









# **Rrb Alp CBT - 1 Previous Year Question Paper Overview**

Here, you can solve all the questions asked in Rrb Alp CBT - 1 Previous Year Question Paper on 2018-08-13 in the Morning exam. The detailed solutions are also provided for every previous year question and some of these questions can be asked again in your Rrb Alp CBT - 1 exam. There are 75 questions in the exam and 60 minutes are provided for the Rrb Alp CBT - 1 exam. The Cutoff of the exam was 40 marks hence you should try to score at least 50 marks.

# Rrb Alp CBT - 1 Previous Year Question Paper: Questions and Solutions

## Question 1:

Select the option that depicts the correct mirror image for the given word.

Difficulty: Moderate

Average Time : 42 Seconds

# Options:

1. CNORTS

2 CNOSTS

3 STRONG

4. GNORTS

#### Solution:

The correct answer is **Option 2** i.e.  $\mathbb{C} \setminus \mathbb{N} \cup \mathbb{A} \setminus \mathbb{C}$ .

In the mirror image left becomes the right and vice-versa. So, the left of the word as well as the letter becomes right and the right becomes left. Thus only option 2 shows the correct image.

Hence, the correct answer is option 2.

#### Question 2:

The given graph shows the distribution of minerals in the human body. Based on the given data, if a person has a total of 1000 IU of all the mentioned minerals in his body, what is the units of calcium distributed in his body?

Difficulty: Moderate Average Time: 72 Seconds

Options:

Page No: 1



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- 2. 200 IU
- 3. 500 IU
- 4. 400 IU

#### Solution:

The correct answer is Option 4 i.e. 400 IU.

Total = 1000 IU

Calcium = 40%

Units of calcium distributed in his body =  $(\frac{40}{100})$   $\tilde{A}$ — 1000\)

= 400 IU

#### Question 3:

From the given four figures choose the correct water image of the below figure:

Difficulty: Moderate Average Time: 39 Seconds

# Options:

- 1. A
- 2. C
- 3. D
- 4. B

# Solution:

The correct answer is Option 3 i.e. D.

In the water image up and down the side of the image is changed only. So, option 3 shows the correct image of the given figure.

Hence, the correct answer is option 3.

# Question 4:

Two identical resistors, each of 10, are connected in parallel. This combination, in turn, is connected to a third resistor of 10. The equivalent resistance of the combination is \_\_\_\_\_\_.

Difficulty : Moderate Average Time : 45 Seconds

Page No: 2

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# Options:

- 1. 10
- 2. 30
- 3. 15
- 4. 5

# Solution:

The correct answer is Option 3 i.e. 15.

• The equivalent resistance in parallel combination is given by :

$$\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2}$$

$$\frac{1}{R} = \frac{1}{10} + \frac{1}{10}$$

$$R = 5 \Omega$$

• Equivalent reisistance is given by :

R = 5 ohms + 10 ohms

R = 15 ohms

Hence, the equivalent resister of the combination is 15 ohms.

## Question 5:

What does the kinetic energy of an object increase with?

Difficulty: Moderate Average Time: 58 Seconds

# Options:

1. Speed

2. Mass

3. Friction

4. Time

Solution:

Page No: 3

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The correct answer is **Option 1** i.e. **Speed**.

- The amount of kinetic energy possessed by an object depends directly upon the square of speed (or velocity).
- The equation for Kinetic Energy is: KE = 1/2 mv2.
- Kinetic energy has a direct relationship with mass, meaning that as mass increases so does the Kinetic Energy of an object.

## Question 6:

The length of one side of a rhombus is 13 cm and one of the diagonals is 10 cm. What is the length of the other diagonal?

Difficulty: Moderate Average Time: 49 Seconds

Options:

1. 22 cm

2. 23 cm

3. 24 cm

4. 25 cm

Solution:

The correct answer is Option 3 i.e. 24 cm.

Diagonals of a rhombus bisect each other at right angles

Length of one side of rhombus = 13 cm

Length of one diagonal = 10 cm

By using Pythagoras theorem

 $(Hypotenuse)^2 = (Perpendicular)^2 + (Base)^2$ 

 $(13)^2 = (5)^2 + (Base)^2$ 

 $(Base)^2 = 169 - 25$ 

 $(Base)^2 = 144$ 

(Base) = 12

So length of the diagonal = 12 + 12 = 24 cm

#### Question 7:

Consider the argument and decide which of the given assumptions is/are implicit. Argument: Alexander the Great was mortal. Assumption: 1. Alexander the Great was human. 2. Alexander the Great is a Greek.

Page No: 4

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**Difficulty: Moderate** 

Average Time: 59 Seconds

# Options:

- 1. Only assumption 1 is implicit
- 2. Both 1 and 2 are implicit
- 3. Neither 1 nor 2 is implicit
- 4. Only assumption 2 is implicit

## Solution:

The correct answer is **Option 1** i.e. **Only assumption 1 is implicit**.

# **Given Argument:**

Alexander the Great was mortal.

# **Assumption:**

- 1. Alexander the Great was human. **Implicit** (Alexander was the great is already given and he was a human so he was the great human. Thus it is implicit)
- 2. Alexander the Great is Greek. Not implicit (It is not given that his Greek so it is not implicit)

Hence, the correct answer is **Only assumption 1 is implicit**.

# Question 8:

Which of the following is a surface phenomenon?

Difficulty: Moderate Average Time: 57 Seconds

# Options:

- 1. Freezing
- 2. Melting
- 3. Evaporation
- 4. Boiling

## Solution:

The correct answer is **Option 3** i.e. **Evaporation**.

- The properties of liquid which can be only seen at the free surface of the liquid is a surface phenomenon.
- Evaporation of liquid is a surface phenomenon in which the topmost layer of liquid is converted into vapour without

Page No: 5

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reaching the boiling point.

- Evaporation is a surface phenomenon because it occurs in the surface. For example when we put wet clothes for drying we spread them out so that the surface area gets increased.
- When the surface area increases the water will get enough space to get into vapour stage and thus evaporation happens easily.

## Question 9:

If in a certain code, GREEN is written as ITGGP, then how will PINK be written as in the same code?

Difficulty: Moderate Average Time: 61 Seconds

# Options:

- 1. KLON
- 2. TUMJ
- 3. RKQS
- 4. RKPM

#### Solution:

The correct answer is **Option 4** i.e. **RKPM**.

Here GREEN is ITGGP. Every letter in the new word is (+2) word.

G + 2 = I

R + 2 = T

E + 2 = G

E + 2 = G

N + 2 = P

Similarly,

P + 2 = R

I + 2 = K

N + 2 = P

K + 2 = M

So PINK is RKPM.

Page No: 6



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Hence, the correct answer is RKPM.

#### Question 10:

Who wrote the book 'Two Fates -- The Story of My Divorce', which is a parody of Chetan Bhagat's 'Two States -- The Story of My Marriage'?

Difficulty: Moderate Average Time: 53 Seconds

# Options:

- 1. Namita Gokhale
- 2. Swati Kaushal
- 3. Judy Balan
- 4. Arundhati Roy

#### Solution:

The correct answer is Option 3 i.e. Judy Balan.

