code for the following group of number-symbols?
94#51

Ans

✗ A. ©JTLH

✗ B. WJTL©

✗ C. WJTLH

✓ D. WJT©H

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Q.11 **Seven people, E, F, G, H, W, X and Y, are sitting around a circular table, facing the center of the table. E sits fourth to the left of X. Only two people sit between H and G, when counted from the left of H. F sits third to the left of Y. W is an immediate neighbor of Y and G. Who sits fourth to the right of W?**

Ans

✗ A. F

✗ B. G

✗ C. E

✓ D. H

Q.12 **Aman is three times as old as his son, and his daughter is 3 years younger than the son. If the sum of the ages of these three people 3 years ago was 108 years, then Aman's present age (in years) is:**

Ans

✓ A. 72

✗ B. 70

✗ C. 59

✗ D. 48

Q.13 **Each letter in the word GUILDER is arranged in the English alphabetical order. How many letters are there in the English alphabetical order between the letter which is fourth from the left and the one which is first from the right in the new letter cluster thus formed?**

Ans

✓ A. 11

✗ B. 10

✗ C. 14

✗ D. 12

Q.14 **311 is related to 330 following a certain logic. Following the same logic, 426 is related to 445. To which of the given options is 115 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 etc. 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

✗ A. 156

✓ B. 134

✗ C. 145

✗ D. 167

Q.15 **Simplify:** $3-\sqrt{5}+\frac{1}{\sqrt{5}-\sqrt{3}}+\frac{1}{\sqrt{5}-\sqrt{3}}$.

Ans

✗ A. $2+\sqrt{5}$

✓ B. $3+\sqrt{3}$

✗ C. $\sqrt{3}-\sqrt{5}$

✗ D. 3

Q.16 **Which of the following regions of the electromagnetic spectrum is/are primarily responsible for photosynthesis on Earth?**

Ans

✓ A. Visible light

✗ B. Microwaves

✗ C. Ultraviolet radiation

✗ D. Radio waves

Q.17 **A can lay a railway track between two given stations in 7 days and B can do the same job in 63 days. With the help of C, they do the job in 6 days only. Then, C alone can do the job in:**

Ans

✔ A. 126 days

✘ B. 129 days

✘ C. 128 days

✘ D. 127 days

Q.18 If $8b - \frac{1}{5b} = 8$, then what is the value of the expression $25b^2 + \frac{1}{64}$

Ans

✘ A. $\frac{120}{7}$

✘ B. $\frac{80}{49}$

✔ C. $\frac{105}{4}$

✘ D. $\frac{7}{4}$

Q.19 **Each vowel in the word DARKISH is changed to the letter immediately following it in the English alphabetical order and each consonant is changed to the letter immediately preceding it in the English alphabetical order. How many letters will appear exactly twice in the group of letters thus formed?**

Ans

✘ A. 3

✘ B. 2

✘ C. 0

✔ D. 1

Q.20 **A car's radiator should contain a solution of 84% antifreeze. A motorist has 10 litres of 70% antifreeze. How many litres (rounded off to 2 decimal places) of 95% antifreeze liquid should he add to his solution to produce a 84% antifreeze?**

Ans

✘ A. 18.61

✘ B. 15.38

✔ C. 12.73

✘ D. 10.34

Q.21 **What will come in place of the question mark (?) in the following equation if '+' and '−' are interchanged and '×' and '÷' are interchanged?**

5 ÷ 2 + 8 × 4 − 5 = ?

Ans

✔ A. 13

✘ B. 22

✘ C. 18

✘ D. 20

Q.22 **A pair of shoes is marked at ₹2000. During a festival sale, a shopkeeper offers a 30% discount. What is the amount of discount given?**

Ans

✘ A. ₹500

✘ B. ₹700

✔ C. ₹600

✘ D. ₹800

Q.23 **The volume of a cylinder having diameter 30 cm and height 49 cm is:**

$$\pi = \frac{22}{7}$$

Ans

✔ A. 34650 cm^3

✘ B. 34569 cm^3

✘ C. 34725 cm^3

✘ D. 34606 cm^3

Q.24 **The displacement of an object between two instants can be determined from a velocity–time graph by calculating the:**

Ans

✘ A. intercept on the velocity axis.

✘ B. slope of the graph.

✔ C. area enclosed between the graph and the time axis.

✘ D. length of the graph.

Q.25 Simplify: $\frac{52^2 - 12^3}{4^3 - 16 \times 3}$

Ans

✘ A. 66

✘ B. 72

✔ C. 61

✘ D. 57

Q.26 **Binayak starts from Point A and drives 11 km towards East. He then takes a left turn, drives 8 km, turns left and drives 12 km. He then takes a left turn and drives 10 km. He takes a final left turn, drives 1 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 degrees turns only unless specified)**

Ans

✔ A. 2 km to the North

✘ B. 4 km to the North

✘ C. 3 km to the North

✘ D. 1 km to the North

Q.27 **Select the pair which follows the same pattern as that followed by the two pairs given below. Both pairs follow the same pattern.**
XZC–EGJ
MOR–TVY

Ans

✘ A. LMO–SUX

✘ B. LNQ–RUW

✔ C. LNQ–SUX

✘ D. LMO–RTW

Q.28 **A, B, C, D and E each scored different marks. D was the third lowest scorer. B scored less than C. E scored more than A but less than B. How many people scored more than E?**

Ans

✘ A. Four

✘ B. Two

✘ C. One

✔ D. Three

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Q.29 **This question is based on the five, three-digit numbers given below.**
(Left) 639 658 652 641 647 (Right)
(Example- 697 – First digit = 6, second digit = 9 and third digit = 7)

What will be the resultant if the second digit of the second highest number is added to the third digit of the lowest number?

Ans
- ✗ A. 15
- ✗ B. 18
- ✗ C. 16
- ✓ D. 14

Q.30 **Each of C, F, J, R, N, U and H has an exam on a different day of a week starting from Monday and ending on Sunday of the same week. N has the exam on Thursday. Only five people have exams before C. F has the exam immediately after R but not on Wednesday. H has the exam after U but before J. How many people have exams between U and J?**

Ans
- ✓ A. Three
- ✗ B. Two
- ✗ C. Four
- ✗ D. One

Q.31 **In this question, a question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.**

Q. Five people – Qirat, Reyansh, Samika, Tushar and Urvika – live on different floors of a five-storey building numbered 1 to 5 (1 being the lowest and 5 being the highest floor). Who lives on Floor 5?

(I) Samika lives above Tushar, who lives above Reyansh.
(II) Urvika lives above Samika, and Qirat lives below Reyansh.

Ans
- ✓ A. Both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question
- ✗ B. Data in Statement I alone is sufficient to answer the question while data in Statement II is not
- ✗ C. Data in Statement II alone is sufficient to answer the question while data in Statement I is not
- ✗ D. Both statements I and II together are NOT sufficient to answer the question

Q.32 **P, Q and R start a business with investments in the ratio 2 : 3 : 5. If P's share of the annual profit is ₹4,000, what is the total profit?**

Ans
- ✗ A. ₹18,000
- ✗ B. ₹15,000
- ✓ C. ₹20,000
- ✗ D. ₹25,000

Q.33 **Select the pair that follows the same pattern as that followed by the two pairs given below. Both pairs follow the same pattern.**

QRU–TUX
STW–VWZ

Ans
- ✗ A. GGI–IJM
- ✗ B. GGI–JKN
- ✗ C. GHK–IKM
- ✓ D. GHK–JKN

Q.34 **A shopkeeper bought six identical mobile phones for ₹75,000. He sold two of them for ₹34,000. What was his gain percentage on the two mobile phones sold?**

Ans
- ✗ A. 35%
- ✓ B. 36%
- ✗ C. 39%
- ✗ D. 37%

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Q.35 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**

VSM 15 SPO 2 PMQ -11 MJS -24 ?

Ans

✗ A. HKP -44

✓ B. JGU -37

✗ C. JKI -34

✗ D. HYT -35

Q.36 **The value of $\tan^4\theta + (2 - \sec^2\theta)\tan^2\theta + 2 - \sec^2\theta$ is:**

Ans

✗ A. −1

✗ B. 0

✓ C. 1

✗ D. 2

Q.37 **A, H, M, P, S, and V are sitting around a circular table facing the center. H is seated to the immediate right of M. Only two people are seated between P and A when counted from the right of P. S is not an immediate neighbor of P. V is seated to the immediate left of S. How many people are seated between H and V when counted from the left of H?**

Ans

✓ A. 3

✗ B. 2

✗ C. 4

✗ D. 1

Q.38 **MING is related to TPUN in a certain way based on the English alphabetical order. In the same way, OKPI is related to VRWP. To which of the given options is JFKD related, following the same logic?**

Ans

✓ A. QMRK

✗ B. QMKI

✗ C. QMJU

✗ D. QRHY

Q.39 **In a certain code language, 'WHAT' is coded as '2789' and 'HATS' is coded as '1789'. What is the code for 'S' in the given code language?**

Ans

✓ A. 1

✗ B. 7

✗ C. 8

✗ D. 2

Q.40 **Refer to the following letter series and answer the question that follows. Counting to be done from left to right.**
(Left) I X U Q T O D I R R Z I P T T D E O L I U Z (Right)
How many such consonants are there, each of which is immediately preceded by a consonant and also immediately followed by a vowel?

Ans

✗ A. 2

✓ B. 3

✗ C. 4

✗ D. 5

Q.41 **Each of P, Q, R, S, T, U and V has an exam on a different day of a week starting from Monday and ending on Sunday of the same week. V has an exam on Friday. Only two people have exams between V and S. S has an exam on the day immediately after T. R has an exam on the day immediately after U but not on Thursday. Q has an exam on the day immediately after P but before U. Who among the following has an exam on Thursday?**

Ans

✗ A. P

✗ B. R

✗ C. S

✓ D. Q

Q.42 **The 7-digit number 49A952B is divisible by 12. What is the minimum value of (A + B)?**

Ans

✗ A. 2

✗ B. 3

✗ C. 4

✓ D. 1

Q.43 **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 pair.)

Ans

✗ A. US–QO

✗ B. NL–JH

✓ C. WU–RS

✗ D. VT–RP

Q.44 **If a bell is rung under water and in open air, which of the following best describes what happens to the speed of sound between the two situations?**

Ans

✓ A. Sound travels faster in water than in air.

✗ B. Sound travels slower in water than in air.

✗ C. Sound does not travel through water.

✗ D. Sound travels at the same speed in both media.

Q.45 **In a certain code language, 'HATE' is coded as '7856' and 'TEAM' is coded as '7659'. What is the code for 'M' in that language?**

Ans

✗ A. 6

✗ B. 5

✓ C. 9

✗ D. 8

Q.46 **If '+' means '–', '–' means '×', '×' means '÷', '÷' means '+', then what will come in place of the question mark (?) in the following equation?**

30 – 4 ÷ 4 + 40 × 10 = ?

Ans

✓ A. 120

✗ B. 122

✗ C. 124

✗ D. 118

Q.47 **Each of F, A, C, I, N, G and S has holidays on a different day of a week, starting from Monday and ending on Sunday of the same week. No one has holiday before A. Only three people have holiday between A and I. Only one person has holiday between I and C. F has holiday on Wednesday. N has holiday on one of the days after S but on one of the days before G. On which day of the week does N have holiday?**

Ans

✗ A. Sunday

✗ B. Monday

✗ C. Saturday

✓ D. Thursday

Q.48 **Three friends, A, B, and C, invest in the ratio 2:3:5 in a business. If the total profit is ₹1,00,000, how much more does C get than A?**

Ans

✗ A. ₹10,000

✗ B. ₹40,000

✗ C. ₹20,000

✓ D. ₹30,000

Q.49 **Let AB and CD be two parallel lines, with AB above CD. Let EF and GH be two parallel transversals intersecting AB at P and R, respectively, and CD at Q and S, respectively. Assume that E and G lie above AB, while F and H lie below CD. If ∠EPB = 2a°, ∠DSG = b° and ∠FQD = 80°, then find the values for a and b, respectively.**

Ans

✗ A. 20 and 80

✓ B. 50 and 100

✗ C. 40 and 100

✗ D. 40 and 120

Q.50 **18 is related to 59 following a certain logic. Following the same logic, 15 is related to 50. To which of the following is 12 related, following the same logic?**
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding /subtracting /multiplying etc. 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

✗ A. 36

✗ B. 32

✓ C. 41

✗ D. 45

Q.51 **Based on the alphabetical order, three of the following four are alike in a certain way and thus form a group. Which is the one that does not belong to that group?**
(Note: The odd one is not based on the number of consonants/vowels or their position in the letter cluster.)

Ans

✗ A. IJ - MN

✗ B. ZK - DO

✗ C. GS - KW

✓ D. MQ - RU

Q.52 **Below are given two sets of numbers. In each set of numbers, a certain mathematical operation on the first number results in the second number. Similarly, certain mathematical operations on the second number results in the third number and so on. Which of the given options follows the same set of operations as in question?**
(NOTE – A two/three digit number cannot be broken into individual digits for operations e.g. if 37 is followed by 10, the operation cannot be 3+7 as a two digit number cannot be broken into individual digits)
14 – 25 – 75 – 90 ; 12 – 23 – 69 – 84

Ans

✗ A. 4 – 15 – 45 – 70

✓ B. 8 – 19 – 57 – 72

✗ C. 10 – 21 – 63 – 76

✗ D. 6 – 17 – 68 – 83

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Q.53 **Refer to the following letter series and answer the question that follows. Counting to be done from left to right only**
(Left) S Q A Y V Y V E R L O A J F V V A Z A A F Y (Right)
How many such vowels are there, each of which is immediately preceded by a consonant and also immediately followed by a consonant?

Ans
- ✗ A. 2
- ✗ B. 5
- ✓ C. 3
- ✗ D. 4

Q.54 **A sum was invested at 12% per annum for 2 years. The difference between compound interest, compounded annually, and simple interest earned on the sum after 2 years is ₹101.76. What was the principal amount (rounded off to two decimal places)?**

Ans
- ✗ A. ₹6,842.48
- ✗ B. ₹7,680.82
- ✗ C. ₹6,050.23
- ✓ D. ₹7,066.67

Q.55 **The position(s) of how many letters will remain unchanged if each letter in the word CHAPTER is arranged in the English alphabetical order?**

Ans
- ✗ A. Three
- ✓ B. None
- ✗ C. One
- ✗ D. Two

Q.56 **Sahil starts from Point A and drives 14 km towards West. He then takes a right turn, drives 10 km, turns right and drives 17 km. He then takes a right turn and drives 15 km. He takes a final right turn, drives 3 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.)**

Ans
- ✗ A. 7 km to the South
- ✓ B. 5 km to the North
- ✗ C. 6 km to the South
- ✗ D. 6 km to the North

Q.57 **What will come in place of the question mark (?) in the following equation if '+' and '−' are interchanged and '×' and '÷' are interchanged?**

43 − 16 ÷ 9 + 154 × 14 = ?

Ans
- ✗ A. 174
- ✗ B. 177
- ✗ C. 170
- ✓ D. 176

Q.58 **A wooden box in the shape of a cuboid has internal dimensions 19.8 cm × 13.2 cm × 8.8 cm. It is completely filled with small cubic blocks, each of side 2.2 cm. Find the number of cubes that can completely fill the box.**

Ans
- ✓ A. 216
- ✗ B. 200
- ✗ C. 232
- ✗ D. 256

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Q.59 **Which statement best describes a homogeneous mixture?**

Ans

✔ A. It has the same appearance and composition throughout

✘ B. It contains substances visible to the naked eye

✘ C. It forms layers that can be seen easily

✘ D. It shows different properties and appearance in different areas

Q.60 **Find the compound interest on ₹8,680 for one year at 10% per annum, interest payable half yearly (rounded off to the nearest rupees).**

Ans

✘ A. ₹850

✘ B. ₹840

✘ C. ₹880

✔ D. ₹890

Q.61 **If cosec 43° = x, then the value of**

$$\left[\frac{1}{\text{cosec}^2 47^\circ} + \sin^2 43^\circ + \tan^2 47^\circ - \frac{1}{\sin^2 47^\circ \sec^2 43^\circ}\right]$$ **is:**

Ans

✘ A. $2x^2 - 3$

✘ B. $2x + 3$

✔ C. $x^2 - 1$

✘ D. $x^2 + 1$

Q.62 **Refer to the following letter and symbol series and answer the question that follows. Counting to be done from left to right only.**

(Left) O H # M N @ $ R & I Ω T £ D H R Y (Right)

How many such vowels, are there each of which is immediately preceded by a symbol and also immediately followed by a symbol?

Ans

✘ A. Three

✘ B. None

✘ C. Two

✔ D. One

Q.63 **This question is based on the five, three-digit numbers given below.**
(Left) 956 587 124 963 248 (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 second digit of the highest number is added to the third digit of the lowest number?

Ans

✔ A. 10

✘ B. 12

✘ C. 9

✘ D. 7

Q.64 Two trains with lengths 148 m and 156 m, respectively, are moving to
What will be the time required by the trains to cross each other?

