



Rrb Group D CBT - 1 Previous Year Question Paper Overview

Here, you can solve all the questions asked in Rrb Group D CBT - 1 Previous Year Question Paper on 2018-10-03 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 Group D CBT - 1 exam. There are 100 questions in the exam and 90 minutes are provided for the Rrb Group D CBT - 1 exam. The Cutoff of the exam was 77 marks hence you should try to score at least 87 marks.

Rrb Group D CBT - 1 Previous Year Question Paper : Questions and Solutions

Question 1 :

The secretion from the prostate gland enters into the:

Difficulty : Moderate

Average Time : 42 Seconds

Options :

1. Kidney
2. Ureter
3. Urethra
4. Testis

Solution :

The correct answer is **option 3** i.e. **Urethra**.

- The urethra runs through the center of the prostate, from the bladder to the penis, letting urine flow out of the body.
- The prostate gland secretes fluid that nourishes and protects sperm.
- During ejaculation, **the prostate squeezes this fluid into the urethra**, and it's expelled with sperm as semen.



Question 2 :

Which one of the following is a leguminous crop?

Difficulty : Moderate

Average Time : 54 Seconds

Options :

1. Mucuna
2. Pulses
3. Sesame
4. Cereals

Solution :

The correct answer is **option 2** i.e. **Pulses**.

- **Leguminous crops** are broadleaf crops that fix nitrogen into the soil as a reason for the symbiotic relationship between nitrogen-fixing bacteria and the roots in the root node. They usually supply a high quantity of proteins more than cereals. Examples are soybean, cowpea, green beans, pigeon pea.
- **Pulses** are a type of leguminous crop but pulse term refers to the dried seed.
- **Mucuna** is a genus of around 100 accepted **species** of climbing lianas (vines) and shrubs of the family Fabaceae.
- **Cereal crops** are necessarily grasses, a composite term that refers to monocot plants under the family Poaceae or Gramineae.
- **Sesame** seed is one of the oldest oilseed crops known, domesticated well over 3000 years ago.

Question 3 :

The absolute refractive index of any medium is always:

Difficulty : Moderate

Average Time : 74 Seconds

Options :

more than one

2. 0

3. 1

4. less than one

Solution :

The correct answer is **option 1** i.e. **more than one**.

- The absolute refractive index of any medium is the refractive index of the medium with respect to vacuum. **It is always greater than 1.**
- When the light goes from vacuum to another medium, then the value of the refractive index is called the absolute refractive index.

Question 4 :

What is the natural source of Oxalic acid?

Difficulty : Moderate

Average Time : 53 Seconds

Options :

1. Tomato
2. Sour milk
3. Ant sting
4. Tamarind

Solution :

The correct answer is **option 1** i.e. **Tomato**.

- **Oxalic acid** is an organic compound found in many plants. These include leafy greens, vegetables, fruits, cocoa, nuts, and seeds.
- **Oxalic acid is the main acid present in tomatoes.** As tomato ripens, the amount of Vitamin C decreases, and the amount of oxalic acid increases.
- **Lactic Acid** is present in sour milk or curd.
- An acid called **formic acid** (or **methanoic acid**) is present in ant stings.
- Tamarind acidic nature is due to **tartaric acid** content (IUPAC-2,3-dihydroxybutanedioic acid).

Question 5 :

Who is the Chief Minister of Punjab as of 1st March 2018?

Difficulty : Moderate

Average Time : 67 Seconds

Options :

1. Navjot Singh Sidhu
2. Captain Amarinder Singh
3. Parkash Singh Badal
4. Naveen Mahindra

Solution :

The correct answer is **option 2** i.e. **Captain Amarinder Singh**.

- Captain Amarinder Singh is an Indian politician serving as the 15th and current Chief Minister of Punjab.
- An elected Member of the Legislative Assembly from Patiala, he was also the president of Punjab Pradesh Congress Committee, the state division of the Indian National Congress.

Question 6 :



..... reproduces by binary fission.

Difficulty : Moderate

Average Time : 49 Seconds

Options :

1. Amoeba
2. Liverfiuke
3. Plasmodium
4. Planaria

Solution :

The correct answer is **option 1** i.e. **Amoeba**.