- It's the classic tale of Punjabi boy-meets-Tamilian girl, they fall in love, the families oppose it, but love conquers all and they get married to live happily ever after.
- There's a twist in this hilarious tale by Judy Balan when, four years down the line, Rishab and Deepika fall out of love. But if getting married was hard, getting divorced is much, much harder because, by now, their families have fallen in love with each other.
- Judy Balan is the author of six novels including the bestselling Two Fates: The Story of My Divorce. She is also a consulting psychological astrologer completing a Post Graduate Diploma in Jungian Studies with the Society for Psychology and Healing (SOPH), UK.

# Question 11:

Select the figure which does NOT belong to the group.

Difficulty: Moderate Average Time: 66 Seconds

# Options:

- 1. 4
- 2. 1
- 3. 3
- 4. 2

Solution:

Page No: 7

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The correct answer is Option 1 i.e. 4.

Except for 4 i.e, E all letters are made up of 3 lines. Only E needs 4 lines.

Hence, the correct answer is 4.

#### Question 12:

Find the smallest square number from among the given option which is divisible by each of 8,15 and 20.

Difficulty : Moderate Average Time : 38 Seconds

# Options:

- 1. 6400
- 2. 14400
- 3. 3600
- 4. 4900

#### Solution:

The correct answer is Option 3 i.e. 3600.

LCM of 8, 15, and 20 is 120

Factors of  $120 = 2 \times 2 \times 2 \times 3 \times 5$ 

Here factors 2, 3 and 5 have no pairs. So 120 must be multiplied by 2 x 3 x 5 to make it a perfect square

 $120 \times 2 \times 3 \times 5 = 3600$ 

So the required smallest square number is 3600.

#### Question 13:

A ball is dropped from a height of 10 m. It strikes the ground and rebounds up to a height of 2.5 m. During the collision, the per cent loss in the kinetic energy is:

Difficulty: Moderate Average Time: 51 Seconds

## Options:

- 1. 100%
- 2. 25%
- 3. 75%

Page No: 8

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50%

## Solution:

The correct answer is **Option 3** i.e. **75%**.

- Initial kinetic energy= mgh; final kinetic energy is mg h'.
- Change in kinetic energy= mg(h-h')
- % change in kinetic energy =  $\{mg(h-h')/mgh\}100 (7.5/10)(100) = 75\%$ .

#### Question 14:

Pipe A can empty a filled tank in 28 hours while Pipe B can fill the same tank, when empty, in 35 hours. If alternately Pipes A and B are turned on for an hour each time, starting when the tank is full, how long will it take to empty the tank?

Difficulty : Moderate Average Time : 49 Seconds

# Options:

- 1. 271 hours
- 2. 275 hours
- 3. 279 hours
- 4. 280 hours

#### Solution:

The correct answer is Option 1 i.e. 271 hours.

Pipe A can empty the tank = 28 hours

Pipe B can fill the tank = 35 hours

Total capacity of the tank = 140 liters

A pipe empties the tank by 5 litres and pipe B fills the tank by 4 litres. So the tank is emptied by 1 litre in 2 hours

For emptying 140 litres of the tank if pipe A was started emptying the tank first

Time taken to empty 135 litres of tank =  $2 \times 135 = 270$  hours and remaining 5 litres emptied by pipe A in 1 1 hour. So total time taken to empty the tank full of 140 litres is 271 hours.

# Question 15:

The 2017 Brahmaputra Literary Festival was hosted by which city?

Difficulty: Moderate Average Time: 58 Seconds

Options:

Page No: 9



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#### Lucknow

- 2. Kolkata
- 3. Shillong
- 4. Guwahati

#### Solution:

The correct answer is **Option 4** i.e. **Guwahati**.

- The Brahamaputra Literary Festival was held at Srimanta Sankaradeva Kalakshetra, Guwahati, Assam from 28 to 30 January 2017.
- The festival is organised jointly by the National Book Trust (NBT) and the Assam government and inaugurated by the Union Human Resources Development Minister Prakash Javadekar.
- The 3-day will host 60 panel discussions, book releases, readings and culture events, including screenings of films based on books, musical and dance performances

# Question 16:

By what number should (10 {2over3}) be divided to obtain 20?

Difficulty: Moderate Average Time: 50 Seconds

# Options:

- 1. \(6\over15\)
- 2. \(7\over15\)
- 3. \(8\over15\)
- 4. \(9\over15\)

#### Solution:

The correct answer is Option 3 i.e. \(8\over15\).

let the required number be x

 $(10 {2\circ 3})/x = 20$ 

 $\(\dfrac{32}{3}\)/x = 20$ 

 $x = (\frac{32}{20 \tilde{A} - 3})$ 

 $x = (\frac{8}{15})$ 

Question 17:

Page No: 10

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Rathin is now 16 years old while his cousin is 7 years. After how many years will Rathin's age be 1.5 times that of his cousin?

Difficulty : Moderate Average Time : 51 Seconds

#### Options:

- 1. 9
- 2. 12
- 3. 10
- 4. 11

## Solution:

The correct answer is **Option 4** i.e. **11**.

Rathin's age = 16 years

His cousin = 7 years

let after x years Rathin's age be 1.5 times that of his cousin

**ATQ** 

$$(16 + x) = 1.5(7 + x)$$

$$16 + x = 10.5 + 1.5x$$

$$5.5 = 0.5x$$

x = 11

So after 11 years, Rathin's age will be 1.5 times that of his cousin

## Question 18:

If - means  $\div$ ,  $\div$  means +,  $\times$  means - and + means  $\times$ , then determine the value of 35 - 7  $\times$  14  $\div$  28.

Difficulty: Moderate Average Time: 49 Seconds

## Options:

- 1. 20
- 2. 15
- 3. 24

Page No: 11

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19

## Solution:

The correct answer is Option 4 i.e. 19.

Given 35 - 7 × 14 ÷ 28.

On exchanging signs according to the question:

 $35 \div 7 - 14 + 28$ 

5 - 14 + 28

33 - 14 = 19

Hence, the correct answer is 19.

#### Question 19:

Consider the given argument and decide which of the given assumptions is (are) implicit in the argument. Argument: Due of IT recession, many software engineers lost their job. Assumptions: IT sector jobs are not secure. IT sector companies lay off software engineers quite often.

Difficulty: Moderate Average Time: 49 Seconds

# Options:

- 1. Both 1 and 2 are implicit.
- 2. Only assumption 1 is implicit.
- 3. Only assumption 2 is implicit.
- 4. Neither 1 nor 2 is implicit.

#### Solution:

The correct answer is Option 4 i.e. Neither 1 nor 2 is implicit.

# **Argument:**

Due of IT recession, many software engineers lost their job.

# **Assumptions:**

- 1. IT sector jobs are not secure. **Not implicit.** This is not given in the statement so this is extra information.
- 2. IT sector companies lay off software engineers quite often. Not implicit. This is not given in the statement so this is

Page No: 12

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extra information.

Hence, the correct answer is **Neither 1 nor 2 is implicit.** 

#### Question 20:

Select the figure that does NOT belong in the following group.

Difficulty: Moderate Average Time: 59 Seconds

# Options:

- 1. C
- 2. A
- 3. B
- 4. D

#### Solution:

The correct answer is Option 4 i.e. D.

Except for D, all figure has a single dot on all side and double dots in the middle of the shape (inside the figure). But D does not have this pattern.