Ans

✘ A. 7 seconds

✔ B. 8 seconds

✘ C. 9 seconds

✘ D. 10 seconds

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Q.65 **Seven people Mohan, Nehal, Ojasvi, Pooja, Suresh, Tushar and Umang are sitting around a circular table facing the centre. Nehal sits second to the left of Ojasvi. Umang sits second to the left of Nehal. Tushar sits to the immediate left of Suresh. Mohan is not an immediate neighbour of Umang. How many people sit between Mohan and Umang when counted from the left of Mohan?**

Ans
- ✗ A. None
- ✓ B. Two
- ✗ C. One
- ✗ D. Three

Q.66 **A shopkeeper buys a pen for ₹100 and sells it for ₹150. What is the profit percentage?**

Ans
- ✗ A. 48%
- ✗ B. 45%
- ✓ C. 50%
- ✗ D. 40%

Q.67 **Which of the following plant tissues are made up of long, living cells arranged end-to-end by perforated walls?**

Ans
- ✗ A. Vessels
- ✗ B. Tracheids
- ✗ C. Phloem fibres
- ✓ D. Sieve tubes

Q.68 **Where in the cell does the breakdown of glucose occur during anaerobic respiration?**

Ans
- ✗ A. In the mitochondria, known as the powerhouse of the cell
- ✓ B. Within the cytoplasm, where cellular reactions occur
- ✗ C. In the chloroplasts responsible for making food through photosynthesis
- ✗ D. Inside the nucleus that controls all cell activities

Q.69 **What should come in place of the '?' in the given series?**

35,44,62,89,125, ?

Ans
- ✗ A. 173
- ✗ B. 171
- ✓ C. 170
- ✗ D. 172

Q.70 **A question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.**

Question:
Among 5 sticks, T, N, R, K and I, each having a different height, which stick is the shortest?

Statements:
(I) K is shorter than I but taller than N. T is taller than N.
(II) R is taller than only one stick.

Ans
- ✓ A. Data in both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.
- ✗ B. Data in statement I alone is sufficient to answer the question while data in statement II is not.
- ✗ C. Data in both statements I and II together are NOT sufficient to answer the question.
- ✗ D. Data in statement II alone is sufficient to answer the question while data in statement I is not.

Q.71 **What should come in place of '?' in the given series?**
4 12 23 31 42 50 ?

Ans
- ✗ A. 63
- ✓ B. 61
- ✗ C. 54
- ✗ D. 58

Q.72 **If a candidate received 55% of the 2,20,000 votes in an election, what was the total number of votes the candidate received?**

Ans
- ✗ A. 1,10,000
- ✓ B. 1,21,000
- ✗ C. 1,15,000
- ✗ D. 1,30,000

Q.73 **The weekly wages (in ₹) of 7 workers are ₹1200, ₹1300, ₹1100, ₹1400, ₹1250, ₹1350, ₹1150. What is the median wage?**

Ans
- ✗ A. ₹1300
- ✗ B. ₹1350
- ✓ C. ₹1250
- ✗ D. ₹1200

Q.74 **What will come in place of the question mark (?) in the following equation if '+' and '−' are interchanged and '×' and '÷' are interchanged?**
10 ÷ 2 + 70 × 5 − 80 = ?

Ans
- ✓ A. 86
- ✗ B. 66
- ✗ C. 76
- ✗ D. 83

Q.75 **In a certain code language, 'piano juice bonus' is coded as 'ui gc fh' and 'bonus lemon judge' is coded as 'hp ui gt'. How is 'bonus' coded in the given language?**

Ans
- ✗ A. gc
- ✗ B. fh
- ✗ C. hp
- ✓ D. ui

"

Blackbook

सत्यमेव जयते

रेलवे भर्ती बोर्ड | RAILWAY RECRUITMENT BOARD

सीईएन ०१/२०२६ सहायक लोको पायलट (एएलपी) के पद पर भर्ती

CEN 01/2026 Recruitment of Assistant Loco Pilot (ALP)

Test Date	04/11/2026
Test Time	12:30 PM - 1:30 PM
Subject	RRB ALP 2026 CBT 1

*** 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 ALP**

Q.1 Simplify: $\left(\frac{9x^2-68xy+64y^2}{3x-8y}-3x+8y+\frac{10xy}{3x-8y}\right)\left(\frac{64y^2-9x^2}{3x+8y}\right)$

Ans
- ✔ A. 10xy
- ✘ B. 3x + 8y
- ✘ C. 3x − 8y
- ✘ D. −10xy

Q.2 **What should come in place of '?' in the given series?**

6 10 18 34 66 ?

Ans
- ✘ A. 134
- ✘ B. 128
- ✘ C. 133
- ✔ D. 130

Q.3 **A car's radiator should contain a solution of 84% antifreeze. A motorist has 4 litres of 54% antifreeze. How many litres (rounded off to 2 decimal places) of 95% antifreeze liquid should he add to his solution to produce a 84% antifreeze?**

Ans
- ✘ A. 6.85
- ✘ B. 16.93
- ✔ C. 10.91
- ✘ D. 14.46

Q.4 **A man has invested ₹56,500 at a rate of 8% per annum simple interest for 3 years. Find the amount (in ₹) that he will receive after 3 years.**

Ans
- ✘ A. 69,600
- ✘ B. 69,060
- ✔ C. 70,060
- ✘ D. 70,600

Q.5 This question is based on the five, three-digit numbers given below.

(Left) 241 826 356 742 961 (Right)

(Example- 697 – First digit = 6, second digit = 9 and third digit = 7)

What will be the resultant if the third digit of the second highest number is multiplied with the third digit of the second lowest number?

Ans

✗ A. 18

✗ B. 9

✗ C. 56

✓ D. 36

Q.6 What will be the total cost (in ₹) of polishing the curved surface of a wooden cylinder at a rate of ₹165 per m^2, if it has 20 cm radius and 7 m height?

Ans

✗ A. 1,245

✓ B. 1,452

✗ C. 1,524

✗ D. 2,145

Q.7 Ai, Bf, Cx, Dj, Ey, Fu and Gt are sitting around a circular table facing the centre. Bf sits second to the right of Cx. Gt sits second to the left of Cx. Dj sits to the immediate left of Ai. Ey sits second to the right of Fu. How many people sit between Ey and Gt when counted from the left of Ey?

Ans

✗ A. One

✗ B. Three

✗ C. Four

✓ D. Two

Q.8 Find the value of m which sastisfies the equation: $\left(\frac{11}{3}\right)^3 \times \left(\frac{3}{11}\right)^{13} \times ($

Ans

✗ A. $\frac{5}{3}$

✗ B. $-\frac{5}{3}$

✓ C. $-\frac{7}{3}$

✗ D. $\frac{7}{3}$

Q.9 After replacing old appliances with energy-efficient models, a household reduced its monthly electricity consumption by 15%. If it previously consumed 400 units of electricity per month, how many units does it consume now?

Ans

✗ A. 365

✓ B. 340

✗ C. 345

✗ D. 300

Q.10 Each vowel in the word PRINTED is changed to the letter immediately following it in the English alphabetical order and each consonant is changed to the letter immediately preceding it in the English alphabetical order. Which of the following letters will be third from the left in the new group of letters thus formed?

Ans

✗ A. S

✓ B. J

✗ C. F

✗ D. M

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Q.11 **Roshan runs from point A to point B at a speed of 25 km/h and returns from point B to point A at 31 km/h. Find the average speed for the entire trip (rounded off to two decimal places).**

Ans

✔ A. 27.68 km/h

✘ B. 27.49 km/h

✘ C. 27.84 km/h

✘ D. 27.32 km/h

Q.12 **A car accelerates from rest at a constant rate. After 5 seconds, its velocity is 20 m/s. Using the graphical representation of motion, which equation would you use to find the distance covered in those 5 seconds, and what is the result?**

Ans

✔ A. Use $s = ut + 1/2\ at^2$, so distance = 50 m

✘ B. Use p = mv, so distance = 25 m

✘ C. Use v = u + at, so distance = 20 m

✘ D. Use F = ma, so distance = 100 m

Q.13 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**
RGZ 12, VDD 17, ZAH 22, DXL 27, ?

Ans

✘ A. GVR 30

✘ B. HWQ 30

✘ C. GUQ 32

✔ D. HUP 32

Q.14 **If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', then what will come in place of question mark (?) in the following equation?**

2 B 1 D 6 A 2 C 3 = ?

Ans

✘ A. 7

✔ B. 2

✘ C. 5

✘ D. 8

Q.15 **A movie received ratings from two groups of viewers. Forty viewers gave an average rating of 8 points, while sixty viewers gave an average rating of 7 points. What was the overall average rating?**

Ans

✘ A. 7.2

✔ B. 7.4

✘ C. 7.5

✘ D. 7.6

Q.16 **In this question, a group of numbers/symbols is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then the codes for the respective number/symbol are to be followed directly as given in the table.**

Number/Symbol	8	6	%	5	#	!	&	9	3	?
Code	Y	A	V	J	P	Q	N	X	K	I

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange their codes.
(ii) If the second and third elements are odd numbers, code the third as the code of the second.
(iii) If the fourth element is a symbol and the fifth element is a number, code both as ©.

What will be the code for the following group?
8 6 % 5 #

Ans
- ✗ A. YANJP
- ✓ B. YAVJP
- ✗ C. YAVJZ
- ✗ D. PAVJP

Q.17 **21 is related to 147 following a certain logic. Following the same logic, 25 is related to 175. To which of the given options is 33 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 etc. 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
- ✓ A. 231
- ✗ B. 251
- ✗ C. 221
- ✗ D. 241

Q.18 **If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', then what will come in place of the question mark (?) in the following equation?**

29 D 28 A 11 B 44 C 41 = ?

Ans
- ✓ A. −42
- ✗ B. −44
- ✗ C. −40
- ✗ D. −41

Q.19 **If + means -, - means ×, × means ÷, and ÷ means +, then what will come in place of the question mark (?) in the following equation?**

86 - 13 ÷ 127 + 684 × 12 = ?

Ans
- ✓ A. 1188
- ✗ B. 1169
- ✗ C. 1135
- ✗ D. 1122

Q.20 **S, T, U, V, and W are sitting around a circular table facing the center. U sits to the immediate right of S. V sits second to the left of U. W is not an immediate neighbor of V. Who is sitting immediately to the left of W?**

Ans
- ✗ A. S
- ✗ B. T
- ✓ C. U
- ✗ D. V

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Q.21 **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
- ✗ A. EA – VR
- ✓ B. OK – GB
- ✗ C. RN – IE
- ✗ D. UQ – LH

Q.22 **A premium headphone was available for ₹15,300 after successive discounts of 15% followed by 10% on its marked price. What was its marked price (in ₹)?**

Ans
- ✓ A. 20,000
- ✗ B. 21,000
- ✗ C. 18,000
- ✗ D. 19,500

Q.23 **Which of the following numbers is divisible by both 19 and 46?**

Ans
- ✗ A. 15005
- ✗ B. 17039
- ✓ C. 16606
- ✗ D. 17849

Q.24 **This question is based on the following words.**

ART LOW CRY FLU

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 it in the English alphabetical order. In how many letter clusters thus formed, will no vowel appear?

Ans
- ✗ A. One
- ✗ B. Four
- ✓ C. Three
- ✗ D. Two

Q.25 **Evaluate the following.**

$$\frac{\sin^2\theta - 2\sin^4\theta}{2\cos^3\theta - \cos\theta}$$

Ans
- ✓ A. tanθsinθ
- ✗ B. tanθsecθ
- ✗ C. cosθcotθ
- ✗ D. cotθsinθ

Q.26 **Find the curved surface area (in cm^2) of the cylinder of radius 6 cm and height 14 cm. (Use π = 22/7)**

Ans
- ✗ A. 522
- ✓ B. 528
- ✗ C. 526
- ✗ D. 524

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Q.27 **AB and CD are two parallel lines. Another line EF cuts these parallel lines at M and N, respectively. The bisectors of angles BMN and MND meet at the point P. Which of the following statements is true?**

Ans

✔ A. MNP is a right-angled triangle with right angle at P.

✘ B. MNP is a right-angled triangle with right angle at M.

✘ C. MNP is a right-angled triangle with right angle at N.

✘ D. MNP is not a right-angled triangle.

Q.28 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**
DFC 11, IKH 18, NPM 25, SUR 32, ?

Ans

✘ A. UXW 38

✘ B. VXZ 39

✔ C. XZW 39

✘ D. ZWX 38

Q.29 **A shopkeeper buys 78 dozen articles at ₹168 per dozen. He sells each article for ₹35. What is his profit percentage?**

Ans

✔ A. 150%

✘ B. 130%

✘ C. 140%

✘ D. 160%

Q.30 **In a certain code language, 'UHRD' is coded as '57' and 'SALM' is coded as '63'. What is the code for 'YFCP' in the given code language?**

Ans

✘ A. 52

✘ B. 55

✔ C. 58

✘ D. 61

Q.31 **ORVX is related to YBFH in a certain way based on the English alphabetical order. In the same way, ADHJ is related to KNRT. To which of the following is JMQS related, following the same logic?**

Ans

✔ A. TWAC

✘ B. TXZB

✘ C. TVZC

✘ D. TWZC

Q.32 **Below are given two sets of numbers. In each set of numbers, a certain mathematical operation on the first number results in the second number. Similarly, certain mathematical operations on the second number results in the third number and so on. Which of the given options follows the same set of operations as in question?**
(NOTE – A two/three digit number cannot be broken into individual digits for operations e.g. if 37 is followed by 10, the operation cannot be 3+7 as a two digit number cannot be broken into individual digits)
3 – 12 – 24 – 36 ; 5 – 20 – 40 – 52

Ans

✘ A. 8 – 32 – 64 – 74

✘ B. 6 – 30 – 60 – 72

✘ C. 7 – 28 – 54 – 66

✔ D. 4 – 16 – 32 – 44

Q.33 **Seven boxes, C, D, E, F, K, L and M, are kept one over the other but not necessarily in the same order. F is kept second from the bottom. Only three boxes are kept between F and C. M is kept at one of the positions below F. Only E is kept between C and D. K is kept at one of the positions above C. How many boxes are kept between L and C?**

Ans

✗ A. Four

✗ B. Three

✗ C. One

✓ D. Two

Q.34 **The position(s) of how many letters will remain unchanged if each letter in the word CONSULT is arranged in the English alphabetical order?**

Ans

✗ A. One

✓ B. Two

✗ C. None

✗ D. Three

Q.35 **A machine originally costs ₹25,000. If the rate of depreciation is 4% per annum, find the value of the machine after two years.**

Ans

✗ A. ₹24,400

✓ B. ₹23,040

✗ C. ₹23,400

✗ D. ₹24,040

Q.36 **In this question, a question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.**
Among 5 poles, A,W,V,G and E each having a different height, which pole is the shortest?
(I)G is taller than only one pole. A is taller than W.
(II)G is taller than E

Ans

✓ A. Both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.

✗ B. Both statements I and II together are NOT sufficient to answer the question

✗ C. Data in Statement II alone is sufficient to answer the question while data in statement I is not

✗ D. Data in Statement I alone is sufficient to answer the question while data in statement II is not

Q.37 **A sum is invested at compound interest (compounded annually) at 12% per annum. If it amounts to ₹25,088 after 2 years, what was the sum invested?**

Ans

✗ A. ₹21,000

✓ B. ₹20,000

✗ C. ₹19,000

✗ D. ₹22,000

Q.38 **Each of L, M, N, O, G, H and I has exam on a different day of a week starting from Monday and ending on Sunday of the same week. Only M has exam before N. Only three people have exam between L and H. Only three people have exam between I and N. O has exam on some day before H and on some day after G. How many people have exam after L?**

Ans

✗ A. One

✗ B. Two

✗ C. Three

✓ D. Four

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Q.39 **A store stocks two types of digital storage devices, X and Y, in the ratio 3 : 8. If 24 devices are of type X, by how many does the number of type Y devices exceed type X devices?**

Ans

✗ A. 48

✗ B. 64

✗ C. 32

✓ D. 40

Q.40 **In a school, Class X is divided into three sections: A, B, and C. The ratio of students in sections A and B is 1 : 3, and the ratio of students in sections B and C is 4 : 5. If the total number of students in Class X is 341, how many students are there in Section A?**

Ans

✗ A. 42

✓ B. 44

✗ C. 40

✗ D. 46

Q.41 **If the selective re-absorption in nephron stopped functioning, which of the following would likely happen?**

Ans

✗ A. Filtration would stop completely

✓ B. Essential nutrients would be lost in urine

✗ C. More waste would be conserved in the body

✗ D. Urine would become solid

Q.42 **In this question, a question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.**

Q. Five people – Gautam, Hiral, Ivaan, Jivika and Keshav – are standing in a queue. Who is standing last?

(I) Hiral is behind Ivaan but ahead of Gautam.
(II) Jivika is behind Gautam, and Keshav is behind Jivika.