- Organisms in the domains of Archaea and Bacteria reproduce with binary fission. This form of asexual reproduction and cell division is also used by some organelles within eukaryotic organisms (e.g., mitochondria).
- **Amoeba reproduces by the common asexual reproduction method called binary fission.** After replicating its genetic material through mitotic division, the cell divides into two equal-sized daughter cells.

Question 7 :

Which of the following is associated with The Government of India's 'Khelo India' program?

Difficulty : Moderate

Average Time : 56 Seconds

Options :

1. Science and Technology
2. Literature
3. Sports
4. Music

Solution :

The correct answer is **option 3** i.e. **Sports**.

- The Khelo India programme has been introduced to revive the sports culture in India at the grass-root level by building a strong framework for all sports played in our country and establish India as a great sporting nation.
- Talented players identified in priority sports disciplines at various levels by the High-Powered Committee will be provided annual financial assistance of INR 5 lakh per annum for 8 years.

Question 8 :

Which of the following elements has the electronic configuration 2, 8, 3?

Difficulty : Moderate

Average Time : 54 Seconds

Options :

1. Magnesium
2. Sodium
3. Aluminium
4. Argon

Solution :

The correct answer is **option 3** i.e. **Aluminium**.

The atomic number of the element = $2+8+3=13$, so it is **aluminium**.

Question 9 :

..... connects muscle to the bones.

Difficulty : Moderate

Average Time : 37 Seconds

Options :



Cartilage

2. Areolar
3. Ligaments
4. Tendons

Solution :

The correct answer is **option 4** i.e. **Tendons**.

- A **tendon** or sinew is a tough band of fibrous connective tissue that connects muscle to bone and is capable of withstanding tension.
- Tendons are similar to **ligaments**; both are made of collagen. Ligaments connect one bone to another, while tendons connect muscle to bone.
- **Areolar** connective tissue holds organs in place and attaches epithelial tissue to other underlying tissues.
- **Cartilage** is a resilient and smooth elastic tissue, rubber-like padding that covers and protects the ends of long bones at the joints, and is a structural component of the rib cage, the ear, the nose, the bronchial tubes, the intervertebral discs, and many other body components.

Question 10 :

The General Anti-Avoidance Rule introduced in the 2012-13 budget speech by the then Finance Minister Pranab Mukherjee was finally implemented on

Difficulty : Moderate

Average Time : 72 Seconds

Options :

1. 1 April 2016
2. 1 April 2015
3. 1 April 2017
4. 1 April 2018

Page No: 7

Follow us on



Address : 1997, Mukherjee Nagar, 110009

Email : online@kdcampus.org

Call : +91 95551 08888

Download the App



**Solution :**

The correct answer is **option 3** i.e. **1 April 2017**

- The **General anti-avoidance rule** is an anti-tax avoidance law under Chapter X-A of the Income Tax Act, 1961 of India. It is framed by the Department of Revenue under the Ministry of Finance.
- GAAR was introduced in India by then Finance Minister, Pranab Mukherjee, on 16 March 2012 during the Budget session introduced vide Finance Act, 2012.
- **India's general anti-avoidance rule (GAAR) came into effect on 1 April 2017.**

Question 11 :

In which of the following is $MgCl_2$ soluble?

Difficulty : Moderate

Average Time : 57 Seconds

Options :

1. **Petrol**
2. **Acetone**
3. **Kerosene**
4. **Water**

Solution :

The correct answer is **option 4** i.e. **Water**.

- Magnesium Chloride is highly soluble in water.
- In water, it dissociates to ions: a cation of magnesium (Mg^{2+}) and two anions of chloride (Cl^-).

Question 12 :

Which film was awarded the Best Film on Social Issues in the 64th National Film Awards in 2017?

Difficulty : Moderate

Average Time : 46 Seconds



Options :

1. Udda Punjab
2. Bobby Jasoos
3. Neerja
4. Pink

Solution :

The correct answer is **option 4** i.e. **Pink**.

- Sonam Kapoor's **Neerja** was declared the Best Hindi Film of 2016.
- **While Shoojit Sircar's Pink won the best film on social issues.**

Question 13 :

Who is the author of the book 'Why I am a Hindu' published in 2017?

Difficulty : Moderate

Average Time : 47 Seconds

Options :

1. Shashi Tharoor
2. Manmohan Singh
3. Arnab Goswami
4. Venkaiah Naidu

Solution :

The correct answer is **option 1** i.e. **Shashi Tharoor**.