Hence, the correct answer is **D**.

#### Question 21:

The mean score in a test of the 10 boys in a class was 15 while the overall mean of the 25 students in the class was 16.2. What was the mean score of the girls?

Difficulty : Moderate Average Time : 48 Seconds

# Options:

- 1. 16.8
- 2. 17
- 3. 17.5
- 4. 16.5

#### Solution:

The correct answer is **Option 2** i.e. **17**.

Page No: 13

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The average of 10 boys in a class = 15

The average of 25 students in the class = 16.2

Average = Sum of all the elements/Number of elements

15 = Sum of all the elements/10

Sum of all the elements = 150

16.2 = Sum of all the elements/25

Sum of all the elements = 405

Total score of girls = 405 - 150 = 255

Average score of girls = 255/15 = 17

## Question 22:

What are the products formed during photosynthesis?

**Difficulty : Moderate** 

Average Time: 48 Seconds

#### Options:

- 1. Starch and Oxygen
- 2. Starch, Water and Oxygen
- 3. Glucose, Water and Oxygen
- 4. Glucose and Oxygen

# Solution:

The correct answer is **Option 3** i.e. **Glucose**, **Water and Oxygen**.

- Photosynthesis is the name given to the set of chemical reactions performed by plants to convert energy from the sun into chemical energy in the form of sugar. Specifically, plants use energy from sunlight to react carbon dioxide and water to produce sugar (glucose) and oxygen
- Many reactions occur, but the overall chemical reaction for photosynthesis is:

$$6 \text{ CO}_2 + 6 \text{ H}_2\text{O} + \text{light } \text{C}_6\text{H}_{12}\text{O}_6 + 6 \text{ O}_2$$

• Carbon Dioxide + Water + Light yields Glucose + Oxygen

# Question 23:

Vishnu spends â,1 5000 in buying 12 tables and some chairs. The cost of one table is â,1 50 and that of one chair is â,1 40.

Page No: 14

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What is the ratio of the numbers of the chairs to the number of tables purchased?

Difficulty: Moderate Average Time: 72 Seconds

# Options:

1. 55:4

2. 5:1

3. 5:2

4. 55:6

# Solution:

The correct answer is Option 4 i.e. 55:6.

Vishnu spends â,1 5000 and purchased 12 tables and some chairs

Price of 1 table = Rs. 50

No of tables purchased =  $12 \times 50 = 600$ 

Amount spend on purchasing chairs = 5000 - 600 = Rs. 4400

Number of chair purchased = 4400/40 = 110

Ratio of number of chairs to number of tables = 110/12 = 55:6

#### Question 24:

Who is the first female pilot to be inducted into the Indian Navy in 2017?

Difficulty: Moderate Average Time: 43 Seconds

# Options:

- 1. Dipa Karmakar
- 2. Zaira Wasim
- 3. Tessy Thomas
- 4. Shubhangi Swaroop

## Solution:

The correct answer is **Option 4** i.e. **Shubhangi Swaroop**.

• Shubhangi Swaroop was inducted as the Indian Navy's first woman pilot at the Air Force Academy at Hyderabad.

Page No: 15

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Shubhangi is the first Naval woman pilot, the Navy's Aviation branch has had women officers operating as air traffic control officers and as 'observers' in the aircraft who are responsible for communication and weapons, Southern Naval spokesperson Commander Sreedhar Warrier.

• She hails from Bareilly in Uttar Pradesh and is the daughter of Naval Commander Gyan Swaroop. She is expected to fly maritime reconnaissance aircraft.

## Question 25:

How many triangles are present in the below figure?

Difficulty: Moderate

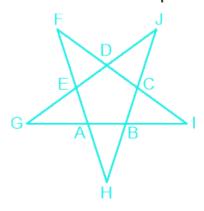
Average Time: 57 Seconds

# Options:

- 1. 10
- 2. 8
- 3. 9
- 4. 6

# Solution:

The correct answer is **Option 1** i.e. **10**.



The triangles in this figure are:

FDE, JCD, IBC, HAB, GEA, CFH, BJG, AIF, EHJ, and DGI

= 10 triangles

Hence, the correct answer is 10 triangles.

# Question 26:

In which of the following tissues are the cells living, elongated and irregularly thickened at the corners?

Page No: 16

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**Difficulty: Moderate** 

**Average Time: 46 Seconds** 

# Options:

- 1. Collenchyma
- 2. Sclerenchyma
- 3. Parenchyma
- 4. Aerenchyma

## Solution:

The correct answer is **Option 1** i.e. **Collenchyma**.

- Collenchyma is a supporting tissue characteristic of the growing organs of many herbaceous and woody plants, and
  it is also found in stems and leaves of mature herbaceous plants, including those that are only slightly modified by
  secondary growth.
- Collenchyma tissue is composed by elongated living cells of uneven primary thick walls, which possess hemicellulose, cellulose, and pectic materials.
- It provides support, structure, mechanical strength, and flexibility to the petiole, leaf veins, and stem of young plants, allowing for easy bending without breakage.

#### Question 27:

The LCM of 48 and 54 is:

Average Time: 53 Seconds

#### Options:

1.  $6 \times 2 \times 9$ 

**Difficulty: Moderate** 

2.  $6 \times 8 \times 3$ 

 $3.48 \times 54$ 

4. 6×8×9

## Solution:

The correct answer is **Option 4** i.e.  $6 \times 8 \times 9$ .

Prime factorization of-

 $48 = 2 \times 2 \times 2 \times 2 \times 3$ 

 $54 = 2 \times 3 \times 3 \times 3$ 

Page No: 17

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$$LCM = 2^4 \times 3^3$$

$$=2\times2\times2\times2\times3\times3\times3$$

 $=6 \times 8 \times 9$ 

# Question 28:

Complete the following. XIGP: 172716:: ZHEJ:

Difficulty: Moderate

Average Time: 46 Seconds

# Options:

- 1. 191510
- 2. 191501
- 3. 191511
- 4. 191601

## Solution:

The correct answer is Option 1 i.e. 191510.

We know that

$$X = 24$$
,  $I = 9$ ,  $G = 7$ ,  $P = 16$ ,

XIGP: 172716

It comes from X={24-7}=17, I={9-7}=2, G=7, P=16

Similarly

$$Z = 26$$
,  $H = 8$ ,  $E = 5$ ,  $J = 10$ 

Thus, ZHEJ: 191510

Hence, the correct answer is 191510

#### Question 29:

Which of the following is NOT a pollinating agent for cross pollination?

Difficulty: Moderate Average Time: 46 Seconds

Options:

Page No: 18

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#### Wind

- 2. Water
- 3. Animals
- 4. Plants

#### Solution:

The correct answer is **Option 4** i.e. **Plants**.

- Cross-pollination is the process of applying pollen from one flower to the pistils of another flower. Pollination occurs in nature with the help of insects and wind.
- Cross-pollination occurs when pollen from one plant is transferred to another plant, resulting in healthier offspring and new plant varieties.
- It's essential for genetic variation, increasing plants' diversity and adaptability in changing environments.

#### Question 30:

Which famous cricketer co-owns the Pro-Kabaddi team from Tamil Nadu named 'Tamil Thalaivas'?