Ans

✗ A. Both statements I and II together are NOT sufficient to answer the question

✗ B. Data in Statement II alone is sufficient to answer the question while data in Statement I is not

✓ C. Both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question

✗ D. Data in Statement I alone is sufficient to answer the question while data in Statement II is not

Q.43 **Each of A, B, E, F, G, H and I has exam on a different day of a week starting from Monday and ending on Sunday of the same week. E has exam on Saturday. H has exam immediately before A. B has exam on one of the days after F. I has exam immediately after A. Only one person has exam between E and G. How many people have exam between A and B?**

Ans

✗ A. One

✗ B. Two

✓ C. Four

✗ D. Three

Q.44 **Each of N, Q, V, C, T, G and K has an exam on a different day of a week starting from Monday and ending on Sunday of the same week. G has the exam on Thursday. Only five people have exams after V. Only one person has the exam between K and G. Q has the exam before G but after C. T does not have the exam on Friday. Who has the exam immediately before K?**

Ans

✓ A. N

✗ B. C

✗ C. G

✗ D. T

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Q.45 **Refer to the following letter series and answer the question**
(Left) W Z L V B R O F V Y N K H V N T G B J D C Y Z Q D X (Right)
How many letters are there in the English alphabetical series between the letter which is third from the left end and third from the right end of the series?

Ans

✗ A. Three

✗ B. Six

✓ C. Four

✗ D. Five

Q.46 If $12 \sin y + \cos y = \sqrt{8} \sin y$, find the value of $\tan y$.

Ans

✗ A. $\frac{-12 - \sqrt{8}}{146}$

✓ B. $\frac{-12 - \sqrt{8}}{136}$

✗ C. $\frac{-12 - \sqrt{8}}{141}$

✗ D. $\frac{-13 - \sqrt{8}}{136}$

Q.47 **A mobile accessories retailer cleared a batch of unsold chargers during an end-of-season sale. The batch had originally cost ₹6,000 but was sold for ₹5,700 to free up shelf space. What was the retailer's loss (in ₹)?**

Ans

✗ A. 280

✗ B. 290

✗ C. 320

✓ D. 300

Q.48 **Which gas is always produced when a carbon compound undergoes complete combustion in the presence of sufficient oxygen?**

Ans

✓ A. Carbon dioxide

✗ B. Methane

✗ C. Oxygen

✗ D. Carbon monoxide

Q.49 **4 is related to 38 following a certain logic. Following the same logic, 9 is related to 83. To which of the following is 13 related, following the same logic?**
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding /subtracting /multiplying etc. 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

✗ A. 112

✗ B. 109

✓ C. 119

✗ D. 115

Q.50 **Which of the following pairs of glands secrete fluids that nourish sperm and help them remain active?**

Ans

✗ A. Vas deferens and urethra

✗ B. Testes and scrotum

✓ C. Seminal vesicles and prostate

✗ D. Scrotum and urethra

black

Q.51 **A circle of diameter 50 cm has two equal parallel chords of length 14 cm each separated by a distance y cm. Find the value of y.**

Ans

✗ A. 24

✗ B. 28

✓ C. 48

✗ D. 36

Q.52 **Which value represents the pressure exerted by the blood on artery walls when the heart contracts?**

Ans

✗ A. Mean arterial pressure

✗ B. Diastolic pressure

✗ C. Air pressure

✓ D. Systolic pressure

Q.53 **Seven people, E, F, G, H, W, X and Y, are sitting around a circular table, facing the center of the table. G sits third to the right of F. H sits fourth to the right of Y. Only two people sit between F and Y, when counted from the left of F. W is not an immediate neighbor of H or F. X is not an immediate neighbor of W. Who sits third to the right of E?**

Ans

✓ A. X

✗ B. G

✗ C. Y

✗ D. F

Q.54 **Refer to the following letter and symbol series and answer the question that follows. Counting to be done from left to right only.**
(Left) # V $ A U % * € V S C & O X & Z * % @ @ F I (Right)
How many such letters are there, each of which is immediately preceded by a letter and also immediately followed by a symbol?

Ans

✗ A. 8

✗ B. 4

✓ C. 3

✗ D. 5

Q.55 **In a certain code language, 'XJCQ' is coded as '108' and 'PNST' is coded as '78'. What is the code for 'OBYN' in the given code language?**

Ans

✓ A. 104

✗ B. 110

✗ C. 108

✗ D. 101

Q.56 **Vinod starts from Point A and drives 7 km towards East. He then takes a left turn, drives 9 km, turns left and drives 3 km. He then takes a left turn and drives 15 km. He then takes a left turn and drive 5 km. He then takes a right turn and drives 4 km. He takes a final right turn, drives 9 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 degrees turns only unless specified)**

Ans

✗ A. 12km North

✓ B. 10km North

✗ C. 9km North

✗ D. 11km North

blackbook

Q.57 **This question is based on the following words.**
DEN GOD WAR BOA
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 it in the English alphabetical order. In how many letter-clusters thus formed, will no vowel appear?

Ans
- ✗ A. Two
- ✗ B. Four
- ✗ C. One
- ✓ D. Three

Q.58 **A, B, C, D and E have different ages. C is younger than only D and E. A is older than B but younger than C.**
Who is the youngest?

Ans
- ✓ A. B
- ✗ B. A
- ✗ C. D
- ✗ D. C

Q.59 **Simplify the following-**
$(6561)^{0.18} \times (6561)^{0.07}$

Ans
- ✓ A. 9
- ✗ B. 5
- ✗ C. 4
- ✗ D. 6

Q.60 **Arvind starts from Point A and drives 9 km towards north. He then takes a right turn, drives 13 km, turns right and drives 11 km. He then takes a right turn and drives 18 km. He takes a final right 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.)**

Ans
- ✗ A. 5 km to the west
- ✓ B. 5 km to the east
- ✗ C. 4 km to the east
- ✗ D. 4 km to the west

Q.61 **What should come in place of '?' in the given series?**
162 153 143 134 124 115 ?

Ans
- ✗ A. 103
- ✗ B. 108
- ✓ C. 105
- ✗ D. 112

Q.62 **A tap fills a tank in 8 hours, while another tap empties the full tank in 16 hours. If the tank is initially empty and both taps are opened together, how long (in hours) will it take to fill half of the tank?**

Ans
- ✓ A. 8
- ✗ B. 12
- ✗ C. 16
- ✗ D. 24

blackbook

Q.63 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol ! * 3 # @ % 8 6 $?

Code A E B D L Z T Q J I

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange the codes of the first and the last elements.
(ii) If the second and third elements are odd numbers, code the third element as the code of the second element.
(iii) If the fourth element is a symbol and the fifth element is a number, code both elements as ©.

What is the code for the following group of number-symbols?
! * 3 # @

Ans
- ✔ A. AEBDL
- ✘ B. AEQDL
- ✘ C. LEBDL
- ✘ D. ZEBDL

Q.64 **If 1 is added to each even digit and 1 is added to each odd digit in the number 5287463, then what will be the sum of all the odd digits in the new number thus formed?**

Ans
- ✘ A. 26
- ✔ B. 24
- ✘ C. 20
- ✘ D. 22

Q.65 **Select the pair which follows the same pattern as that followed by the two set of pairs given below. Both pairs follow the same pattern.**

OAT : QWV
SSX : UOZ

Ans
- ✘ A. LWK : PUO
- ✔ B. WKB : YGD
- ✘ C. UST : WPV
- ✘ D. TKY : WGB

Q.66 **Select the pair that follows the same pattern as that followed by the two pairs given below. Both pairs follow the same pattern.**

TRT–WUW
IGI–LJL

Ans
- ✘ A. DAB–FDF
- ✔ B. DBD–GEG
- ✘ C. DBD–FEF
- ✘ D. DAB–GEG

Q.67 **Refer to the following letter and symbol series and answer the question that follows. Counting to be done from left to right only.**

(Left) J H # P N @ $ R & Z Ω T £ D V R Y (Right)

How many such consonants are there, each of which is immediately preceded by a symbol and also immediately followed by a consonant?

Ans
- ✔ A. Two
- ✘ B. Three
- ✘ C. One
- ✘ D. None

Black Book

Q.68 **Which statement best describes the valency of an element?**

Ans

✗ A. It is the total number of protons in the nucleus of an atom

✓ B. It is the combining capacity based on electrons lost, gained, or shared

✗ C. It is the total number of nucleons in the nucleus

✗ D. It is the difference between the number of neutrons and protons in an atom

Q.69 **Each vowel in the word REFLIMS is changed to the letter immediately following it in the English alphabetical order and each consonant is changed to the letter immediately preceding it in the English alphabetical order. How many letters will appear exactly twice in the new group of letters thus formed?**

Ans

✗ A. 3

✓ B. 0

✗ C. 1

✗ D. 2

Q.70 **Based on the English alphabetical order, three of the following four letter-clusters are alike in a certain way and thus form a group. Which is the one that 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

✓ A. GNQT

✗ B. VBFI

✗ C. UAEH

✗ D. RXBE

Q.71 **During an experiment, a student mistakenly identifies the lever's load arm as the part where force is always applied. Which concept best corrects this misunderstanding?**

Ans

✗ A. The fulcrum is the force application point

✗ B. The base is the force direction

✗ C. The load arm supports the fulcrum

✓ D. The effort arm is where force is applied

Q.72 **What should come in place of '?' in the given series?**
62 73 95 139 227 ?

Ans

✗ A. 401

✗ B. 407

✓ C. 403

✗ D. 408

Q.73 **A school's attendance dashboard records the attendance for five consecutive days. The attendance on four days was 48, 50, 47, and 53 students. If the dashboard reports an average attendance of 50 students over all five days, what was the attendance on the fifth day?**

Ans

✗ A. 51

✗ B. 50

✗ C. 54

✓ D. 52

Q.74 **Which of the following statements about resistivity is correct?**

Ans

✗ A. Resistivity depends on the frequency of current

✗ B. Resistivity changes with applied voltage

✓ C. Resistivity remains constant for a material at a given temperature

✗ D. Resistivity varies with the current

black

Q.75 **Simplify $(17pq + 16q)^2 - (17pq - 16q)^2$.**

Ans

✔ A. $1088pq^2$

✗ B. $544pq^2$

✗ C. $1088p^2q$

✗ D. $544p^2q^2$

"

Blackbook

सत्यमेव जयते

रेलवे भर्ती बोर्ड | RAILWAY RECRUITMENT BOARD

सीईएन ०१/२०२६ सहायक लोको पायलट (एएलपी) के पद पर भर्ती

CEN 01/2026 Recruitment of Assistant Loco Pilot (ALP)

Test Date	04/11/2026
Test Time	4:00 PM - 5:00 PM
Subject	RRB ALP 2026 CBT 1

*** 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 ALP**

Q.1 **If a + b + c = 0, then find the value of** $\frac{a^2}{a^2 - bc} + \frac{b^2}{b^2 - ca} + \frac{c^2}{c^2 - ab}$.

Ans
- ✗ A. 0
- ✗ B. 6
- ✗ C. 4
- ✓ D. 2

Q.2 **Which experiment would best demonstrate that sound waves are longitudinal in nature?**

Ans
- ✗ A. Reflecting light off a mirror and measuring the angle of incidence.
- ✓ B. Observing the motion of particles in a slinky when compressions and rarefactions are created.
- ✗ C. Using water waves in a tank to observe crests and troughs.
- ✗ D. Measuring pitch and loudness of a sound with different instruments.

Q.3 **Each of A, B, J, U, R, E and S has holiday on a different day of a week, starting from Monday and ending on Sunday of the same week. Only two people have holiday before J. Only one person has holiday after B. Only three people have holiday between J and R. Only one person has holiday between A and E. U has holiday immediately before A. Who among the following has holiday on Friday?**

Ans
- ✗ A. A
- ✗ B. E
- ✓ C. S
- ✗ D. B

Q.4 **A person invested ₹56,000 at a rate of 10% per annum simple interest for 3 years. Find the amount (in ₹) he will receive after 3 years.**

Ans
- ✗ A. 73,800
- ✗ B. 71,800
- ✗ C. 70,800
- ✓ D. 72,800

Q.5 **The position(s) of how many letters will remain unchanged if each letter in the word READING is arranged in the English alphabetical order?**

Ans

✔ A. TWO

✘ B. ZERO

✘ C. THREE

✘ D. ONE

Q.6 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**
CGH 6, ZLE 19, WQB 32, TVY 45, ?

Ans

✘ A. QBU 58

✘ B. PCU 56

✘ C. RBV 56

✔ D. QAV 58

Q.7 **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 is the one that 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

✔ A. AZ–VX

✘ B. KJ–GF

✘ C. WV–SR

✘ D. ML–IH

Q.8 **Refer to the following letter series and answer the question**
(Left) E H K N F D J S V I Z A M O G L W Y Q X U P R B (Right)

How many such consonants are there each of which is immediately preceded by a vowel and
also immediately followed by a vowel?

Ans

✔ A. Two

✘ B. One

✘ C. None

✘ D. Three

Q.9 **A digital polling agency reports that in a municipal election, Candidate X secured 65% of the total valid votes, while Candidate Y secured 35%. If 13,000 valid votes were cast, then by how many votes did Candidate X lead Candidate Y?**

Ans

✘ A. 3500

✘ B. 4200

✘ C. 2600

✔ D. 3900

Q.10 **If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', then what will come in place of the question mark (?) in the following equation?**
210 A 5 C 38 D 19 B 3 = ?

Ans

✔ A. 23

✘ B. 21

✘ C. 24

✘ D. 25

blackbook

Q.11 **A sum of money is divided among A, B, and C in the ratio 4:5:6. If C receives ₹2,400, how much does B receive?**

Ans

✗ A. ₹2,200

✗ B. ₹1,600

✗ C. ₹1,800

✓ D. ₹2,000

Q.12 **Six boxes A, B, F, G, H and I are kept one over the other but not necessarily in the same order. F is kept second from the bottom. Only two boxes are kept between F and I. H is kept at one of the positions below F. Only A is kept between I and G. How many boxes are kept between B and H?**

Ans

✓ A. Four

✗ B. One

✗ C. Two

✗ D. Three

Q.13 **Which of the following numbers is divisible by both 11 and 24?**

Ans

✓ A. 17688

✗ B. 16811

✗ C. 19640

✗ D. 19408

Q.14 **In a certain code language, 'wind whistles loud' is coded as 'hy gb ec' and 'dance with wind' is coded as 'gb ut rn'. How is 'wind' coded in the given language?**

Ans

✗ A. hy

✗ B. rn

✗ C. ut

✓ D. gb

Q.15 **This question is based on the following words.**

COG DID LAM JEW

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 it in the English alphabetical order. In how many letter clusters thus formed, will no vowel appear?

Ans

✗ A. Two

✓ B. Three

✗ C. One

✗ D. Four

Q.16 **This question is based on the following words.**

COG LIT HER LET

In each of the words, each vowel is changed to the letter immediately preceding it in the English alphabetical order and each consonant is changed to the letter immediately following it in the English alphabetical order. In how many letter-clusters thus formed, will no vowel appear?

Ans

✗ A. Four

✗ B. Three

✗ C. Two

✓ D. One

blackbook

Q.17 **In a circle, a chord of length 80 cm is at a distance of 9 cm from the centre. Find the diameter of the circle.**

Ans

✗ A. 85 cm

✗ B. 86 cm

✓ C. 82 cm

✗ D. 88 cm

Q.18 **In big halls, sound lingers because it repeatedly reflects off walls. This lasting effect is reduced using sound-absorbing materials. What is this phenomenon called?**

Ans

✗ A. Echo

✗ B. Resonance

✗ C. Noise

✓ D. Reverberation

Q.19 **In a certain code language, 'FROM' is coded as '6429' and 'FOUR' is coded as '9324'. What is the code for 'U' in that language?**

Ans

✗ A. 6

✓ B. 3

✗ C. 2

✗ D. 4

Q.20 **The position(s) of how many letters will remain unchanged if each letter in the word OARFISH is arranged in the English alphabetical order?**

Ans

✗ A. ONE

✓ B. ZERO

✗ C. TWO

✗ D. THREE

Q.21 **A question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.**

Question:
Among 5 sticks, F, B, C, Y and N, each having a different height, which stick is the shortest?

Statements:
(I) N is taller than C.
(II) Y is taller than N. F is only shorter than one stick.

Ans

✗ A. Data in statement II alone is sufficient to answer the question while data in statement I is not.

✓ B. Data in both statements I and II together are NOT sufficient to answer the question.

✗ C. Data in statement I alone is sufficient to answer the question while data in statement II is not.

✗ D. Data in both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.

Q.22 **A cylindrical pillar is 84 cm in diameter and 25 m in height. Find the cost of painting the curved surface of the pillar at the rate of ₹25 per m^2.**

$\left(\text{Take } \pi = \frac{22}{7}\right)$

Ans

✗ A. ₹1,618

✗ B. ₹1,698

✗ C. ₹1,617

✓ D. ₹1,650

Q.23 **A dress is bought for ₹500 and sold at a loss of 10%. What is the selling price?**

Ans

✔ A. ₹450

✘ B. ₹470

✘ C. ₹480

✘ D. ₹400

Q.24 **On a circular path of 1292 m, Sujata and Anjali start walking from the same point but in the opposite directions with speeds of 3.7 m/s and X m/sec, respectively. They will meet for the first time after 136 seconds. Find the value of X.**

Ans

✔ A. 5.8

✘ B. 11.3

✘ C. 9.4

✘ D. 0.4

Q.25 **Based on the English alphabetical order, three of the following four letter-clusters are alike in a certain way and thus form a group. Which is the letter-cluster that does NOT belong to that group?**
(Note: The odd one out is not based on the number of consonants/vowels or their positions in the letter-cluster.)

Ans

✔ A. GIM

✘ B. PSV

✘ C. ILO

✘ D. RUX

Q.26 **A shopkeeper buys 41 dozen articles at ₹600 per dozen. He sells each article for ₹55. What is his profit percentage?**

Ans

✘ A. 11%

✔ B. 10%

✘ C. 9%

✘ D. 13%

Q.27 **15 is related to 48 following a certain logic. Following the same logic, 21 is related to 66. To which of the following is 28 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 to/subtracting from/multiplying with 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

Ans

✘ A. 92

✘ B. 83

✔ C. 87

✘ D. 95

Q.28 **Refer to the following letter and symbol series and answer the question that follows. Counting to be done from left to right only.**
(Left) % M % A I $ G % J * O @ V U $ H # % £ © A & (Right)
How many such symbols are there, each of which is immediately preceded by a letter and also immediately followed by a symbol?

Ans

✔ A. 1

✘ B. 3

✘ C. 0

✘ D. 2

Q.29 If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', then what will come in place of the question mark (?) in the following equation?
70 C 225 A 5 B 2 D 103 = ?

Ans
- ✗ A. 55
- ✓ B. 57
- ✗ C. 58
- ✗ D. 59

Q.30 The ability of carbon to form chains gives rise to a homologous series of compounds in which the same functional group is attached to carbon chains of different lengths, is known as:

Ans
- ✗ A. substitution
- ✓ B. catenation
- ✗ C. elimination
- ✗ D. addition

Q.31 Find the value of $(\sin^4\theta - \cos^4\theta + 1)\sec^2\theta - 2\tan^2\theta$.

Ans
- ✓ A. 0
- ✗ B. 5
- ✗ C. 3
- ✗ D. 2

Q.32 In this question, a question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.

Q. Five friends – Laksh, Myra, Nivan, Ojas and Prisha – are sitting around a circular table facing the centre. Who is sitting immediately to the right of Ojas?

I. Nivan sits immediately to the left of Ojas.
II. Laksh sits immediately to the left of Nivan, and Myra sits immediately to the left of Laksh.

Ans
- ✗ A. Both statements I and II together are NOT sufficient to answer the question
- ✗ B. Data in Statement II alone is sufficient to answer the question while data in Statement I is not
- ✓ C. Both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question
- ✗ D. Data in Statement I alone is sufficient to answer the question while data in Statement II is not

Q.33 An investor deposits ₹15,000 in a scheme that offers 7% compound interest for the first year and 8% compound interest for the second year, compounded annually. What is the total amount at the end of 2 years (in ₹)?

Ans
- ✗ A. 17,200
- ✗ B. 17,520
- ✗ C. 17,400
- ✓ D. 17,334

Q.34 A car's radiator should contain a solution of 47% antifreeze. A motorist has 15 litres of 28% antifreeze. How many litres (rounded off to 2 decimal places) of 65% antifreeze liquid should he add to his solution to produce a 47% antifreeze?

Ans
- ✓ A. 15.83
- ✗ B. 17.21
- ✗ C. 18.64
- ✗ D. 20.88

adda

Q.35 **Select the pair that follows the same pattern as that followed by the two pairs given below. Both pairs follow the same pattern.**

HDH–JFJ
PLP–RNR

Ans

✗ A. UPS–VRV

✓ B. UQU–WSW

✗ C. UPS–WSW

✗ D. UQU–VSV

Q.36 **In a moderately skewed distribution, the mean and median are in the ratio 5:4. If the mode is 8 less than the median, what is the value of the mode?**

Ans

✓ A. 8

✗ B. 12

✗ C. 10

✗ D. 14

Q.37 **In a certain code language, 'NSCG' is coded as '86' and 'WEOP' is coded as '118'. What is the code for 'QAYL' in the given code language?**

Ans

✗ A. 120

✗ B. 116

✓ C. 110

✗ D. 113

Q.38 **Which of the following sequences CORRECTLY shows the hierarchical order in biological classification from broadest to most specific?**

Ans

✓ A. Kingdom, Phylum, Class, Order, Family, Genus, Species

✗ B. Species, Genus, Family, Order, Class, Phylum, Kingdom

✗ C. Kingdom, Phylum, Class, Family, Order, Genus, Species

✗ D. Kingdom, Class, Phylum, Order, Family, Genus, Species

Q.39 **Each of C, D, E, F, G, X and Y has interview on a different day of a week starting from Monday and ending on Sunday of the same week. Only four people have interview after E. Only one person has interview after F. Only three people have interview between E and G. Only one person has interview between Y and X. D has interview immediately before Y. How many people have interview between C and Y?**

Ans

✗ A. Four

✗ B. One

✓ C. Two

✗ D. Three

Q.40 If $12\sin y + \cos y = \sqrt{11}\sin y$, find the value of $\tan y$.

Ans

✗ A. $\frac{-12-\sqrt{11}}{138}$

✓ B. $\frac{-12-\sqrt{11}}{133}$

✗ C. $\frac{-12-\sqrt{11}}{143}$

✗ D. $\frac{-13-\sqrt{11}}{133}$

blackbook

Q.41 If ₹5,000 is placed in a bank for 1 year at 6% interest compounded half-yearly, what is the total amount at the end of the year?

Ans

✗ A. ₹5,360.50

✓ B. ₹5,304.50

✗ C. ₹5,300.50

✗ D. ₹5,318.50

Q.42 Raghu starts from point A and drives 7km towards North. He then takes a right turn and drives 5km. He then takes a left turn and drives 9km, and again takes a right turn and drives 8km. He takes a final right turn and drives 16km and stops at point B. 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.)

Ans

✗ A. 11km North

✗ B. 12km South

✗ C. 14km East

✓ D. 13km West

Q.43 What should come in place of the '?' in the given series?

5 18 33 50 69 ?

Ans

✓ A. 90

✗ B. 85

✗ C. 87

✗ D. 92

Q.44 If a shopkeeper wants the selling price after a 20% discount to increase from ₹600 to ₹750, by what percentage should the marked price be increased?

Ans

✗ A. 20%

✓ B. 25%

✗ C. 15%

✗ D. 12.5%

Q.45 During an experiment, a physicist observes that a certain material vibrates at 18 Hz when struck. Which type of sound does this vibration generate, and how would it be perceived by the human ear?

Ans

✗ A. Audible; it would be felt not heard

✓ B. Infrasonic; it would not be heard by humans

✗ C. Ultrasonic; it would be heard faintly

✗ D. Audible; it would be clearly heard

Q.46 Given that $33^{0.65} = x$, $33^{0.84} = y$ and $x^z = y^5$, then the value of z is closest to:

Ans

✗ A. 4.53

✓ B. 6.46

✗ C. 9.97

✗ D. 8.95

Q.47 **Eight friends, H, I, J, K, L, M, N and O, are sitting around a circular table, facing the center.**
L sits second to the left of N.
O sits third to the left of L.
K sits third to the right of J.
H is an immediate neighbor of L and M.

What is the position of L with respect to I?

Ans
- ✗ A. Second to the left
- ✗ B. Third to the right
- ✗ C. Fourth to the right
- ✓ D. Third to the left

Q.48 **A tap fills a tank in 9 hours. Another tap empties the full tank in 18 hours. How long (in hours) will it take to fill half of the tank, if the tank is empty initially and both the taps are open together?**

Ans
- ✗ A. 18
- ✗ B. 10
- ✓ C. 9
- ✗ D. 19

Q.49 **Akshay, Badal, Chris, Daksh and Elizabeth have different heights. Only three people have heights between Daksh and Chris. Akshay is taller than Elizabeth but shorter than Badal. Daksh is taller than Chris. How many people are taller than Elizabeth?**

Ans
- ✓ A. Three
- ✗ B. Four
- ✗ C. One
- ✗ D. Two

Q.50 **Shini starts from Point A and drives 11 km towards South. He then takes a right turn, drives 7 km, turns right and drives 13 km. He then takes a right turn and drives 12 km. He takes a final right 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 degrees turns only unless specified)**

Ans
- ✗ A. 6 km to the west
- ✗ B. 7 km to the west
- ✓ C. 5 km to the west
- ✗ D. 4 km to the west

Q.51 **The curved surface area and the total surface area of a cylinder are in the ratio 1 : 2. If the total surface area of the right cylinder is 616 sq. cm, then its volume is (take $\pi = \frac{22}{7}$):**

Ans
- ✗ A. $1088\ cm^3$
- ✓ B. $1078\ cm^3$
- ✗ C. $1120\ cm^3$
- ✗ D. $1190\ cm^3$

Q.52 **What is the small outgrowth formed on the body of a hydra due to repeated cell division called?**

Ans
- ✗ A. Spore
- ✗ B. Offshoot
- ✓ C. Bud
- ✗ D. Node

blackbook

Q.53 **How does bile juice help in the digestion process in the small intestine?**

Ans

✔ A. It emulsifies fats into smaller globules

✘ B. It digests proteins into amino acids

✘ C. It secretes digestive enzymes

✘ D. It absorbs nutrients into blood vessels

Q.54 **What should come in place of '?' in the given series?**
61 62 64 68 76 ?

Ans

✔ A. 92

✘ B. 95

✘ C. 90

✘ D. 94

Q.55 **In chain isomerism, isomers differ in:**

Ans

✘ A. The number of carbon atoms

✔ B. The arrangement of the carbon skeleton

✘ C. The position of the functional group

✘ D. The type of functional group

Q.56 **Refer to the following letter series and answer the question that follows. Counting to be done from left to right only.**
(Left) P K O C N E Z U L B N U C Z M T U Y B E E S (Right)
How many such consonants are there, each of which is immediately preceded by a consonant and also immediately followed by a vowel?

Ans

✘ A. 4

✘ B. 6

✔ C. 5

✘ D. 7

Q.57 **The sum of the present ages of Johnny and Billy is 65 years. Four years ago from now, Billy's age was half of Johnny's then age. How old (in years) is Johnny at present?**

Ans

✘ A. 49

✘ B. 41

✘ C. 50

✔ D. 42

Q.58 **Find the fourth proportional to 25, 40, and 60.**

Ans

✘ A. 86

✔ B. 96

✘ C. 84

✘ D. 98

Q.59 **Below are given two sets of numbers. In each set of numbers, a certain mathematical operation on the first number results in the second number. Similarly, certain mathematical operations on the second number results in the third number and so on. Which of the given options follows the same set of operations as in question?**
(NOTE – A two/three digit number cannot be broken into individual digits for operations e.g. if 37 is followed by 10, the operation cannot be 3+7 as a two digit number cannot be broken into individual digits)
18 – 23 – 37 – 58 ; 13 – 18 – 32 – 53

Ans

✘ A. 23 – 28 – 42 – 60

✘ B. 11 – 16 – 30 – 43

✔ C. 21 – 26 – 40 – 61

✘ D. 15 – 20 – 32 – 53

Black Book

Q.60 Each letter in the word JUMBLED is arranged in the English alphabetical order. How many letters are there in the English alphabetical order between the letter that is fourth from the left and the one that is third from the right in the new letter-cluster thus formed?

Ans

✔ A. 1

✘ B. 4

✘ C. 2

✘ D. 0

Q.61 Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?
YXA 65 DCF 75 IHK 85 NMP 95 ?

Ans

✘ A. SST 105

✔ B. SRU 105

✘ C. SUX 104

✘ D. SQT 104

Q.62 What should come in place of the '?' in the given series?

37,44,58,79,107, ?

Ans

✔ A. 142

✘ B. 143

✘ C. 144

✘ D. 141

Q.63 In a Δ PQR, PS is the bisector of ∠P, meeting side QR at S. If PQ = 7.2 cm, QR = 7 cm, and QS = 3.6 cm, find PR.

Ans

✘ A. 5.7 cm

✔ B. 6.8 cm

✘ C. 3.5 cm

✘ D. 4.6 cm

Q.64 If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', then what will come in place of the question mark (?) in the following equation?
8 B 2 D 14 A 7 C 9 = ? D 3

Ans

✘ A. 22

✘ B. 24

✘ C. 28

✔ D. 26

Q.65 Seven boxes, C, D, E, F, X, Y and Z, are kept one over the other, but not necessarily in the same order.
Only Z is kept above D. Only two boxes are kept between D and C. Only X is kept below Y.
F is not kept immediately above C.
How many boxes are kept between E and X?

Ans

✘ A. Three

✘ B. Four

✔ C. Two

✘ D. One

Q.66 FAME is related to NIUM in a certain way based on the English alphabetical order. In the same way, LGSK is related to TOAS. To which of the given options is JEQI related, following the same logic?

Ans

✘ A. RQWE

✘ B. RMYU

✘ C. REQS

✔ D. RMYQ

blackbook

Q.67 **A cricketer scored 30, 42, 28, 35, 50, 44, 31, 39, 40, and 41 runs in his ten matches. What is his average score (in runs) per match?**

Ans
- ✔ A. 38
- ✘ B. 36
- ✘ C. 42
- ✘ D. 40

Q.68 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol	#	6	+	7	5	9	8	$	!	3
Code	P	V	F	Q	Y	S	X	W	C	H

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange the codes of the first and the last elements.
(ii) If the second and third elements are odd numbers, code the third element as the code of the second element.
(iii) If the fourth element is a symbol and the fifth element is a number, code both elements as ©.

What is the code for the following group of number-symbols?
 # 6 + 7 5

Ans
- ✔ A. YVFQP
- ✘ B. MVFQY
- ✘ C. PVFQY
- ✘ D. PYFQY

Q.69 **YWAZ is related to WUYX in a certain way based on the English alphabetical order. In the same way, ECGF is related to CAED. To which of the following is VTXW related, following the same logic?**

Ans
- ✘ A. TQUU
- ✔ B. TRVU
- ✘ C. TRUU
- ✘ D. TSUA

Q.70 **Seven people, A, B, C, I, J, K and L are sitting in a row, facing north.**
Only two people sit between B and A. Only L sits to the right of I. Only one person sits between A and I. K sits at some place to the right of J but at some place to the left of C. How many people sit between C and J?

Ans
- ✔ A. Two
- ✘ B. Four
- ✘ C. Three
- ✘ D. One

Q.71 $\text{Find the value of } 48.3 - [7 + \frac{1}{7 + \frac{1}{7}}] - [3 + \frac{1}{3 + \frac{1}{3}}]$

Ans
- ✔ A. 37.86
- ✘ B. 46.18
- ✘ C. 38.30
- ✘ D. 31.75

blackbook

Q.72 **Seven people, R, S, T, U, V, W and X are sitting in a straight row, facing north. Only two people sit to the left of R. Only 3 people sit between R and U. W sits third to the left of V. V is not an immediate neighbour of R. T sits second to the right of S. Who sits at the extreme left end of the line?**

Ans

✗ A. V

✗ B. S

✗ C. W

✓ D. X

Q.73 **This question is based on the five, three-digit numbers given below.**
(Left) 398 635 586 478 659 (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 second digit of the second highest number is added to the third digit of the lowest number?

Ans

✓ A. 11

✗ B. 10

✗ C. 8

✗ D. 13

Q.74 **17 is related to 36 following a certain logic. Following the same logic, 22 is related to 46. To which of the following is 25 related, following the same logic?**
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding /subtracting /multiplying etc. 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

✗ A. 56

✗ B. 48

✗ C. 45

✓ D. 52

Q.75 **If 2 is added to each even digit and 1 is subtracted from each odd digit in the number 643217, then what will be the sum of the first two digits from the left in the new number thus formed?**

Ans

✗ A. 18

✗ B. 12

✓ C. 14

✗ D. 16

"

रेलवे भर्ती बोर्ड | RAILWAY RECRUITMENT BOARD
सीईएन ०१/२०२६ सहायक लोको पायलट (एएलपी) के पद पर भर्ती
CEN 01/2026 Recruitment of Assistant Loco Pilot (ALP)

Test Date	05/11/2026
Test Time	9:00 AM - 10:00 AM
Subject	RRB ALP 2026 CBT 1

*** 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 ALP**

Q.1 **Match the following criteria with the correct description.**

Classification Criteria	Description
I). Mode of nutrition	A) Presence or absence of cell wall
II). Ecological role	B) Autotrophic or heterotrophic
III). Cell structure	C) Producer, consumer, or decomposer

Ans
✔ A. I-B, II-C, III-A
✘ B. I-C, II-B, III-A
✘ C. I -A, II-B, III-C
✘ D. I-A, II-C, III-B

Q.2 **Seven people, E, F, G, H, W, X and Y, are sitting around a circular table, facing the center of the table. E sits third to the left of F. Only one person sits between F and W, when counted from the left of W. Only two people sit between Y and H, when counted from the right of H. X is an immediate neighbor of Y. Who sits to the immediate left and immediate right of G, respectively?**

Ans
✘ A. H and F
✘ B. X and W
✔ C. F and W
✘ D. F and X

Q.3 **What should come in place of the '?' in the given series?**

62 63 65 69 77 ?

Ans
✔ A. 93
✘ B. 97
✘ C. 95
✘ D. 91

Q.4 **This question is based on the following words**
TAP BED LOG FIN
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 it in the English alphabetical order. How many letter-clusters thus formed have a vowel in the first position from left?