Difficulty : Moderate Average Time : 50 Seconds

#### Options:

- 1. Sachin Tendulkar
- 2. Ravi Shastri
- 3. Krishnamachari Srikkanth
- 4. Sunil Gavaskar

## Solution:

The correct answer is **Option 1** i.e. **Sachin Tendulkar**.

- Sachin Tendulkar co-owns the Pro-Kabaddi team from Tamil Nadu named 'Tamil Thalaivas'.
- The Chennai franchise is set to make it's debut in the fifth season of Pro Kabaddi League (PKL).
- The Pro Kabaddi League began in 2014 with eight teams. Before the fifth season, four new teams, namely Haryana Steelers, Gujarat Giants, UP Yoddha and Tamil Thalaivas joined the tournament.

#### Question 31:

If the power of a corrective lens is +2.0D, then it is a:

Difficulty: Moderate Average Time: 50 Seconds

Options:

Page No: 19

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#### convex mirror

- 2. concave mirror
- 3. convex lens
- 4. concave lens

#### Solution:

The correct answer is **Option 3** i.e. **convex lens**.

Power of a lens is given by-

P=1fP=1f

- · Substituting the given values we get-
- 2=1f2=1f

f=12f=12

f=+0.5m=+50cmf=+0.5m=+50cm

• Thus, the focal length of the lens is 50 cm. The minus sign (+)(+) indicates that the lens is converging in nature means it is a convex lens.

#### Question 32:

Who among the following dedicated the Chenani-Nashri Tunnel -- the longest road tunnel in India -- to the nation in April 2017?

**Difficulty: Moderate** Average Time: 55 Seconds

# Options:

- 1. Narendra Modi
- 2. Pranab Mukherjee
- 3. Omar Abdullah
- 4. Chandrababu Naidu

#### Solution:

The correct answer is **Option 1** i.e. **Narendra Modi**.

 The Prime Minister Shri Narendra Modi dedicated India's longest highways tunnel - the Chenani- Nashri tunnel in Jammu & Kashmir- to the nation.

Page No: 20

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PM Modi dedicated the Chennai-Nashri tunnel to the nation in the presence of Jammu and Kashmir governor N N Vohra, chief minister Mehbooba Mufti and Union transport minister Nitin Gadkari.

- Built over a period of five yars, the 9.2 km long Chenani-Nashri tunnel constructed at a cost of over Rs 2,500 crore is the longest tunnel in the country.
- It connects Udhampur with Ramban district and bypasses a dangerous hilly terrain of over 30 km of the strategic Jammu-Srinagar national highway.

#### Question 33:

Which of the following is the third member of the Dobereiner triad, that also features Lithium and Sodium?

Difficulty: Moderate Average Time: 68 Seconds

# Options:

- 1. Potassium
- 2. Boron
- 3. Barium
- 4. Hydrogen

# Solution:

The correct answer is **Option 1** i.e. **Potassium**.

- Dobereiner triad: Lithium (Li), Sodium (Na) and Potassium (K)
- In the year 1817, a German scientist Dobereiner suggested that properties of elements are related to their atomic masses.
- Triads: He made groups of three elements each having similar chemical properties and called them triads.

#### Question 34:

Find the number which will complete the following series. 0, 1, 8, 27, ?

Difficulty: Moderate Average Time: 43 Seconds

# Options:

- 1. 25
- 2. 16
- 3. 125
- 4.64

Solution:

Page No: 21

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The correct answer is Option 4 i.e. 64.

0, 1, 8, 27, ?

The pattern would be-

$$0^3$$
,  $1^3$ ,  $2^3$ ,  $3^3$ ,  $4^3$ 

So  $4^3 = 63$  is the next term

Hence, the correct answer is 64.

#### Question 35:

X walks 3 km towards west, and then turns and travels 4 km towards north. The shortest distance between the start and the end point of X's journey is \_\_\_\_\_.

Difficulty: Moderate

**Average Time: 44 Seconds** 

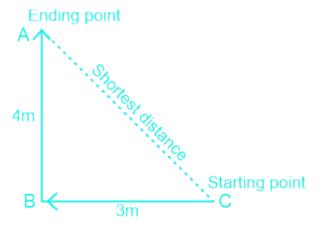
# Options:

- 1. 8 km
- 2. 6 km
- 3. 5 km
- 4. 7 km

# Solution:

The correct answer is Option 3 i.e. 5 km.

The given information represents the following diagram



Page No: 22

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The shortest distance between the start and end point will be:-

By using Pythagoras' theorem

$$AB^2 + BC^2 = AC^2$$

$$4^2 + 3^2 = AC^2$$

$$16 + 9 = AC^2$$

$$AC = 5 \text{ km}.$$

Shorest distance = 5 km

Hence, the correct answer is 5 km.

## Question 36:

A curved mirror where the reflecting surface is curved inwards is called a:

**Difficulty: Moderate** Average Time: 57 Seconds

# Options:

- 1. plane mirror
- 2. concave mirror
- 3. plano-convex mirror
- 4. convex mirror

# Solution:

The correct answer is **Option 2** i.e. **concave mirror**.

- A concave mirror or converging mirror is a type of mirror that is bent towards the inwards side in the middle.
- The angle of incidence in the concave mirror is not the same as the angle of reflection. Moreover, the angle of reflection, in this case, depends on the area on which the light hits.
- A concave mirror is a mirror that is curved inward in the middle.

#### Question 37:

Read the following statements and identify the logically correct conclusion from the given information. Statement: Time and tide wait for none. Conclusions: Time is not in anyone's control. One has to keep moving in life forgetting the bad experiences of past.

**Difficulty: Moderate** Average Time: 62 Seconds

Page No: 23

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# Options:

- 1. Neither conclusion 1 nor 2 follows.
- 2. Both conclusions 1 and 2 follow.
- 3. Conclusion 2 follows.
- 4. Conclusion 1 follows.

#### Solution:

The correct answer is Option 2 i.e. Both conclusions 1 and 2 follow.

#### **Given Statement:**

Time and tide wait for none.

#### **Conclusions:**

- 1. Time is not in anyone's control. **Follows** (As the statement says, "Time waits for none". so it definitely follows that time is not in anyone's control).
- 2. One has to keep moving in life forgetting the bad experiences of the past. **Follows** (As the statement says, "Time waits for none". so it definitely follows that time is moving and everybody has to forget their past and move on for a good future).

Hence, the correct answer is **Both conclusions 1 and 2 follow.** 

#### Question 38:

Select the related word from the given alternatives: Wheel: Spokes:: Fan:

Difficulty : Moderate Average Time : 65 Seconds

# Options:

- 1. Wings
- 2. Motor
- 3. Round
- 4. Air

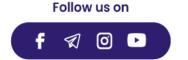
# Solution:

The correct answer is **Option 1** i.e. **Wings**.

As the wheel is made up of spokes similarly, a fan is made up of wings.

Hence, the correct answer is wings.

Page No: 24



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#### Question 39:

Consider the given question and decide which of the following statements is sufficient to answer the question. How many cows in a herd are black? Statements: There are in total 60 cows. 40% of them are black.