Ans
- ✔ A. 2
- ✘ B. 3
- ✘ C. 1
- ✘ D. 4

Q.5 **The following are the pocket money amounts (in ₹) received by a group of students: 400, 600, 400, 800, 600, 400, 1000. What is the mode of the data?**

Ans
- ✘ A. ₹1000
- ✘ B. ₹800
- ✘ C. ₹600
- ✔ D. ₹400

Q.6 **A,B,C,D and E have scored different marks in an exam. C scored more than only 1 person. E scored more than A but less than D. A scored more than B. Who scored the highest?**

Ans
- ✘ A. E
- ✘ B. C
- ✔ C. D
- ✘ D. A

Q.7 **A car's radiator should contain a solution of 51% antifreeze. A motorist has 9 litres of 23% antifreeze. How many litres (rounded off to 2 decimal places) of 97% antifreeze liquid should he add to his solution to produce a 51% antifreeze?**

Ans
- ✔ A. 5.48
- ✘ B. 4.18
- ✘ C. 10.39
- ✘ D. 6.94

Q.8 **Which one of the following statements is correct?**

Ans
- ✘ A. Absolute refractive index does not relate to optical density.
- ✘ B. A medium with lower absolute refractive index is optically denser.
- ✘ C. A medium with higher absolute refractive index is optically rarer.
- ✔ D. A medium with higher absolute refractive index is optically denser.

Q.9 **The position(s) of how many letters will remain unchanged if each letter in the word ANCHOR is arranged in the English alphabetical order?**

Ans
- ✘ A. None
- ✔ B. Three
- ✘ C. Two
- ✘ D. One

Q.10 **Seven boxes A, B, C, D, E, F and G are kept one over the other but not necessarily in the same order. Only four boxes are kept above E. Only four boxes are kept below A. G is kept immediately above B but below E. C is kept immediately below D. How many boxes are kept between F and G?**

Ans
- ✔ A. One
- ✘ B. Three
- ✘ C. Two
- ✘ D. Four

Black Book

Q.11 **A shopkeeper buys 60 dozen articles at ₹240 per dozen. He sells each article for ₹25. What is his profit percentage?**

Ans

✗ A. 35%

✗ B. 20%

✓ C. 25%

✗ D. 30%

Q.12 **What should come in place of '?' in the given series?**
6, 12, 24, 48, ?

Ans

✗ A. 90

✓ B. 96

✗ C. 102

✗ D. 98

Q.13 **A person invested ₹56,000 at a rate of 10% per annum simple interest for 4 years. Find the amount (in ₹) he will receive after 4 years.**

Ans

✗ A. 80,400

✗ B. 79,400

✓ C. 78,400

✗ D. 81,400

Q.14 **A woman's monthly income is ₹50,000. She spends 25% on rent, 35% on food, and 20% on transportation, saving the remaining amount. How much does she save each month?**

Ans

✗ A. ₹12,500

✗ B. ₹15,000

✓ C. ₹10,000

✗ D. ₹8,000

Q.15 **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

✗ A. IE – ZV

✗ B. EA – VR

✗ C. TP – KG

✓ D. LH – CZ

Q.16 **The surface area of a sphere increases by 44 cm² when its radius increases by 0.5 cm. Find the original radius.** $\left(\text{Use } \pi = \frac{22}{7}\right)$

Ans

✗ A. 4.25 cm

✗ B. 4 cm

✓ C. 3.25 cm

✗ D. 3.5 cm

Q.17 **What is the value of x, if x is the mean proportional between 0.16 and 0.64?**

Ans

✗ A. 0.40

✓ B. 0.32

✗ C. 0.48

✗ D. 0.24

blackbook

Q.18 When a more reactive metal reacts with a salt solution of a less reactive metal, what type of reaction will occur?

Ans

✗ A. Substitution

✗ B. Rearrangement

✓ C. Displacement

✗ D. Addition

Q.19 Each of P, Q, R, S, T, U and V has an exam on a different day of a week starting from Monday and ending on Sunday of the same week. V has an exam on Thursday. Only one person has exam between V and P. Q has exam on the day immediately after P but not on a Sunday. U has exam on the day immediately after V. S has exam on the day immediately before T. P has exam on the day immediately after R. Following a certain logic, Q is related to Wednesday in the given arrangement in the same way as S is related to Saturday. To which of the following days is T related, following the same logic?

Ans

✗ A. Friday

✗ B. Monday

✓ C. Sunday

✗ D. Tuesday

Q.20 The diameter of a right circular cone is 14 m and its slant height is 11 m. Find its volume. $\left(\text{Take } \pi = \frac{22}{7}\right)$

Ans

✗ A. $108\sqrt{2}\ m^3$

✗ B. $408\sqrt{2}\ m^3$

✗ C. $208\sqrt{2}\ m^3$

✓ D. $308\sqrt{2}\ m^3$

Q.21 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?
17 D 6 B 4 C 49 A 7 = ?

Ans

✗ A. 12

✗ B. 7

✗ C. 4

✓ D. 0

Q.22 Two sounds have the same pitch and loudness, but one is more pleasant. Which characteristic helps us distinguish between them?

Ans

✗ A. Frequency

✗ B. Amplitude

✓ C. Quality or timber

✗ D. Wavelength

Q.23 Given that $137^{0.61} = x$, $137^{0.25} = y$ and $x^z = y^6$, then the value of z is closest to:

Ans

✗ A. 2.89

✓ B. 2.46

✗ C. 4.48

✗ D. 4.17

Q.24 Refer to the following letter and symbol series and answer the question that follows. Counting to be done from left to right only.
(Left) T © * Q L @ M $ I B A © & J © O © & N £ I © (Right)
How many such letters are there, each of which is immediately preceded by a letter and also immediately followed by a letter?

Ans
- ✔ A. 1
- ✘ B. 2
- ✘ C. 3
- ✘ D. 0

Q.25 The difference between the compound interest (compounded annually) and simple interest on a certain sum for 2 years at 12% per annum is ₹57.60. Calculate the principal.

Ans
- ✔ A. ₹4000
- ✘ B. ₹3500
- ✘ C. ₹3000
- ✘ D. ₹4500

Q.26 The sides of a triangle are 7, 9 and x. For what value of x is the area of the triangle the maximum?

Ans
- ✘ A. $\sqrt{140}$
- ✘ B. $\sqrt{120}$
- ✘ C. $\sqrt{110}$
- ✔ D. $\sqrt{130}$

Q.27 Seven people, A, B, C, D, E, F and G are sitting in a row, facing north. Only four people sit to the right of E. Only four people sit to the left of F. G is the immediate neighbour of C and E. B sits third to the left of D. How many people sit between A and E?

Ans
- ✔ A. Two
- ✘ B. Four
- ✘ C. One
- ✘ D. Three

Q.28 Which of the following numbers is divisible by both 47 and 21?

Ans
- ✘ A. 46676
- ✔ B. 48363
- ✘ C. 49923
- ✘ D. 47390

Q.29 If $9\sec^2\theta - 6\tan^2\theta = 15$, θ is an acute angle, then find the value of $\operatorname{cosec}\theta$.

Ans
- ✘ A. $\frac{2}{\sqrt{3}}$
- ✔ B. $\sqrt{\frac{3}{2}}$
- ✘ C. $\sqrt{\frac{2}{3}}$
- ✘ D. $\frac{3}{\sqrt{2}}$

blackbook

Q.30 **In this question, a question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.**
Among 5 poles, A,W,V,G and E each having a different height, which pole is the shortest?
(I)V is taller than only two poles. A is shorter than V and W is shorter than A
(II)G is taller than E

Ans

✗ A. Data in Statement II alone is sufficient to answer the question while data in statement I is not

✗ B. Both statements I and II together are NOT sufficient to answer the question

✗ C. Both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.

✓ D. Data in Statement I alone is sufficient to answer the question while data in statement II is not

Q.31 **Select the pair which follows the same pattern as that followed by the two pairs given below. Both pairs follow the same pattern.**
ABF−JKO
DEI−MNR

Ans

✓ A. RSW−ABF

✗ B. RRU−ZAE

✗ C. RRU−ABF

✗ D. RSW−ZBE

Q.32 **Which part of the brain is mainly responsible for thinking and decision making?**

Ans

✗ A. Spinal cord

✓ B. Fore-brain

✗ C. Mid-brain

✗ D. Hind-brain

Q.33 **A, B, C, D, E, F, and G are sitting around a circular table facing the center. A sits second to the right of D. E is an immediate neighbor of A and G. D is an immediate neighbor of B and C. If F sits exactly to the left of C, who is sitting to the immediate left of G?**

Ans

✗ A. F

✗ B. C

✓ C. E

✗ D. B

Q.34 **9 is related to 83 following a certain logic. Following the same logic, 16 is related to 258. To which of the following is 3 related, following the same logic?**
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding / subtracting /multiplying etc. 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

✓ A. 11

✗ B. 13

✗ C. 15

✗ D. 7

Q.35 **The HCF and LCM of two numbers are 48 and 576 respectively. If one of the numbers is 192, find the other number.**

Ans

✗ A. 143

✗ B. 136

✗ C. 141

✓ D. 144

Q.36 **If the difference between compound interest, compounded annually, and simple interest on a certain sum for 2 years at 10% per annum is ₹21, what is the sum?**

Ans

✗ A. ₹2,000

✓ B. ₹2,100

✗ C. ₹2,200

✗ D. ₹2,500

Q.37 **Which observation from Rutherford's experiment led to the conclusion that the atom is mostly empty space?**

Ans

✗ A. Alpha particles were absorbed completely by the gold foil

✗ B. A few alpha particles bounced back from the foil

✗ C. Electrons emitted light while rotating

✓ D. Most alpha particles passed straight through the foil

Q.38 **Simplify $(2pq + 7q)^2 - (2pq - 7q)^2$.**

Ans

✗ A. $28p^2q^2$

✓ B. $56pq^2$

✗ C. $56p^2q$

✗ D. $28pq^2$

Q.39 **CYUW is related to YUQS in a certain way based on the English alphabetical order. In the same way, OKGI is related to KGCE. To which of the given options is IEAC related, following the same logic?**

Ans

✗ A. EAVY

✓ B. EAWY

✗ C. EBVB

✗ D. EZVY

Q.40 **In this question, a question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.**
Among 5 poles, W,O,K,G and Y each having a different height, which pole is the shortest?
(I)W is shorter than O but taller than K
(II)W is shorter than Y. G is taller than K

Ans

✗ A. Data in Statement I alone is sufficient to answer the question while data in statement II is not

✗ B. Data in Statement II alone is sufficient to answer the question while data in statement I is not

✗ C. Both statements I and II together are NOT sufficient to answer the question

✓ D. Both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.

Q.41 **F, G, H, M, N and O 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.**
Only O lives above F. H lives immediately below F. Only G lives below N. How many people live between M and O?

Ans

✗ A. One

✓ B. Two

✗ C. Three

✗ D. Four

Q.42 **A ramp is used to load boxes onto a truck. If the ramp is made longer but the height remains the same, what will happen to the mechanical advantage and why?**

Ans

✗ A. The mechanical advantage decreases because the ramp is shorter

✗ B. The mechanical advantage decreases because the ramp becomes steeper

✓ C. The mechanical advantage increases because the input force is spread over a greater distance

✗ D. The mechanical advantage increases because the ramp is higher

Q.43 **A man bought a chair for ₹350 and sold it at a loss of 10%. What was the selling price?**

Ans

✓ A. ₹315

✗ B. ₹310

✗ C. ₹300

✗ D. ₹320

Q.44 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol + & ! @ 7 8 9 * 4 $

Code P Z F K U X Q Y I A

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange their codes of the first and last elements.
(ii) If the second and third elements are odd numbers, code the third element as the code of the second.
(iii) If the fourth element is a symbol and the fifth element is a number, code the fourth and fifth elements as ©.

What is the code for : 9&!@7

Ans

✓ A. QZF©©

✗ B. IZFKU

✗ C. PZA©©

✗ D. UYFKQ

Q.45 **Refer to the following letter and symbol series and answer the question that follows. Counting to be done from left to right only.**
(Left) T V @ $ @ £ £ © E R S € N W # % # M N © € $ (Right)
How many such letters are there, each of which is immediately preceded by a letter and also immediately followed by a letter?

Ans

✓ A. 1

✗ B. 2

✗ C. 3

✗ D. 0

Q.46 **Below are given two sets of numbers. In each set of numbers, a certain mathematical operation on first number results in the second number. Similarly, certain mathematical operation on second number results in the third number and so on. Which of the given options follows the same set of operations as in question?**
(NOTE – A two/three digit number cannot be broken into individual digits for operations e.g. if 37 is followed by 10, the operation cannot be 3+7 as a two digit number cannot be broken into individual digits)
14 - 9 - 1 - 3
7 - 2 - (-6) - (-18)

Ans

✗ A. 8 - 3 - (-7) - (-14)

✓ B. 9 - 4 - (-4) - (-12)

✗ C. 50 - 44 - 36 - 72

✗ D. 22 - 18 - 11 - 33

Black Book

Q.47 **A shopkeeper marks a shirt 50% above its cost price. He then offers two successive discounts of 10% and 20% on the marked price. If the final selling price is ₹432, what was the original cost price of the shirt?**

Ans

✗ A. ₹320

✗ B. ₹360

✓ C. ₹400

✗ D. ₹280

Q.48 **The position(s) of how many letters will remain unchanged if each letter in the word SCRAMBLE is arranged in the English alphabetical order?**

Ans

✗ A. Two

✗ B. One

✓ C. None

✗ D. Three

Q.49 **Select the pair which follows the same pattern as that followed by the two set of pairs given below. Both pairs follow the same pattern.**

BOA : XQW
TSS : PUO

Ans

✗ A. YGD : WKB

✗ B. DWP : AYM

✓ C. LWK : HYG

✗ D. KTO : HWL

Q.50 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol	#	$	9	7	*	6	%	5	3	8
Code	L	K	A	F	B	J	S	O	H	P

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange the codes for first and last elements.
(ii) If the second and third elements are odd numbers, code the third element as the code of the second element.
(iii) If the fourth element is a symbol and the fifth element is a number, code both elements as ©.

What is the code for the following group of number-symbols?
#$97*

Ans

✗ A. OKAFB

✗ B. LKJFB

✗ C. LKASB

✓ D. LKAFB

Q.51 **A group of six friends spent the following amounts on lunch: ₹120, ₹135, ₹145, ₹150, ₹125, and x. If their average spending was ₹140, what is the value of x?**

Ans

✗ A. ₹155

✗ B. ₹160

✓ C. ₹165

✗ D. ₹170

Q.52 In Δ ABC, DE $\|$ AC, where D and E are the points on sides AB and and AD = 13 cm, then what is the ratio of the area of ΔBDE to the

Ans
- ✗ A. 429:100
- ✗ B. 101:430
- ✓ C. 100:429
- ✗ D. 430:101

Q.53 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**

PHL 2 MJJ -4 JLH 8 GNF -16 ?

Ans
- ✗ A. GYT 35
- ✗ B. GHY 67
- ✗ C. FRE 34
- ✓ D. DPD 32

Q.54 **This question is based on the five, three-digit numbers given below.**
(Left) 214 359 369 741 846 (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 second digit of the highest number is added to the second digit of the lowest number?

Ans
- ✗ A. 9
- ✓ B. 5
- ✗ C. 8
- ✗ D. 15

Q.55 **E, R, T, Y, U and W 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.**
E lives on an odd numbered floor but not 5. The sum of floors on which E and R live is 5.
Only 3 people live between R and W. U lives immediately above T.
How many people live below T?

Ans
- ✗ A. 4
- ✗ B. 2
- ✓ C. 3
- ✗ D. 1

Q.56 **What should come in place of '?' in the given series?**

6 10 15 21 28 36 ?

Ans
- ✗ A. 43
- ✗ B. 48
- ✗ C. 47
- ✓ D. 45

blackbook

Q.57 Based on the English alphabetical order, three of the following four letter-clusters are alike in a certain way and thus form a group. Which is the one that 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
- ✗ A. MSWZ
- ✓ B. XDGK
- ✗ C. NTXA
- ✗ D. YEIL

Q.58 If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', then what will come in place of the question mark (?) in the following equation?
9 B 3 D 21 A 3 C 2 = ? D 8

Ans
- ✗ A. 33
- ✗ B. 32
- ✗ C. 34
- ✓ D. 30

Q.59 A cat runs in a garden covering two different stretches. In the first stretch, it takes 70 steps, each of 0.4 meters. In the second stretch, it increases its speed and covers 56 steps, each of 0.5 meters. If the cat takes the same time (14 seconds) for each stretch, what is its average speed for the entire run?

Ans
- ✗ A. 4 m/s
- ✓ B. 2 m/s
- ✗ C. 1 m/s
- ✗ D. 5 m/s

Q.60 Which of the following parts of the female reproductive system is responsible for both producing eggs and releasing hormones?

Ans
- ✓ A. Ovary
- ✗ B. Uterus
- ✗ C. Oviduct
- ✗ D. Cervix

Q.61 A started a business by investing ₹1,08,000. After 6 months, B joined him with a capital of ₹1,44,000. At the end of the year, they made a profit of ₹82,000. Find the profit share of B.

Ans
- ✗ A. ₹30,000
- ✗ B. ₹48,000
- ✗ C. ₹46,000
- ✓ D. ₹32,800

Q.62 Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?
GDF 8, JGI 13, MJL 18, PMO 23, ?