Difficulty: Moderate Average Time: 44 Seconds

# Options:

- 1. Statement 1 alone is sufficient but statement 2 alone is not sufficient to answer the question.
- 2. Statements 1 and 2 together are not sufficient, and additional data is needed to answer the question.
- 3. Both statements taken together are sufficient to answer the question, but neither statement alone is sufficient.
- 4. Statement 2 alone is sufficient but statement 1 alone is not sufficient to answer the question.

#### Solution:

The correct answer is **Option 3** i.e. **Both statements taken together are sufficient to answer the question, but neither statement alone is sufficient.** 

Given question: How many cows in a herd are black?

#### Statements:

- 1. There are in total 60 cows.
- 2. 40% of them are black.

Explanation: As the question is asking about black cow so we have to know the total number of cow and the number of cows that is black in colour. Thus both statements are needed as the statement is about the total number of cows and the second is giving the percentage of the black cow from the total.

Hence, the correct answer is **Both statements taken together are sufficient to answer the question, but neither statement alone is sufficient.** 

#### Question 40:

Which of the following physicists explained the existence of Buoyant force?

Difficulty: Moderate Average Time: 83 Seconds

#### Options:

- 1. Isaac Newton
- 2. Archimedes

Page No: 25

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#### **Blaise Pascal**

4. Charles Augustine de Coulomb

#### Solution:

The correct answer is **Option 2** i.e. **Archimedes**.

- Archimedes of Syracuse was one of the greatest mathematicians in history. He was also a great inventor and scientist.
- Born in Syracuse, Sicily (then part of Greece), in about 287 B.C., Archimedes traveled to Egypt at the age of 18 to study at the great library of Alexandria.
- Archimedes was obsessed with mathematics. He would become so involved in his work that he would forget to eat. He scribbled notes and figures on any available surface.

## Question 41:

Two numbers are in the ratio of 15:11. If their H.C.F is 13. Find the numbers.

Difficulty : Moderate Average Time : 57 Seconds

Options:

1. 195, 141

2. 196, 143

3. 195, 143

4. 195, 142

#### Solution:

The correct answer is Option 3 i.e. 195, 143.

let the required numbers be 15x and 11x

We can say that x is the highest common factor for both 15 and 11,  $(15 \times x)$  &  $(11 \times x)$ 

HCF = 13 (Given)

So we can say that x = 13

So the required numbers would be

 $15 \times 13 = 195$ 

 $11 \times 13 = 143$ 

Page No: 26



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# Comprehension:

Directions: The following table shows parties contested in an election and seats won by them in different zones. Read the data carefully and answer the questions that follow.

#### Question 42:

In south, what is the percentage of seats won by party A (round to one decimal)?

Difficulty: Moderate Average Time: 56 Seconds

# Options:

- 1. 30.5%
- 2. 30%
- 3. 30.8%
- 4. 31%

#### Solution:

The correct answer is Option 3 i.e. 30.8%.

Seats won by Party A in the south = 40

Total seats won by all the parties in South = 40 + 6 + 83 + 1 = 130

Percentage of seats won by Party A in South =  $40/130 \times 100 = 30.76 = 30.8\%$ 

#### Question 43:

The difference between Peter and Preeti's ages is 5 years. When they married each other 35 years ago, 4 times Peter's age was the same as 5 times the age of Preeti. What is the current sum of their ages?

Difficulty: Moderate Average Time: 46 Seconds

# Options:

- 1. 105 years
- 2. 112 years
- 3. 115 years
- 4. 110 years

# Solution:

The correct answer is **Option 3** i.e. **115 years**.

Page No: 27

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Let Peter and Preeti's ages be A and B respectively.

The difference between Peter and Preeti's ages is 5 years,

$$A - B = 5$$

35 years ago, 4 times Peter's age was the same as 5 times the age of Preeti's,

$$4(A - 35) = 5(B - 35)$$

$$4A - 140 = 5B - 175$$

$$5B - 4A = 35$$

Solving,

$$5B - 4(5 + B) = 35$$

$$5B - 20 - 4B = 35$$

B = 55

A = 60

, The sum of their present ages = 60 + 55 = 115 years

Hence, the correct answer is 115 years.

#### Question 44:

Use each of the below figures only once and form three groups. The three groups so formed are:

Difficulty: Moderate Average Time: 63 Seconds

Options:

1. (1,3,5), (2,4,9), (6,7,8)

2. (1,3,5), (2,7,9), (6,4,8)

3. (1,3,5), (6,4,9), (2,7,8)

4. (1,3,5), (2,4,8), (6,7,9)

Solution:

The correct answer is **Option 1** i.e. **(1,3,5)**, **(2,4,9)**, **(6,7,8)**.

We can form a group on the basis of similarity. Like (1,3,5), (2,4,9), (6,7,8) is an appropriate group and each group has similar features.

Page No: 28

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Hence, the correct answer is (1,3,5), (2,4,9), and (6,7,8).

#### Question 45:

Which country hosted the Asian Women's Boxing Championship in 2017 when India's iconic boxer Mary Kom won gold?

Difficulty: Moderate Average Time: 40 Seconds

# Options:

- 1. Vietnam
- 2. Japan
- 3. Indonesia
- 4. China

#### Solution:

The correct answer is **Option 1** i.e. **Vietnam**.

- M C Mary Kom (48kg) notched up her fifth gold medal at the Asian Women's Boxing Championships, winning a fiercely-contested summit clash in Ho Chi Minh City Vietnam.
- This was Mary Kom's first international gold medal since the 2014 Asian Games and her first medal in over a year.
- She is the first Indian female boxer to have bagged a gold at the 2014 Asian Games held in South Korea, the first Indian female pugilist to win a gold at the 2018 Commonwealth Games and the only boxer who was the Asian Amateur Boxing champion for as many as six times, creating yet another record.

# Question 46:

India's current finance minister Arun Jaitley is a Rajya Sabha member from which state?

Difficulty: Moderate Average Time: 62 Seconds

# Options:

- 1. Gujarat
- 2. Punjab
- 3. Haryana
- 4. Uttar Pradesh

# Solution:

The correct answer is Option 1 i.e. Gujarat.

Page No: 29



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A senior member of the Bharatiya Janata Party (BJP), Arun Jaitley was the Union finance minister through the Narendra Modi-led Bharatiya Janata Party (BJP) government's first term in power at the Centre.

- Besides finance, Jaitley previously held the defence, corporate affairs, commerce & industry and law & justice
   Cabinet portfolios in the Atal Bihari Vajpayee and Narendra Modi governments.
- Jaitley, who has been indisposed for some time, was not able to present the Union Budget for 2018-19 and the 2019-20 Interim Budget due to his poor health.
- He also did not contest the Lok Sabha Elections in 2019.

#### Question 47:

Which of the following type of medicine is used to treat indigestion?

Difficulty : Moderate Average Time : 59 Seconds

# Options:

- 1. Antihistamine
- 2. Antacid
- 3. Antibiotic
- 4. Sulpha drug

# Solution:

The correct answer is **Option 2** i.e. **Antacid**.

- Antacids are medicines that counteract (neutralise) the acid in your stomach to relieve indigestion and heartburn.
- They come as a liquid or chewable tablets and can be bought from pharmacies and shops without a prescription.
- Aluminum hydroxide gel, Calcium carbonate (Alka-Seltzer, Tums, Magnesium hydroxide (Milk of Magnesia, Gaviscon, Gelusil, Maalox are the examples of Antacid.

#### Question 48:

What is the type of asexual reproduction in Amoeba?

Difficulty: Moderate Average Time: 47 Seconds

#### Options:

- 1. Budding
- 2. Vegetative propagation
- 3. Spore formation

Page No: 30

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Binary fission

## Solution:

The correct answer is **Option 4** i.e. **Binary fission**.

- · Binary fission is the process through which asexual reproduction happens in bacteria.
- Binary fission is a relatively simple process, compared to mitosis, because binary fission does not involve reproducing organelles or complex chromosomes.
- The process starts with the replication of the DNA within the cell. Mitochondria must also replicate their DNA before binary fission, though other organelles have no DNA.

#### Question 49:

A and B together can complete a task in 12 days. However, if A works alone, completes half the job and leaves and then B works alone and completes the rest of the work, it takes 25 days in all to complete the work. If B is more efficient than A, how many days would it have taken B to do the work by herself?

**Difficulty: Moderate** 

Average Time: 64 Seconds

# Options:

- 1. 22
- 2. 20
- 3. 18
- 4. 15

#### Solution:

The correct answer is **Option 2** i.e. **20**.

A and B together can complete a task in 12 days

Work done by A & B together in one day = 1/A + 1/B = 1/12 ...(1)

Time taken to complete the task = 25 days

(A/2 + B/2) = 25

A + B = 50

B = 50 - A

From (1)

1/A + 1/B = 1/12

Page No: 31



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$$1/A + 1/50 - A = 1/12$$

$$600 = 50A - A^2$$

$$A^2 - 50A - 600 = 0$$

# Splitting middle terms

$$A^2 - (20 + 30)A + 600 = 0$$

$$A^2 - 20A - 30A + 600 = 0$$

$$A(A - 20) - 30(A - 20) = 0$$

$$(A - 20) (A - 30) = 0$$

$$A = 20 \text{ or } 30$$

If 
$$A = 20$$
, then  $B = 30$ 

If 
$$A = 30$$
, then  $B = 20$ 

Since B is more efficient than A

B would do the work in 20 days by herself

#### Question 50:

The number of free electrons in the outermost shell of carbon atoms in diamond is:

Difficulty: Moderate Average Time: 71 Seconds

# Options:

- 1. three
- 2. zero
- 3. two
- 4. four

#### Solution:

The correct answer is Option 2 i.e. zero.

- Carbon has 4 electron in the outermost shell Carbon shares those electrons with other atoms to form covalent bond It has no free electrons present.
- Carbon atom forms four covalent bonds with other carbon atoms in a diamond.
- This phenomenon is termed as catenation. Hence there are no free electrons in outmost shell of carbon.

Page No: 32

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#### Question 51:

The square root of 5329 is:

**Difficulty: Moderate** 

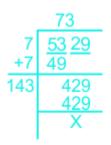
Average Time: 46 Seconds

# Options:

- 1. 94
- 2.96
- 3. 97
- 4. 73

#### Solution:

The correct answer is Option 4 i.e. 73.



#### Question 52:

Insulators have resistivity of the order of:

Difficulty: Moderate

Average Time: 33 Seconds

## Options:

- 1.  $10^{12}$ m to  $10^{17}$ m
- 2.  $10^{-12}$ m to  $10^{-17}$ m
- 3.  $10^6$ m to  $10^8$ m
- 4.  $10^{-8}$ m to  $10^{-6}$ m

## Solution:

The correct answer is **Option 1** i.e.  $10^{12}$ m to  $10^{17}$ m.

- Insulators are the materials that do not readily conduct electricity (i.e., materials with high electrical resistivity)
- Insulators have electrical resistivity on the order of 10<sup>8</sup> to 10<sup>17</sup> cm.

Page No: 33

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Electrical resistance (R) is the resistance to a flow of electric current through a material.

# Question 53:

The value of g on the moon is 1/6th of the value of g on the earth. If a man can jump 1.5 m high on the earth, on the moon, he can jump up to a height of:

Difficulty : Moderate Average Time : 65 Seconds

# Options:

- 1. 6 m
- 2. 7.5 m
- 3. 9 m
- 4. 4.5 m

# Solution:

The correct answer is Option 3 i.e. 9 m.

- g on moon = 1/6 th (g on earth)
  - 6g (moon) = g (earth)
- Since, Distance of jump with g on earth = 1.5m
- Therefore, Distance of jump with g on moon  $=6 \times 1.5 = 9m$

Hence, he will jump 9m on moon.

## Question 54:

At 6% simple interest per annum, a sum of money became â,1 834 in (6 {1over2}) years. The sum initially invested was:

Difficulty: Moderate Average Time: 48 Seconds

# Options:

- 1. â,1 650
- 2. â,1 600
- 3. â,1 675
- 4. â,1 626

Solution:

Page No: 34

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The correct answer is Option 2 i.e. â,1 600.

Amount = Rs. 834

Let the Principal be x

Amount = x + (834 - x)

 $SI = (\frac{P \tilde{A} - R \tilde{A} - T}{100})$ 

 $(834 - x) = (\frac{\tilde{A} - 6 \tilde{A} - 6.5}{100})$ 

83400 - 100x = 39x

x = 600

So the amount initially invested was Rs. 600

Question 55:

The gas evolved when sodium carbonate reacts with hydrochloric acid is \_\_\_\_\_\_.

Difficulty: Moderate

Average Time: 44 Seconds

Options:

1. Hydrogen

2. Chlorine

3. Hydrogen Chloride

4. Carbon dioxide

# Solution:

The correct answer is Option 4 i.e. Carbon dioxide.

- Carbon dioxide gas is evolved when sodium carbonate reacts with hydrochloric acid.
- Na<sub>2</sub>CO<sub>3</sub> + 2HCl 2NaCl + CO<sub>2</sub> + H<sub>2</sub>O is the chemical solution of the reaction.

Question 56:

Select the number that does NOT belong in the following group. 71, 73, 77, 79

Difficulty : Moderate Average Time : 43 Seconds

Options:

1. 79

Page No: 35

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71

3. 77

4. 73

#### Solution:

The correct answer is **Option 3** i.e. **77**.

Except for 77, all numbers are prime numbers. 77 is divisible by 7 as well as 11. So, it does not belong to this group.

Hence, the correct answer is 77.

#### Question 57:

The people of the Indus Valley Civilisation worshipped \_\_\_\_\_\_

Difficulty: Moderate Average Time: 37 Seconds

# Options:

- 1. Hanuman
- 2. Kali
- 3. Ayyappa
- 4. Pashupati

#### Solution:

The correct answer is **Option 4** i.e. **Pashupati**.

- The people of the Indus Valley Civilisation worshipped Pashupati.
- The Pashupati described in the Veda is the guardian of cattle, animals that have been domesticated, while the Pashupati seal in Harappa, which is 4,000 years old, shows a man, or woman, surrounded by wild animals including a tiger and a rhino.
- The Indus Valley civilisation was Vedic, and the Aryans were those who built it.

#### Question 58:

Number of and bonds in benzene, respectively, is:

Difficulty: Moderate Average Time: 50 Seconds

Options:

1. 6 and 3

Page No: 36



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12 and 3

- 3. 9 and 3
- 4. 3 and 3

#### Solution:

The correct answer is **Option 2** i.e. **12 and 3**.