Ans
- ✓ A. SPR 28
- ✗ B. SPR 27
- ✗ C. TPQ 28
- ✗ D. TPR 27

Q.63 If $2x + 5y = 18$ and $2x - 5y = 2$, find the value of xy.

Ans
- ✗ A. 16
- ✗ B. 9
- ✓ C. 8
- ✗ D. 12

Black

Q.64 **Manav starts from Point A and drives 11 km towards East. He then takes a left turn, drives 12 km, turns left and drives 13 km. He then takes a left turn and drives 18 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.)**

Ans

✗ A. 4 km to the South

✗ B. 5 km to the South

✓ C. 6 km to the North

✗ D. 4 km to the North

Q.65 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol	$	?	*	&	+	7	5	9	!	%
Code	E	D	C	Y	R	X	T	L	O	I

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange the codes of the first and the last elements.
(ii) If the second and third elements are odd numbers, code the third element as the code of the second element.
(iii) If the fourth element is a symbol and the fifth element is a number, code both elements as ©.

What is the code for the following group of number-symbols?
$? * & +

Ans

✓ A. EDCYR

✗ B. EDLYR

✗ C. TDCYR

✗ D. EDCOR

Q.66 Find the value of $\frac{(\cot^2 A - \tan^2 A)(\sin^2 A - 1)(\cos^2 A - 1)}{(2\cos^2 A - 1)} + \frac{(1 + \cot^2 A}{\sin A}$

Ans

✗ A. $1 - \text{cosec}^3 A$

✗ B. $\sin^3 A + 1$

✓ C. $1 + \text{cosec}^3 A$

✗ D. $\sin^3 A - 1$

Q.67 **Refer to the following letter and symbol series and answer the question that follows.**

(Left) X G # E A @ $ R & U Ω T £ D H Y (Right)

If all the symbols are dropped from the series, which of the following will be third from the left?

Ans

✓ A. E

✗ B. A

✗ C. G

✗ D. R

Q.68 **115 is related to 226 following a certain logic. Following the same logic, 219 is related to 330. To which of the given options is 306 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 etc. 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

✗ A. 421

✗ B. 415

✗ C. 419

✓ D. 417

blackbook

Q.69 **A tap fills a tank in 9 hours, while another tap empties the full tank in 12 hours. If the tank is initially empty and both taps are opened together, how long (in hours) will it take to fill half of the tank?**

Ans
- ✗ A. 38
- ✗ B. 36
- ✓ C. 18
- ✗ D. 19

Q.70 **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?**
23 D 10 B 3 C 112 A 4 = ?

Ans
- ✗ A. 17
- ✗ B. 20
- ✓ C. 21
- ✗ D. 14

Q.71 **This question is based on the five, three-digit numbers given below.**
(Left) 429 476 483 521 589 (Right)
(Example- 697 – First digit = 6, second digit = 9 and third digit = 7)

What will be the resultant if the second digit of the second highest number is added to the third digit of the second lowest number?

Ans
- ✗ A. 9
- ✓ B. 8
- ✗ C. 7
- ✗ D. 6

Q.72 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol	$	7	3	+	8	#	@	5	!	&
Code	S	H	U	E	T	A	Q	W	J	B

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange the codes of the first and the last elements.
(ii) If the second and third elements are odd numbers, code the third element as the code of the second element.
(iii) If the fourth element is a symbol and the fifth element is a number, code both elements as ©.

What is the code for the following group of number-symbols?
$ 7 3 + #

Ans
- ✗ A. SJUET
- ✓ B. SHHEA
- ✗ C. SHUEW
- ✗ D. SHUET

Q.73 **Each letter in the word FIRMEST is changed to the letter immediately following it in the English alphabetical order and then all the letters thus formed are arranged in the English alphabetical order. Which of the following letters will be fourth from the right in the new group of letters thus formed?**

Ans
- ✓ A. N
- ✗ B. J
- ✗ C. G
- ✗ D. S

black book

Q.74 **Rizwan starts from Point A and drives 37 km towards the East. He then takes a right turn, drives 14 km, then turns right and drives 58 km. He then takes a right turn and drives 31 km. He takes a final right turn, drives 21 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 degrees turns only, unless specified.)**

Ans

✔ A. 17 km to the South

✘ B. 14 km to the South

✘ C. 16 km to the North

✘ D. 15 km to the South

Q.75 **If '+' means '−', '−' means '×', '×' means '÷', '÷' means '+', then what will come in place of the question mark (?) in the following equation?**

39 ÷ 24 × 3 − 5 + 19 = ?

Ans

✔ A. 60

✘ B. 64

✘ C. 58

✘ D. 62

"

Blackbook

सत्यमेव जयते

रेलवे भर्ती बोर्ड | RAILWAY RECRUITMENT BOARD

सीईएन ०१/२०२६ सहायक लोको पायलट (एएलपी) के पद पर भर्ती

CEN 01/2026 Recruitment of Assistant Loco Pilot (ALP)

Test Date	05/11/2026
Test Time	12:30 PM - 1:30 PM
Subject	RRB ALP 2026 CBT 1

*** 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 ALP**

Q.1 **Vivek starts from Point A and drives 8 km towards north. He then takes a left turn, drives 15 km, turns left and drives 10 km. He then takes a left turn and drives 18 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.)**

Ans
- ✗ A. 6 km to the west
- ✗ B. 8 km to the east
- ✓ C. 3 km to the west
- ✗ D. 6 km to the east

Q.2 **The position(s) of how many letters will remain unchanged if each letter in the word PIGEON is arranged in the English alphabetical order?**

Ans
- ✓ A. One
- ✗ B. Three
- ✗ C. None
- ✗ D. Two

Q.3 **YVYU is related to SPSO in a certain way based on the English alphabetical order. In the same way, OLOK is related to IFIE. To which of the given options is RORN related, following the same logic?**

Ans
- ✗ A. LJKN
- ✗ B. LHKH
- ✗ C. LIKH
- ✓ D. LILH

Q.4 **Refer to the following letter series and answer the question that follows. Counting to be done from left to right only.**
(Left) A F I E G M L A X F I E Q R T J I L U E Y H (Right)
How many such consonants are there, each of which is immediately preceded by a vowel and also immediately followed by a vowel?

Ans
- ✗ A. 3
- ✗ B. 4
- ✗ C. 1
- ✓ D. 2

Q.5 **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?**
48 A 3 C 7 B 2 D 18 = ?

Ans
- ✗ A. 4
- ✓ B. 12
- ✗ C. 7
- ✗ D. 10

Q.6 **This question is based on the following words.**

SEA CAZ LOT HAT

In each of the words, each vowel is changed to the second letter following it in the English alphabetical order and each consonant is changed to the letter immediately preceding it in the English alphabetical order. In how many letter-clusters thus formed, will no vowel appear?

Ans
- ✗ A. Two
- ✓ B. Four
- ✗ C. Three
- ✗ D. One

Q.7 **In this question, a question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.**
Among 5 poles, A,W,V,G and E each having a different height, which pole is the shortest?
(I)E is shorter than W. G is shorter than A
(II)G is taller than E

Ans
- ✗ A. Data in Statement I alone is sufficient to answer the question while data in statement II is not
- ✗ B. Both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.
- ✓ C. Both statements I and II together are NOT sufficient to answer the question
- ✗ D. Data in Statement II alone is sufficient to answer the question while data in statement I is not

Q.8 **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 is the one that 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
- ✗ A. FC−EB
- ✗ B. MJ−LI
- ✗ C. JG−IF
- ✓ D. WT−UU

Q.9 **Based on the English alphabetical order, three of the following four letter-clusters are alike in a certain way and thus form a group. Which letter-cluster 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
- ✓ A. XSD
- ✗ B. EZU
- ✗ C. RMH
- ✗ D. SNI

Q.10 **The position(s) of how many letters will remain unchanged if each letter in the word SLACKEN is arranged in the English alphabetical order?**

Ans
- ✗ A. One
- ✓ B. None
- ✗ C. Two
- ✗ D. Three

blackboard

Q.11 **When a sodium atom loses one electron, what does it become?**

Ans

✗ A. A sodium molecule

✓ B. A positively charged sodium ion

✗ C. A neutral sodium atom

✗ D. A negatively charged sodium ion

Q.12 **In △ABC, BD ⊥ AC at D and ∠DBC = 53°. E is a point on BC such that ∠CAE = 58°. What is the measure of ∠AEB?**

Ans

✓ A. 95°

✗ B. 81°

✗ C. 109°

✗ D. 87°

Q.13 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol 7 8 # ! 6 % $ @ 3 9

Code I Z G N R K S X W M

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange the codes of the first and the last elements.
(ii) If the second and third elements are odd numbers, code the third element as the code of the second element.
(iii) If the fourth element is a symbol and the fifth element is a number, code both elements as ©.

What is the code for the following group of number-symbols?
7 8 # ! 6

Ans

✗ A. IZGN©

✗ B. ISGNR

✓ C. IZG©©

✗ D. IZG©R

Q.14 **What does the ovary of a flower transform into after fertilisation is complete?**

Ans

✗ A. Seedcoat

✗ B. Zygote

✓ C. Fruit

✗ D. Seed

Q.15 **Refer to the following letter series and answer the question that follows. Counting to be done from left to right only.**
(Left) P W U T K B R E T W R O N E L A U J J U T L (Right)
How many such vowels are there, each of which is immediately preceded by a consonant and also immediately followed by a consonant?

Ans

✗ A. 4

✓ B. 5

✗ C. 7

✗ D. 6

Q.16 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**

MGG 9 KIJ -4 IKM -17 GMP -30 ?

Ans

✗ A. GYT -41

✗ B. JIU -34

✗ C. KJU -44

✓ D. EOS -43

Q.17 **A shop offers a 'Buy One Get Two Free' scheme on a shirt priced at ₹900 each. What is the effective price per shirt if a customer buys three shirts under this offer?**

Ans

✓ A. ₹300

✗ B. ₹450

✗ C. ₹600

✗ D. ₹900

Q.18 **Which of the following structural features helps the plant remain firm and upright?**

Ans

✗ A. Flexible membranes

✓ B. Presence of a cell wall

✗ C. Parenchyma tissue

✗ D. Transparent cytoplasm

Q.19 Find the area of a triangle whose sides are in the ratio of 7:12:14, and

Ans

✗ A. $41\sqrt{2684}\ \text{m}^2$

✓ B. $48\sqrt{3135}\ \text{m}^2$

✗ C. $24\sqrt{1005}\ \text{m}^2$

✗ D. $32\sqrt{1956}\ \text{m}^2$

Q.20 **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?**
4 B 5 D 44 A 4 C 7 = ?

Ans

✗ A. 18

✗ B. 13

✗ C. 21

✓ D. 16

Q.21 **Which of the following numbers is divisible by both 33 and 46?**

Ans

✗ A. 82369

✗ B. 83018

✗ C. 83947

✓ D. 81972

Q.22 **Seven people, E, F, G, H, W, X and Y, are sitting around a circular table, facing the center of the table. Y sits to the immediate right of W. H sits to the immediate left of E. F sits second to the right of E. G sits third to the left of Y. Who sits second to the right of X?**

Ans

✗ A. H

✓ B. E

✗ C. F

✗ D. G

blackbook

Q.23 Given that $69^{0.63} = x$, $69^{0.6} = y$ and $x^z = y^2$, then the value of z is closest to:

Ans

✗ A. 3.4

✓ B. 1.9

✗ C. 3.7

✗ D. 1.3

Q.24 ABCD is a square. M is an external point towards side AB such that triangle MAB is an equilateral triangle. What is the value of $\angle AMD + \frac{1}{3}\angle MCD$?

Ans

✗ A. 50^o

✗ B. 60^o

✗ C. 45^o

✓ D. 40^o

Q.25 The monthly salaries (in ₹) of five workers in a factory are 12,000, 15,000, 18,000, 17,000, and 16,000. What is the arithmetic mean of their salaries?

Ans

✗ A. ₹16,500

✗ B. ₹17,200

✗ C. ₹18,000

✓ D. ₹15,600

Q.26 In this question, a question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.

Q. Five students – Abeer, Charvi, Dhruvika, Eshan and Farah – scored different marks. Who scored the highest marks?

(I) Eshan scored more than Dhruvika, who scored more than Charvi.
(II) Farah scored less than Eshan but more than Abeer, and Abeer scored more than Dhruvika.

Ans

✗ A. Data in Statement I alone is sufficient to answer the question while data in Statement II is not

✓ B. Both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question

✗ C. Data in Statement II alone is sufficient to answer the question while data in Statement I is not

✗ D. Both statements I and II together are NOT sufficient to answer the question

Q.27 MLMN is related to POPQ in a certain way based on the English alphabetical order. In the same way, JIJK is related to MLMN. To which of the following is WVWX related, following the same logic?

Ans

✓ A. ZYZA

✗ B. ZZYZ

✗ C. ZXYA

✗ D. ZYYA

Q.28 A toy is sold for ₹180, gaining a profit of 20%. What was its cost price?

Ans

✓ A. ₹150

✗ B. ₹140

✗ C. ₹160

✗ D. ₹170

Q.29 **A person invested ₹56,000 at a rate of 12% per annum simple interest for 2 years. Find the amount (in ₹) he will receive after 2 years.**

Ans

✔ A. 69,440

✘ B. 66,440

✘ C. 67,440

✘ D. 68,440

Q.30 **A shopkeeper bought six identical mobile phones for ₹18,000. He sold two of them for ₹18,000. What was his gain percentage on the two mobile phones sold?**

Ans

✘ A. 150%

✔ B. 200%

✘ C. 100%

✘ D. 250%

Q.31 **Which of the following belongs to an aldehyde group?**

Ans

✘ A. CH_3CH_2OH

✘ B. CH_3COOH

✔ C. CH_3CHO

✘ D. HCOOH

Q.32 **Shivraj is three times as old as his son, and his daughter is 3 years younger than the son. If the sum of the ages of these three people 3 years ago was 103 years, then Shivraj's present age (in years) is:**

Ans

✘ A. 68

✘ B. 61

✔ C. 69

✘ D. 55

Q.33 **If ₹2000 is invested for 2 years at an annual compound interest rate of 5% compounded annually, what is the compound interest earned at the end of 2 years?**

Ans

✘ A. ₹200

✘ B. ₹190

✘ C. ₹210

✔ D. ₹205

Q.34 **Sourav starts from Point A and drives 40 km towards the South. He then takes a right turn, drives 58 km, then turns right and drives 69 km. He then takes a right turn and drives 79 km. He takes a final right turn, drives 29 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 degrees turns only, unless specified.)**

Ans

✘ A. 24 km to the east

✘ B. 23 km to the east

✘ C. 20 km to the west

✔ D. 21 km to the west

Q.35 **Simplify $(14pq + 7q)^2 - (14pq - 7q)^2$.**

Ans

✘ A. $392p^2q$

✘ B. $196p^2q^2$

✘ C. $196pq^2$

✔ D. $392pq^2$

blackbook

Q.36 If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', what will be come in place of question mark '?' in the following equation?

7 B 4 D 12 A 6 C 12 = ?

Ans

✗ A. 42

✗ B. 40

✗ C. 36

✓ D. 38

Q.37 A student lifts a 20 kg box to a shelf 2 meters high in 5 seconds. What is the power developed by the student? (Take g = 10 m/s^2)

Ans

✓ A. 80 watts

✗ B. 40 watts

✗ C. 200 watts

✗ D. 100 watts

Q.38 A household purchases 4 kg of oil at ₹80 per kg and 6 kg of oil at ₹60 per kg. What is the weighted average price per kg of the oil?

Ans

✓ A. ₹68

✗ B. ₹58

✗ C. ₹88

✗ D. ₹78

Q.39 Seven boxes, A, B, C, D, G, H and I, are kept one over the other, but not necessarily in the same order.
A is kept immediately above C. G is kept immediately above I. Only D is kept above H.
Only two boxes are kept above A. G is not kept at third position from the bottom.
How many boxes are kept between B and D?

Ans

✓ A. Three

✗ B. One

✗ C. Four

✗ D. Two

Q.40 Find the value of $\sec A + \sin A(1 + \tan A) + \cos A(1 + \cot A) - \sqrt{1 + \cot$

Ans

✓ A. $2\sec A + 1$

✗ B. $\sec A + \sin A$

✗ C. $2\sec^2 A - 1$

✗ D. $\cos A + \operatorname{cosec} A$

Q.41 Each of N, Q, K, L, T, P and V has an exam on a different day of a week starting from Monday and ending on Sunday of the same week. Only two people have exams after N. Only three people have exams between L and N. T has the exam immediately after P but before N. Q does not have the exam on Sunday. V does not have the exam after P. Who has the exam immediately after Q?

Ans

✗ A. V

✓ B. K

✗ C. N

✗ D. P

Q.42 **Below are given two sets of numbers. In each set of numbers, a certain mathematical operation on first number results in the second number. Similarly, certain mathematical operation on second number results in the third number and so on. Which of the given options follows the same set of operations as in question?**
(NOTE – A two/three digit number cannot be broken into individual digits for operations e.g. if 37 is followed by 10, the operation cannot be 3+7 as a two digit number cannot be broken into individual digits)
17 - 34 - 170 - 180
43 - 86 - 430 - 440

Ans
- ✗ A. 38 - 43 - 258 - 269
- ✗ B. 41 - 123 - 738 - 748
- ✓ C. 40 - 80 - 400 - 410
- ✗ D. 33 - 66 - 528 - 538

Q.43 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol	+	4	9	5	8	7	2	@	%	$
Code	E	R	G	P	Q	A	B	K	T	V

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange the codes of the first and the last elements.
(ii) If the second and third elements are odd numbers, code the third element as the code of the second element.
(iii) If the fourth element is a symbol and the fifth element is a number, code both elements as ©.