- Number of and bonds in benzene, respectively, is 12 sigma bonds and 3 pi bonds.
- Benzene is a colorless or light-yellow liquid chemical at room temperature.
- Benzene is found in crude oil and is a major part of gasoline. It's used to make plastics, resins, synthetic fibers, rubber lubricants, dyes, detergents, drugs and pesticides.

#### Question 59:

Who took over as the new chairman of the Tata Sons owned Vistara Airline in 2016? Prior to this, he was the Managing Director of Titan for a long time.

**Difficulty: Moderate** 

**Average Time: 53 Seconds** 

#### Options:

- 1. Cyrus Mistry
- 2. N Chandrashekaran
- 3. Ramadurai
- 4. Bhaskar Bhatt

#### Solution:

The correct answer is Option 4 i.e. Bhaskar Bhatt.

- Bhaskar Bhatt took over as the new chairman of the Tata Sons owned Vistara Airline in 2016.
- He is a B.Tech (Mechanical Engineering) degree holder of IIT Madras, and a post graduate diploma holder in Management from IIM Ahmedabad, India.
- Bhaskar Bhat assumed the position of Managing Director of Titan Company Limited on 1st April 2002.

#### Question 60:

If  $493 \div 29 = 17$ , then  $4.93 \div 0.0017 = ?$ 

Difficulty: Moderate Average Time: 47 Seconds

Options:

Page No: 37



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#### 0.29

- 2. 2900
- 3, 290
- 4. 2.9

#### Solution:

The correct answer is Option 2 i.e. 2900.

 $493 \div 29 = 17$ 

493/29 = 17

493/17 = 29 ...(1)

 $\(\dfrac\{4.93\}\{0.0017\}\) = \(\dfrac\{493 \tilde{A}-100\}\{17\}\)$ 

 $= 29 \times 100$ 

(using 1)

= 2900

#### Question 61:

Which of the following is NOT a noble gas?

Difficulty: Moderate Average Time: 42 Seconds

#### Options:

- 1. Radon
- 2. Xenon
- 3. Krypton
- 4. Hydrogen

#### Solution:

The correct answer is Option 4 i.e. Hydrogen.

- Group 8A (or VIIIA) of the periodic table are the noble gases or inert gases.
- They are helium (He), neon (Ne), argon (Ar), krypton (Kr), xenon (Xe), and radon (Rn).
- Noble gasses conduct electricity, are fluorescent, odourless and colourless, and are used under several conditions
  where a stable element is needed to maintain a healthy and constant environment.

Question 62:

Page No: 38

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SnCl2 + 2HgCl2 Hg2Cl2 + SnCl4 In the given reaction:

Difficulty: Moderate Average Time: 48 Seconds

#### Options:

- 1. SnCl<sub>2</sub> is reduced
- 2. SnCl<sub>2</sub> is oxidised
- 3. HgCl<sub>2</sub> is oxidised
- 4. Hg<sub>2</sub>Cl<sub>2</sub> is oxidised

#### Solution:

The correct answer is Option 2 i.e. SnCl<sub>2</sub> is oxidised.

- This is an oxidation-reduction (redox) reaction.
- Sn<sup>II</sup> 2 e<sup>-</sup> Sn<sup>IV</sup> (oxidation)
- 2 Hg<sup>II</sup> + 2 e<sup>-</sup> 2 Hg<sup>I</sup> (reduction)
- SnCl<sub>2</sub> is a reducing agent, HgCl<sub>2</sub> is an oxidizing agent.

#### Question 63:

The given Problem Figure is embedded in one of the given Answer Figures. Which is that Answer Figure?

Difficulty: Moderate Average Time: 63 Seconds

#### Options:

- 1. D
- 2. C
- 3. B
- 4. A

#### Solution:

The correct answer is Option 3 i.e. B.

The given figure is embedded only in figure B. So, option 3 'B' is the right answer.

Hence, the correct answer is B.

Question 64:

Page No: 39

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The length of one side of a rhombus is 41 cm and its area is 720 cm2. What is the sum of the lengths of its diagonals?

Difficulty: Moderate Average Time: 41 Seconds

#### Options:

- 1. 82 cm
- 2. 80 cm
- 3. 98 cm
- 4. 90 cm

#### Solution:

The correct answer is Option 3 i.e. 98 cm.

length of one side of a rhombus = 41 cm

Area of rhombus =  $1/2 \times product$  of diagonals

 $720 = 1/2 \times \text{product of diagonals}$ 

Product of diagonals = 1440

 $(Side of rhombus)^2 = (half of one diagonal)^2 + (half of the other diagonal)^2$ 

 $(half of one diagonal)^2 + (half of the other diagonal)^2 = 4 \times 41 \times 41 = 6724$ 

 $(Sum of two diagonals)^2 = (one diagonal)^2 + (other diagonal)^2 + 2 \times product of diagonals$ 

 $(Sum of two diagonals)^2 = 6724 + 2880 = 9604$ 

So sum of two diagonal = 98 cm

#### Question 65:

This pass is in the Zaskar range of Jammu & Kashmir. The road route from Srinagar to Leh goes through this pass. It has been created by the Indus River. Identify the pass.

Difficulty: Moderate Average Time: 69 Seconds

#### Options:

- 1. Mana Pass
- 2. Rohtang Pass
- 3. Zoji La Pass

Page No: 40

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#### Niti Pass

#### Solution:

The correct answer is Option 3 i.e. Zoji La Pass.

- Zoji La is a high mountain pass at an elevation of 3.536m (11,601ft) above the sea level, located on the boundary of Jammu and Kashmir and Ladakh, in India.
- Zoji-La Pass runs through the Kashmir valley to Ladakh, situated at an altitude of 3528 m above sea level.
- It is one of the most treacherous passes in the world making is a favorite of many adventure and thrill seekers, as well as bike riders.

#### Question 66:

Complete the following sentence with the most appropriate option. Solar energy \_\_\_\_\_ generates more power than wind energy.

Difficulty: Moderate Average Time: 57 Seconds

#### Options:

- 1. never
- always
- 3. sometimes
- 4. often

#### Solution:

The correct answer is **Option 3** i.e. **sometimes**.

- Wind turbines on average harness 60% of the energy that passes through them, compared with the 18% 22% efficiency of solar panels. Therefore, it is undeniable that a home wind turbine can produce more electricity than several solar panels.
- Solar energy provides a more predictable energy output than wind energy. Energy production can be done in a
  massive scale with solar farms. Unlike wind turbines, Solar panels don't require particular space for installation as
  they can be installed on the roofs of houses or offices.

#### Question 67:

In the following series, one letter is missing as shown by the question mark (?). Select the missing term from the given options. Q, O, L, H, ?

Difficulty : Moderate Average Time : 58 Seconds

Options:

Page No: 41

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D

2. C

3. A

4. B

#### Solution:

The correct answer is Option 2 i.e. C.

The pattern is

Q - 2 = 0

0 - 3 = L

L - 4 = H

H - 5 = C

So, the next term will be C.

Hence, the correct answer is C.



#### Question 68:

13 years ago Ram was twice as old as Sunny. Three years from now Sunny's age will be (3over5) of Ram's age. What is Ram's current age?

Difficulty: Moderate Average Time: 49 Seconds

#### Options:

- 1. 72 years
- 2. 77 years
- 3. 64 years
- 4. 80 years

#### Solution:

The correct answer is **Option 2** i.e. **77 years**.

According to the question,

Page No: 42

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13 years ago, Ram was twice as old as Sunny,

Let Ram be 'x' years old and Sunny be 'y' years old,

$$(x - 13) = 2(y - 13)$$

$$x - 13 = 2y - 26$$

$$2y - x = 13$$

Three years from now, Sunny's age will be 3/5 of Ram's age,

$$(y + 3) = 3/5(x + 3)$$

$$5y + 15 = 3x + 9$$

$$3x - 5y = 6$$

Solving,

$$3x - 5(13 + x)/2 = 6$$

$$6x - 65 - 5x = 12$$

$$x = 77$$

, Ram's present age is 77 years.

Hence, the correct answer is 77.

#### Question 69:

In a bag containing red, green and pink tokens, the ratio of red to green tokens was 5 : 12 while the ratio of pink to red tokens was 7 : 15. What was the ratio of green to pink tokens?

**Difficulty: Moderate** 

Average Time: 71 Seconds

#### Options:

1. 36:7

2. 25:28

3. 12:7

4. 28:25

### Solution:

The correct answer is **Option 1** i.e. **36 : 7**.

red: green = 5:12

Green: Red = 12:5

= 36:15

pink : red = 7 : 15

Red: Pink = 15:7

Page No: 43

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Green: Red: Pink = 36:15:7

Green: Pink = 36:7

Question 70:

Select the figure that does NOT belong in the following group.

Difficulty: Moderate Average Time: 37 Seconds

#### Options:

- 1. 4
- 2. 1
- 3. 3
- 4. 2

#### Solution:

The correct answer is Option 3 i.e. 3.

Except for 3, in all figures, both lines are together and parallel but in figure 3 they are apart. So, figure 3 is different.

Hence, the correct answer is 3.

#### Question 71:

In the given Venn diagram which letter represents all those who play Kabaddi as well as Football and also all the three games?

Difficulty: Moderate Average Time: 41 Seconds

#### Options:

- 1. S+V
- 2. S
- 3. S+T
- 4. S+Q

#### Solution:

The correct answer is Option 4 i.e. S+Q.

Those who play kabaddi as well as football according to the given Venn diagram (the letter that is common in the square of kabaddi and football only) = Q

Page No: 44

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Those who play all three games (letter that is common in all three games) = S

So, the letter represents all those who play Kabaddi as well as Football and also all three games = S + Q

Hence, the correct answer is **S+Q.** 

#### Question 72:

54% of 4000 is:

Difficulty : Moderate Average Time : 50 Seconds

#### Options:

- 1. 2025
- 2. 2160
- 3. 2172
- 4. 2232

#### Solution:

The correct answer is Option 2 i.e. 2160.

54% of 4000

- $= (\frac{54}{100}) \times 4000$
- = 2160

#### Question 73:

Consider the given argument and decide which of the given assumptions is (are) implicit. Argument: Warning: Consumption of alcohol is injurious to health. Assumptions: This warning is not required. Non-alcoholic people are healthy.

Difficulty: Moderate Average Time: 39 Seconds

#### Options:

- 1. Neither 1 nor 2 is implicit.
- 2. Both 1 and 2 are implicit.
- 3. Only assumption 1 is implicit.
- 4. Only assumption 2 is implicit.

#### Solution:

The correct answer is **Option 1** i.e. **Neither 1 nor 2 is implicit.** 

Page No: 45

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#### **Argument:**

Warning: Consumption of alcohol is injurious to health.

#### **Assumptions:**

- 1. This warning is not required. **Not implicit** (it is not given in the statement that this warning is not required. This is important so it is also required. Thus, it is not implicit.)
- 2. Non-alcoholic people are healthy. Not implicit (it is not given in the statement that non-alcoholic people are healthy.

Hence, the correct answer is Neither 1 nor 2 is implicit.

#### Question 74:

A train crosses a 375 m long platform in 27 seconds. How long was the train if it was traveling at the speed of 70 km/h?

Difficulty : Moderate Average Time : 64 Seconds

#### Options:

1. 525 m

2. 160 m

3. 140 m

4. 150 m

#### Solution:

The correct answer is Option 4 i.e. 150 m.

let the length of the train be x meter

Speed =  $70 \text{ km/h} = 70 \times 5/18 = 175/9 \text{ m/sec}$ 

A train crosses a 375 m long platform in 27 seconds

175/9 = (375 + x)/27

 $175 \times 27 = (375 + x) \times 9$ 

x = 150 m

#### Question 75:

Samit was given some money to take care of his travel during a 6-day sales drive he had to undertake. However, he had to increase his stay by another 4 days and as a result his average daily travel allowance went down by â,<sup>1</sup> 56. What was the amount that was sanctioned to him in the beginning?

Page No: 46

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**Difficulty: Moderate** 

**Average Time : 54 Seconds** 

#### Options:

- 1. â,¹ 420
- 2. â,<sup>1</sup> 336
- 3. â,1 840
- 4. â,1 560

#### Solution:

The correct answer is **Option 3** i.e. **â**, **1** 840.

Let average money given by Samit be Rs. x

According to the question

$$6x = 10(x - 56)$$

$$6x = 10x - 560$$

4x = 560

x = 140

Total money sanction to him was =  $140 \times 6 = 840$ .

# **Rrb Alp CBT - 1 Previous Year Question Paper Analysis**

The analysis of Rrb Alp CBT - 1 Previous Year Question Paper held on 2018-08-13 in the Morning exam is as follows:

- 1. 75 questions were moderate.
- 2. The safe score is 40 marks.
- 3. 75 questions were asked from CBT -1 and 75 questions were asked from CBT -1
- 4. 0 questions should have been skipped if you were short of time.

# Rrb Alp CBT - 1 Previous Year Question Paper Topic Wise Weightage

**CBT-1** 

Page No: 47



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# **Rrb Alp CBT - 1 Previous Year Question Paper Tips and Tricks**



- 1. Try to solve Rrb Alp CBT 1 Previous Year Question Paper without taking any help from the solutions.
- 2. Rrb Alp CBT 1 Previous Year Question Paper require proper usage of concept so firstly read the question thoroughly and then use the right concept.
- 3. In case you're not able to solve the question in less than 30 seconds in the exam then you should skip the question and move to the next question.

# **Daily Current Affairs**



Page No: 48





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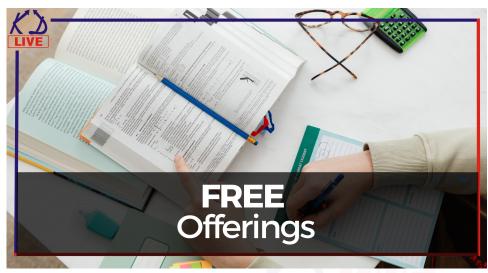






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### **About Neetu Mam**

Neetu Mam is primarily passionate for the English language and teaching from the last 20 years however for the Rrb Alp CBT - 1 Previous Year Question Paper. She has guided her team to provide the best explanation for the question.

Page No: 50



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