What is the code for the following group of number-symbols?
+ 4 9 5 8

Ans
- ✗ A. ERGPQ
- ✗ B. PRGPQ
- ✓ C. QRGPE
- ✗ D. ERGPK

Q.44 **Refer to the following letter and symbol series and answer the question that follows.**

(Left) C G # E A @ $ R & U Ω T £ D J Y (Right)

If all the symbols are dropped from the series, which of the following will be fourth from the left?

Ans
- ✓ A. A
- ✗ B. C
- ✗ C. Y
- ✗ D. D

Q.45 **Each letter in the word KNIFERS is arranged in the English alphabetical order. How many letters are there in the English alphabetical order between the letter which is fourth from the left and the one which is first from the right in the new letter cluster thus formed?**

Ans
- ✗ A. 9
- ✗ B. 6
- ✓ C. 7
- ✗ D. 3

Q.46 Seven people, A, B, C, D, E, F and G are sitting in a row, facing north. Only four people sit to the right of F. Only two people sit between D and F. G is the immediate neighbour of A and D. C sits to the immediate right of E. How many people sit between B and C?

Ans

✗ A. Five

✓ B. Four

✗ C. Two

✗ D. Three

Q.47 A car's radiator should contain a solution of 71% antifreeze. A motorist has 15 litres of 27% antifreeze. How many litres (rounded off to 2 decimal places) of 92% antifreeze liquid should he add to his solution to produce a 71% antifreeze?

Ans

✗ A. 27.86

✓ B. 31.43

✗ C. 32.46

✗ D. 33.99

Q.48 What should come in place of '?' in the given series?
4 16 29 43 58 ?

Ans

✗ A. 70

✓ B. 74

✗ C. 75

✗ D. 77

Q.49 Each of P, Q, R, S, T, U and V has an exam on a different day of a week starting from Monday and ending on Sunday of the same week. P has an exam on Friday. Only one person has an exam between P and T. R has an exam on the day immediately before Q but not on a Monday. U has an exam on the day immediately after S but not on a Sunday. V has an exam on the day immediately after T. How many people have exams before T?

Ans

✗ A. One

✗ B. Three

✓ C. Two

✗ D. None

Q.50 What is the nearest integer to 72979 that is divisible by 9?

Ans

✗ A. 72980

✓ B. 72981

✗ C. 72978

✗ D. 72977

Q.51 A vessel in the form of an inverted cone has a radius of 18 cm. This cone is partly filled with oil, which is dripping from a hole in the tip of the cone at a rate of 1 cm^3 in 45 minutes. In the beginning, the level of oil is 6 cm from top and the surface area of oil is 196π cm^2. How long (in hours) will it take the cone to be completely empty?

Ans

✗ A. 1092π

✓ B. 1029π

✗ C. 1209π

✗ D. 1290π

Q.52 A worker uses a pulley system to lift a load vertically upwards with a constant speed. If the effort applied is 100 N and the load is 200 N, which statement best describes the system?

Ans

✗ A. The system has a mechanical advantage of one

✗ B. The system is an ideal machine

✗ C. The effort is greater than the load

✓ D. The system has a mechanical advantage of two

blackbook

Q.53 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**
YUW 12, TPR 18, OKM 24, JFH 30, ?

Ans
✗ A. EAD 34
✗ B. FAC 36
✗ C. EBD 34
✓ D. EAC 36

Q.54 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol	2	@	9	5	$	&	3	%	7	#	4	8	1	6
Code	T	F	A	J	L	E	W	Q	P	D	B	U	R	S

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange the codes of the first and last elements.
(ii) If the second and third elements are odd numbers, the third element is coded as the code of the second element.
(iii) If the fourth element is a symbol, code the fourth element as ©.

What is the code for the following group of number-symbols?
8952$

Ans
✗ A. UAJTL
✗ B. UAATQ
✓ C. UAATL
✗ D. UAJAL

Q.55 **This question is based on the five, three-digit numbers given below.**
842 974 121 352 465
(Example- 697 – First digit = 6, second digit = 9 and third digit = 7)

What will be the resultant if the second digit of the highest number is added to the third digit of the lowest number?

Ans
✗ A. 10
✓ B. 8
✗ C. 5
✗ D. 6

Q.56 **24 is related to 140 following a certain logic. Following the same logic, 17 is related to 91. To which of the following is 26 related, following the same logic?**
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding / subtracting /multiplying etc. 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
✗ A. 153
✗ B. 160
✓ C. 154
✗ D. 148

Q.57 **A wildlife reserve's forest cover increased by 5% annually for two years and then decreased by 10% in the third year due to a forest fire. If the present forest area is 99,225 hectares, what was the original forest area (in hectares) before these changes?**

Ans
✗ A. 99,000
✗ B. 1,10,250
✗ C. 99,750
✓ D. 1,00,000

black

Q.58 **What will come in place of the question mark (?) in the following equation if '+' and '−' are interchanged and '×' and '÷' are interchanged?**

333 − 84 × 4 ÷ 2 + 308 = ?

Ans

✗ A. 60

✗ B. 62

✓ C. 67

✗ D. 65

Q.59 **A and B started a business in which B invests ₹1,80,000. At the end of the year, the total profit is ₹95,000, and A's share in the profit is ₹20,000. Find A's investment.**

Ans

✗ A. ₹44,000

✗ B. ₹42,000

✗ C. ₹46,000

✓ D. ₹48,000

Q.60 **An ant travels toward a food source. It covers 40% of the total distance at a speed of 60 feet/hour, and the remaining 60% at a speed of 90 feet/hour. What is the average speed of the ant for the entire journey?**

Ans

✗ A. 77 feet/hour

✗ B. 76 feet/hour

✗ C. 74 feet/hour

✓ D. 75 feet/hour

Q.61 **A tap fills a tank in 6 hours. Another tap empties the full tank in 15 hours. How long (in hours) will it take to fill half of the tank, if the tank is empty initially and both the taps are opened together?**

Ans

✗ A. 10

✗ B. 30

✗ C. 15

✓ D. 5

Q.62 **What should come in place of '?' in the given series?**
4 9 15 22 30 ?

Ans

✗ A. 37

✓ B. 39

✗ C. 38

✗ D. 40

Q.63 **If a mobile phone is sold at ₹12,000 after a 20% increase in its original price, what was its original price?**

Ans

✗ A. ₹9,000

✓ B. ₹10,000

✗ C. ₹11,000

✗ D. ₹11,500

Q.64 **What should come in place of '?' in the given series?**
216 176 140 108 80 ?

Ans

✗ A. 62

✓ B. 56

✗ C. 61

✗ D. 58

blackbook

Q.65 **This question is based on the five, three-digit numbers given below.**
(Left) 147 459 582 456 193 (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 added to the second digit of the lowest number?

Ans
✗ A. 2
✓ B. 6
✗ C. 4
✗ D. 8

Q.66 **Which of the folowing creates the initial movement of water into the root from the soil?**

Ans
✗ A. Passive absorption of minerals
✓ B. Active uptake of ions by root cells
✗ C. Gravity pulling water downward
✗ D. Translocation from the leaves

Q.67 **If the ratio of A's salary to B's salary is 3:2 and A earns ₹18,000 per month, what is B's monthly salary?**

Ans
✓ A. ₹12,000
✗ B. ₹15,000
✗ C. ₹9,000
✗ D. ₹10,000

Q.68 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol	7	!	+	*	@	%	#	4	3	6
Code	U	Y	Q	G	E	O	Z	H	C	T

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange the codes of the first and the last elements.
(ii) If the second and third elements are odd numbers, code the third element as the code of the second element.
(iii) If the fourth element is a symbol and the fifth element is a number, code both elements as ©.

What is the code for the following group of number-symbols?
7 ! + * @

Ans
✗ A. UZQGE
✗ B. UYOGE
✓ C. UYQGE
✗ D. OYQGE

Q.69 **Seven people, A, B, C, I, J, K and L are sitting in a row, facing north. Only B sits to the left of J. Only four people sit between B and A. Only C sits between I and K and I is not an immediate neighbor of A. Who sits at the extreme right of the line?**

Ans
✗ A. I
✓ B. L
✗ C. A
✗ D. C

Q.70 A and B are angles such that $0 < B < A < \frac{\pi}{2}$. If $\tan(A+B) = \sqrt{3}$ and $\cos(A-B) = \frac{\sqrt{3}}{2}$, then what is the value of $4\cos^2 A + 9\tan^2 2B$?

Ans

✗ A. 6

✗ B. 8.2

✓ C. 5

✗ D. 7.5

Q.71 **Select the pair which follows the same pattern as that followed by the two set of pairs given below. Both pairs follow the same pattern.**

UST : WPV
YMX : AJZ

Ans

✓ A. CGB : EDD

✗ B. AYM : DWP

✗ C. TKY : WGB

✗ D. HAM : KXP

Q.72 **Which of the following statements correctly differentiates audible, infrasonic, and ultrasonic sounds?**

Ans

✗ A. Audible sounds lie between 20 Hz and 20,000 Hz, infrasonic above 20,000 Hz, and ultrasonic below 20 Hz.

✗ B. Audible, infrasonic, and ultrasonic sounds all have the same frequency range but differ in loudness.

✗ C. Audible sounds have frequencies below 20 Hz, infrasonic between 20 Hz and 20,000 Hz, and ultrasonic above 20,000 Hz.

✓ D. Audible sounds lie between 20 Hz and 20,000 Hz, infrasonic below 20 Hz, and ultrasonic above 20,000 Hz.

Q.73 **A,B,C,D and E have scored different marks in an exam. E scored less than only 1 person. A scored more than B but less than D. B did not score the lowest. Who scored the lowest?**

Ans

✗ A. B

✗ B. A

✗ C. E

✓ D. C

Q.74 **F, G, H, M, N and O 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.**
Only two people live between F and N. Only two people live between M and H. No one lives above M. N lives below H but above O.
On which floor does G live on?

Ans

✗ A. Floor numbered 3

✓ B. Floor numbered 4

✗ C. Floor numbered 5

✗ D. Floor numbered 2

Q.75 **8 is related to 40 following a certain logic. Following the same logic, 12 is related to 60. To which of the given options is 26 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 etc. 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

✓ A. 130

✗ B. 150

✗ C. 120

✗ D. 140

blackbook

रेलवे भर्ती बोर्ड | RAILWAY RECRUITMENT BOARD

सीईएन ०१/२०२६ सहायक लोको पायलट (एएलपी) के पद पर भर्ती

CEN 01/2026 Recruitment of Assistant Loco Pilot (ALP)

Test Date	05/11/2026
Test Time	4:00 PM - 5:00 PM
Subject	RRB ALP 2026 CBT 1

*** 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 ALP**

Q.1 **A wildlife survey reported that the deer population in a reserve became 13,200 after a 10% annual increase. What was the deer population one year earlier?**

Ans
- ✔ A. 12000
- ✘ B. 12120
- ✘ C. 14520
- ✘ D. 11880

Q.2 **X, Y, Z, A and B have different ages. Only one person is younger than X. A is older than B and B is older than Z. Z is older than X. Who is the oldest?**

Ans
- ✘ A. Y
- ✘ B. X
- ✔ C. A
- ✘ D. Z

Q.3 **38 is related to 210 following a certain logic. Following the same logic, 30 is related to 170. To which of the following is 22 related, following the same logic?**
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding / subtracting /multiplying etc. 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
- ✘ A. 132
- ✔ B. 130
- ✘ C. 126
- ✘ D. 128

Q.4 If $\tan(9x-15)^\circ = \cot(8x+20)^\circ$, then find the value of x.

Ans
- ✘ A. 8
- ✘ B. 10
- ✔ C. 5
- ✘ D. 4

Q.5 **An event management company purchased tickets worth ₹12,000 and sold them to a booking partner at a 15% profit. The booking partner then sold the tickets at a 10% profit on the purchase price. What was the final selling price (in ₹)?**

Ans

✔ A. 15,180

✘ B. 14,580

✘ C. 15,400

✘ D. 13,800

Q.6 **Seven friends, E, F, G, H, W, X and Y, are sitting in a straight line facing north. Only two people sit between Y and W. Only E sits to the right of X. Only two people sit between W and E. H sits at some place to the right of F but at some place to the left of G. Who sits third from the right end of the line?**

Ans

✘ A. X

✘ B. F

✘ C. W

✔ D. G

Q.7 **In this question, a group of numbers/symbols is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then the codes for the respective number/symbol are to be followed directly as given in the table.**

Number/Symbol	4	5	?	!	9	7	$	#	6	+
Code	B	O	Q	P	S	X	M	F	W	V

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange their codes.
(ii) If the second and third elements are odd numbers, code the third as the code of the second.
(iii) If the fourth element is a symbol and the fifth element is a number, code both as ©.

What will be the code for the following group?
4 5 ? ! 9

Ans

✘ A. FOQPS

✔ B. BOQ©©

✘ C. BOWPS

✘ D. BOQPM

Q.8 **Refer to the following letter series and answer the question**
(Left) D G J M B W Z L E C I R U H Y L F K V X P W T O Q A (Right)

How many such consonants are there each of which is immediately preceded by a vowel and
also immediately followed by a vowel?

Ans

✘ A. Two

✘ B. More than three

✔ C. Three

✘ D. One

Q.9 **Two trains, T and U, are moving towards each other on parallel tracks. Train T is 210 m long and is moving at 40 km/hr, while Train U is 240 m long and is moving at 50 km/hr. How long (in seconds) will it take for the two trains to cross each other from the moment they meet?**

Ans

✔ A. 18 sec

✘ B. 24 sec

✘ C. 21.6 sec

✘ D. 21 sec

Black Book

Q.10 **A person invested ₹56,000 at a rate of 12% per annum simple interest for 3 years. Find the amount (in ₹) he will receive after 3 years.**

Ans

✗ A. 77,160

✓ B. 76,160

✗ C. 78,160

✗ D. 75,160

Q.11 **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 is the one that 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

✓ A. VS–PP

✗ B. BY–WT

✗ C. NK–IF

✗ D. LI–GD

Q.12 **Why is electrolysis of water classified as a decomposition reaction?**

Ans

✗ A. Hydrogen replaces oxygen

✗ B. Electricity heats the water

✗ C. Oxygen combines with electrodes

✓ D. Water splits into hydrogen and oxygen

Q.13 **Chords AB and CD of a circle intersect at a point T inside the circle. If AB = 27 cm, AT = 16 cm and TC = 20 cm, then CD (in cm) is equal to:**

Ans

✗ A. 31.2

✗ B. 35.6

✓ C. 28.8

✗ D. 22.3

Q.14 **A delivery van consumes 20 litres of diesel to travel 260 km. What is the van's average mileage (in km per litre)?**

Ans

✗ A. 12

✗ B. 10

✗ C. 14

✓ D. 13

Q.15 **Which of the following properties of simple permanent tissue helps aquatic plants to float?**

Ans

✗ A. Hardness from lignified sclerenchyma

✓ B. Presence of air spaces in parenchyma

✗ C. Unevenly thickened corners of a cell

✗ D. Flexibility due to pectin in collenchyma

Q.16

$$\text{If } 4(\sec^2 59^\circ - \cot^2 31^\circ) + \frac{6\sqrt{2}}{7}\cos 45^\circ - 2\alpha \tan^2 56^\circ \times \tan^2 34^\circ = 2\alpha$$

Ans

✗ A. $2\frac{5}{14}$

✓ B. $1\frac{3}{14}$

✗ C. $2\frac{3}{14}$

✗ D. $1\frac{5}{14}$

Q.17 One pipe can fill a tank in 12 min while another pipe can empty completely filled tank in 14 min. If both the pipes are operated together on empty tank, how long (in min) will it take to fill two-third of the tank?

Ans

✗ A. 224

✗ B. 168

✗ C. 112

✓ D. 56

Q.18 This question is based on the five, three-digit numbers given below.
(Left) 682 315 947 524 761 (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 second digit of the highest number is added to the first digit of the lowest number?

Ans

✗ A. 8

✗ B. 9

✓ C. 7

✗ D. 10

Q.19 The HCF of two numbers is 18, and their LCM is 360. If one of the numbers is 90, find the other number.

Ans

✗ A. 90

✗ B. 180

✗ C. 120

✓ D. 72

Q.20 Simplify $(14pq + 15q)^2 - (14pq - 15q)^2$.

Ans

✗ A. $420p^2q^2$

✓ B. $840pq^2$

✗ C. $420pq^2$

✗ D. $840p^2q$

Q.21 Identify the non-metal oxide from the following which when dissolved in water does NOT formed acid.

Ans

✗ A. CO2

✗ B. SO2

✓ C. NO

✗ D. NO2

Q.22 Based on the English alphabetical order, three of the following four letter-clusters are alike in a certain way and thus form a group. Which letter-cluster 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

✓ A. RO-KI

✗ B. YV-RZ

✗ C. JG-CK

✗ D. IF-BJ

Q.23 **A food delivery company records the number of completed deliveries over seven days as 48, 50, 48, 46, x, 50, and 48, where x is a positive integer. If 48 remains the unique mode, determine the smallest possible value of x.**

Ans

✗ A. 46

✗ B. 50

✓ C. 1

✗ D. 48

Q.24 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol	4	3	+	%	8	6	@	!	&	$
Code	Y	W	H	O	I	J	C	M	N	K

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange the codes of the first and the last elements.
(ii) If the second and third elements are odd numbers, code the third element as the code of the second element.
(iii) If the fourth element is a symbol and the fifth element is a number, code both elements as ©.

What is the code for the following group of number-symbols?
4 3 + % 8

Ans

✗ A. YWHOM

✗ B. YWHOI

✓ C. YWH©©

✗ D. YCHOI

Q.25 **The position(s) of how many letters will remain unchanged if each letter in the word HUSBAND is arranged in the English alphabetical order?**

Ans

✗ A. 1

✓ B. 0

✗ C. 2

✗ D. 3

Q.26 **Zoya starts from point A and drives 24 km towards the East. She then takes a right turn and drives 20 km. She then takes a right turn and drives 22 km, takes a right turn and drives 31 km. She takes a final left turn and drives 2 km and stops at point B. How far (shortest distance) and towards which direction should she drive in order to reach Point A again? (All turns are 90-degree turns only unless specified.)**

Ans

✓ A. 11 km to the South

✗ B. 9 km to the North

✗ C. 7 km to the South

✗ D. 8 km to the West

Q.27 **Refer to the following series and answer the question that follows.**
(Left)
L U F I T U A E B A D A Y J H F A K A N F G D (Right)
How many letters are there in the English alphabetical order between the letter which is second from the right end and third from the left end of the series?

Ans

✗ A. Two

✗ B. Three

✓ C. None

✗ D. One

black

Q.28 **A school plans to replace a rectangular garden measuring 49 m by 196 m with a square garden of the same area. What should be the side length (in metres) of the square garden?**

Ans

✗ A. 122

✓ B. 98

✗ C. 147

✗ D. 70

Q.29 **A river 10 m deep and 36 m wide is flowing at a speed of 2.7 km/hr. Find the amount of water (in m^3) that runs into the sea per minute.**

Ans

✓ A. 16,200

✗ B. 12,000

✗ C. 10,260

✗ D. 12,600

Q.30 **Seven people Jack, Kanika, Mehul, Nidhi, Siya, Tina and Yogesh are sitting around a circular table facing the centre. Yogesh is the immediate neighbour of both Kanika and Mehul and second to the left of Nidhi. Kanika sits second to the right of Jack. Tina is not an immediate neighbour of Nidhi. How many people sit between Yogesh and Jack when counted from the left of Yogesh?**

Ans

✗ A. One

✓ B. Two

✗ C. None

✗ D. Three

Q.31 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**

VAN16 WCP14 XER12 YGT10 ?

Ans

✓ A. ZIV8

✗ B. YGV8

✗ C. ZGV8

✗ D. YIV8

Q.32 **Below are given two sets of numbers. In each set of numbers, a certain mathematical operation on first number results in the second number. Similarly, certain mathematical operation on second number results in the third number and so on. Which of the given options follows the same set of operations as in question?**
(NOTE – A two/three digit number cannot be broken into individual digits for operations e.g. if 37 is followed by 10, the operation cannot be 3+7 as a two digit number cannot be broken into individual digits)
27 - 31 - 248 - 237
11 - 15 - 120 - 109

Ans

✗ A. 1 - 4 - 28 - 17

✓ B. 26 - 30 - 240 - 229

✗ C. 3 - 7 - 70 - 60

✗ D. 3 - 8 - 64 - 54

Q.33 **A rainwater harvesting tank is in the shape of a hemisphere of radius 3.5 m. During heavy rainfall, the tank gets completely filled. If the water from this tank is used to fill cylindrical buckets of radius 0.35 m and height 0.7 m, what is the maximum number of buckets that can be completely filled?**

Ans

✗ A. 373

✗ B. 353

✗ C. 313

✓ D. 333

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Q.34 **A dress has a marked price of ₹1,200. What is the percentage discount if the selling price is ₹960?**

Ans

✔ A. 20%

✘ B. 30%

✘ C. 25%

✘ D. 15%

Q.35 **Imagine a city where smokeless tobacco use is very common. Which public health problem is likely to be most prevalent?**

Ans

✘ A. Rise in skin allergies

✔ B. High rates of oral cancer

✘ C. Decrease in viral infections

✘ D. Increase in bone fractures

Q.36 In a quadrilateral ABCD, the measure of $\angle A$ is 19° more than $\angle C$, $\angle D$ is 8° more than twice the $\angle B$. Find the value of $\angle A + \angle D -$

Ans

✔ A. 141°

✘ B. 137°

✘ C. 108°

✘ D. 129°

Q.37 **A pencil appears bent when partially immersed in a glass of water. Which phenomenon best explains this observation, and where does it occur?**

Ans

✘ A. Reflection at the water surface

✘ B. Scattering of light by water molecules

✘ C. Dispersion of light in water

✔ D. Refraction at the water-air interface

Q.38 **Which situation best illustrates the scientific definition of work done by a force?**

Ans

✔ A. A person lifts a box vertically upward against gravity

✘ B. Carrying a bag at constant speed across a level floor

✘ C. Placing a book gently onto a table without sliding it

✘ D. Pushing against a stationary wall with maximum effort

Q.39 **Each of P, Q, R, S, T, U and V 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 Thursday. Only two people have exams between U and S. P has an exam on the day immediately after U. Only one person has an exam between R and Q. V has an exam on the day immediately before S. Q has an exam on the day immediately after T. On which day does R have an exam?**

Ans

✘ A. Thursday

✘ B. Tuesday

✔ C. Friday

✘ D. Saturday

Q.40 **Each of the digits in the number 36784521 is arranged in descending order from left to right. Which of the following digits will be fifth from the right in the new number thus formed?**

Ans

✔ A. 5

✘ B. 4

✘ C. 6

✘ D. 7

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Q.41 **This question is based on the following words.**

DUB OWE SKI FIN

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 it in the English alphabetical order. In how many letter-clusters thus formed, will no vowel appear?

Ans

✗ A. Three

✗ B. One

✓ C. Two

✗ D. Four

Q.42 **Seven people, A, B, C, D, E, F and G are sitting in a row, facing north. C sits second from the right end of the row. Only three people sit to the left of B. D is the immediate neighbour of A and E. F sits second to the right of E. How many people sit between G and D?**

Ans

✗ A. Three

✓ B. Four

✗ C. One

✗ D. Two

Q.43 **Each of E, X, P, O, R, T and S has exam on a different day of a week starting from Monday and ending on Sunday of the same week. Only three people have exam between E and P. P has exam on the last day of the week. T has exam on the second day after R. O has exam immediately the day before S. X doesn't have exam on Friday. How many people have exam after X?**

Ans

✗ A. Five

✗ B. Two

✗ C. Four

✓ D. Six

Q.44 **If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', then what will come in place of the question mark (?) in the following equation?**
107 D 132 A 4 B 3 C 11 = ?

Ans

✗ A. 16

✓ B. 19

✗ C. 14

✗ D. 15

Q.45 **What will come in place of the question mark (?) in the following equation if '+' and '−' are interchanged and '×' and '÷' are interchanged?**

9 ÷ 5 + 10 × 2 − 3 = ?

Ans

✗ A. 50

✓ B. 43

✗ C. 55

✗ D. 40

Q.46 **Six boxes A, B, F, G, H and I are kept one over the other but not necessarily in the same order. Only two boxes are kept between I and B. Only G is kept above H. No box is kept below B. F is kept at some place above A. How many boxes are kept between A and F?**

Ans

✗ A. One

✗ B. Three

✗ C. Two

✓ D. None

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Q.47 **Select the pair that follows the same pattern as that followed by the two pairs given below. Both pairs follow the same pattern.**

VZY−XBA
CGF−EIH

Ans

✗ A. BEC−CGF

✗ B. BFE−CHF

✗ C. BEC−DHG

✓ D. BFE−DHG

Q.48 **A question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.**

Question:
Among 5 sticks, A, E, Z, M and D, each having a different height, which stick is the tallest?

Statements:
(I) M is taller than E. E is taller than D.
(II) D is shorter than A but taller than Z.

Ans

✗ A. Data in statement II alone is sufficient to answer the question while data in statement I is not.

✗ B. Data in both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.

✗ C. Data in statement I alone is sufficient to answer the question while data in statement II is not.

✓ D. Data in both statements I and II together are NOT sufficient to answer the question.

Q.49 **Which of the following numbers is divisible by both 46 and 41?**

Ans

✗ A. 62810

✗ B. 60607

✓ C. 62238

✗ D. 63842

Q.50 **What should come in place of '?' in the given series?**
42 60 76 90 102 112 ?

Ans

✗ A. 122

✗ B. 118

✓ C. 120

✗ D. 121

Q.51 **Select the pair that follows the same pattern as that followed by the two pairs given below. Both pairs follow the same pattern.**

NJG−DZW
DZW−TPM

Ans

✗ A. VQM−KGD

✓ B. VRO−LHE

✗ C. VRO−KHD

✗ D. VQM−LHE

Q.52 **Refer to the following series and answer the question that follows.**
(Left)
E I I N T I K E M R A H G D A H B G K I D F H (Right)
How many letters are there in the English alphabetical order between the letter which is seventh from the right end and second from the left end of the series?

Ans
- ✗ A. Seven
- ✓ B. Six
- ✗ C. Five
- ✗ D. Eight

Q.53 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol	3	@	8	5	$	#	2	%	7	&	4	9	1	6
Code	K	F	U	P	L	D	B	Q	R	E	T	A	H	M

Conditions –
(i) If the first element is a symbol and the last element is a number, interchange the codes of the first and last elements.
(ii) If the second and third elements are even numbers, the third element is coded as the code of the second element.
(iii) If the fourth element is a symbol, code the fourth element as ©.

What is the code for the following group of number-symbols?
9865@

Ans
- ✗ A. AUMPM
- ✗ B. AUUPM
- ✗ C. AUMPF
- ✓ D. AUUPF

Q.54 **An online learning platform reduced its annual subscription fee by 25% during an admission campaign and later increased the discounted subscription fee by 20%. If the original subscription fee was ₹8,000, what is the final subscription fee (in ₹)?**

Ans
- ✗ A. 7,600
- ✗ B. 7,400
- ✓ C. 7,200
- ✗ D. 7,000

Q.55 **A box of mass 5 kg is pushed along a horizontal surface with a constant force of 20 N for 4 meters. If the box starts from rest and experiences a frictional force of 5 N, what is the final kinetic energy of the box according to the work energy theorem?**

Ans
- ✗ A. 80 J
- ✓ B. 60 J
- ✗ C. 15 J
- ✗ D. 20 J

Q.56 **If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '−', then what will come in place of the question mark (?) in the following equation?**
40 D 72 C 115 A 23 B 12 = ?

Ans
- ✓ A. 28
- ✗ B. 25
- ✗ C. 24
- ✗ D. 22

black

Q.57 **Seven boxes C, D, E, F, X, Y and Z are kept one over the other but not necessarily in the same order. Only C is kept above Y. Only E is kept between Y and X. Only Z is kept below D.**
How many boxes are kept between F and Z?

Ans
- ✗ A. Three
- ✓ B. One
- ✗ C. Two
- ✗ D. Four

Q.58 **A car's radiator should contain a solution of 63% antifreeze. A motorist has 4 litres of 23% antifreeze. How many litres (rounded off to 2 decimal places) of 99% antifreeze liquid should he add to his solution to produce a 63% antifreeze?**

Ans
- ✗ A. 6.05
- ✗ B. 10.25
- ✓ C. 4.44
- ✗ D. 7.21

Q.59 **This question is based on the following words.**

ACT LAG GEL IDS

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 it in the English alphabetical order. In how many letter clusters thus formed, will no vowel appear?

Ans
- ✗ A. One
- ✓ B. Four
- ✗ C. Three
- ✗ D. Two

Q.60 **Two sets of numbers are given below. In each set of numbers, certain mathematical operation(s) on the first number result(s) in the second number. Similarly, certain mathematical operation(s) on the second number result(s) in the third number and so on. Which of the given options follows the same set of operations as in the given sets?**

(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 to/subtracting from/multiplying with 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

6 - 36 - 46 - 56
8 - 64 - 74 - 84

Ans
- ✗ A. 11 - 131 - 141 - 151
- ✓ B. 9 - 81 - 91 - 101
- ✗ C. 10 - 100 - 120 - 130
- ✗ D. 15 - 225 - 235 - 255

Q.61 **A borrower repaid a loan through two equal yearly installments of ₹35,280 each, with the first installment due at the end of the first year. If interest was charged at 5% per annum compounded annually, what was the total interest paid (in ₹)?**

Ans
- ✓ A. 4,960
- ✗ B. 4,640
- ✗ C. 5,280
- ✗ D. 4,800

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Q.62 Find the fourth proportional of $\sqrt{48}$, $4\sqrt{3}$ and $\sqrt{169}$.

Ans
- ✗ A. 14
- ✗ B. $\sqrt{13}$
- ✓ C. 13
- ✗ D. $\sqrt{12}$

Q.63 **A shopkeeper bought six identical mobile phones for ₹60,000. He sold two of them for ₹57,000. What was his gain percentage on the two mobile phones sold?**

Ans
- ✓ A. 185%
- ✗ B. 182%
- ✗ C. 187%
- ✗ D. 184%

Q.64 **TXBZ is related to AEIG in a certain way based on the English alphabetical order. In the same way, DHLJ is related to KOSQ. To which of the following is RVZX related, following the same logic?**

Ans
- ✗ A. YBFE
- ✗ B. YCFE
- ✗ C. YDFN
- ✓ D. YCGE

Q.65 **How do companion cells contribute to the function of sieve tubes?**

Ans
- ✗ A. They provide structural support to the phloem.
- ✓ B. They monitor the loading and unloading of sugars.
- ✗ C. They store food materials and resins.
- ✗ D. They regulate latex storage in sieve tubes.

Q.66 **Vikrant starts from Point A and drives 55 km towards the North. He then takes a right turn, drives 60 km, then turns right and drives 70 km. He then takes a right turn and drives 71 km. He takes a final right turn, drives 15 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 degrees turns only, unless specified.)**

Ans
- ✗ A. 13 km to the west
- ✗ B. 10 km to the east
- ✓ C. 11 km to the east
- ✗ D. 12 km to the west

Q.67 **The position(s) of how many letters will remain unchanged if each letter in the word POINTED is arranged in the English alphabetical order?**

Ans
- ✓ A. Two
- ✗ B. None
- ✗ C. Three
- ✗ D. One

Q.68 **What should come in place of '?' in the given series?**
28 33 39 46 54 63 ?

Ans
- ✓ A. 73
- ✗ B. 75
- ✗ C. 71
- ✗ D. 76

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Q.69 **Hitesh is three times as old as his son, and his daughter is 3 years younger than the son. If the sum of the ages of these three people 3 years ago was 83 years, then Hitesh's present age (in years) is:**

Ans

✔ A. 57

✘ B. 68

✘ C. 64

✘ D. 67

Q.70 **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.**

Number/symbol	1	#	6	@	3	%	8	&	5	$	2	+	9	4
Code	H	M	B	T	K	P	A	F	U	R	D	W	L	Q

Conditions –
(i) If the third element is an odd number, code the second element as ©.
(ii) If the first element is a symbol, interchange the codes for the first and last elements.
(iii) If the fifth element is a symbol, the third element should be coded with the code for the fifth element.

What is the code for the following group of numbers?
85326

Ans

✘ A. A©KDA

✔ B. A©KDB

✘ C. A©QDB

✘ D. AUKDB

Q.71 **A question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.**

Question:
Among 5 sticks, Q, L, M, R and E, each having a different height, which stick is the tallest?

Statements:
(I) M is taller than only one stick. R is shorter than L but taller than Q.
(II) R is taller than E.

Ans

✘ A. Data in statement I alone is sufficient to answer the question while data in statement II is not.

✘ B. Data in both statements I and II together are NOT sufficient to answer the question.

✔ C. Data in both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.

✘ D. Data in statement II alone is sufficient to answer the question while data in statement I is not.

Q.72 **Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?**

GUL 2 JSJ -4 MQH 8 ? SMD 32

Ans

✘ A. HJI -43

✘ B. KOI -21

✘ C. KYT -11

✔ D. POF -16

Q.73 **Each letter in the word FROCKED is arranged in the English alphabetical order. How many letters are there in the English alphabetical order between the letter which is third from the left and the one which is second from the right in the new letter cluster thus formed?**

Ans

✔ A. 9

✘ B. 10

✘ C. 8

✘ D. 12

black

Q.74 **The 7-digit number 43A762B is divisible by 12. What is the minimum value of (A + B)?**

Ans

✗ A. 3

✗ B. 1

✓ C. 2

✗ D. 4

Q.75 **What should come in place of the '?' in the given series?**

36,44,60,84,116, ?

Ans

✗ A. 157

✓ B. 156

✗ C. 155

✗ D. 158

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