- **Why I Am a Hindu is a 2018 book by Indian politician Shashi Tharoor.**
- In the book, Tharoor writes about the history of Hinduism and its core tenets, as well as socio-cultural developments in India that relate to the religion, while elucidating his own religious convictions.

**Question 14 :**

Ibrahim Lodi was killed by in the First Battle of Panipat in 1526.

Difficulty : Moderate

Average Time : 51 Seconds

Options :

1. Muhammad Shah
2. Firoz Shah Tughlaq
3. Babur
4. Timur

Solution :

The correct answer is **option 3** i.e. **Babur**.

- **The First Battle of Panipat**, on 21 April 1526, was fought between the invading forces of Babur and the Lodi dynasty. It took place in north India and marked the beginning of the Mughal Empire and the end of the Delhi Sultanate.
- **The Mughal forces of Babur, the king of Kabulistan (Kabul, present Afghanistan), defeated Ibrahim's much larger army in the Battle of Panipat. He was killed in the battle.**

Question 15 :

Who among the following was conferred with sainthood by Pope Francis in 2016?

Difficulty : Moderate

Average Time : 58 Seconds

Options :

1. Mary Euphrasia
2. Kuriakose
3. Sister Alphonsa



Mother Teresa

Solution :

The correct answer is **option 4** i.e. **Mother Teresa**.

- Pope Francis declared Mother Teresa a saint in 2016 at a canonization mass at St Peter's square making her the model of his Jubilee Year of Mercy.
- Born Agnes Gonxhe Bojaxhiu on Aug. 26, 1910, Mother Teresa came to India in 1929 as a sister of the Loreto order.
- In 1950 she founded the Missionaries of Charity, which went onto become a global order of nuns - identified by their trademark blue-trimmed saris - as well as priests, brothers, and lay co-workers.

Question 16 :

Name the team which won the Santosh Trophy for the 32nd time in 2017.

Difficulty : Moderate

Average Time : 59 Seconds

Options :

1. Odisha
2. West Bengal
3. Andhra Pradesh
4. Punjab

Solution :

The correct answer is **option 2** i.e. **West Bengal**.

- **West Bengal won the 2017 Santosh Trophy of football by defeating Goa by 1-0 goals.**
- It was the 71st edition of Santosh Trophy and overall record 32nd win of West Bengal.
- For West Bengal, the lone winning goal was scored by Manvir Singh at the 119th minute of match extended after a goalless 90-minutes' of regular play.

Question 17 :

Who is appointed as UNICEF's ambassador for Goodwill?

Difficulty : Moderate

Average Time : 55 Seconds

Options :

1. Lilly Singh
2. Iravati Dubey
3. Lillete Dubey
4. Rosa Mendes

Solution :

The correct answer is **option 1** i.e. **Lilly Singh**.

- **Lilly Singh appointed UNICEF's newest Goodwill Ambassador.**
- In her role as a Goodwill Ambassador, Lilly will use her unique digital presence to engage children and young people and empower them to speak out about the challenges they face.

Question 18 :

Who is India's next Ambassador to Peru?

Difficulty : Moderate

Average Time : 49 Seconds

Options :



M. Subbarayudu

2. Yashvardhan Kumar Sinha

3. Dr Rizal Sukma

4. Sandeep Chakravorty

Solution :

The correct answer is **option 1** i.e. **M. Subbarayudu**.

- **M. Subbarayudu appointed as the next Ambassador of India to the Republic of Peru.** Shri M. Subbarayudu, (IFS: 1994), presently Joint Secretary in the Ministry of External Affairs has been appointed as the next Ambassador of India to the Republic of Peru.

Question 19 :

Mathura Refinery, the refinery of Indian Oil was commissioned in 1982 with a capacity of 6.0 MMTPA to meet the demand of petroleum products in the northwestern region of India.

Difficulty : Moderate

Average Time : 55 Seconds

Options :

1. 7th

2. 5th

3. 6th

4. 9th

Solution :

The correct answer is **option 3** i.e. **6th**

- **Mathura Refinery, the sixth refinery of IndianOil was commissioned in 1982 with a capacity of 6.0 MMTPA to meet the demand of petroleum products in the northwestern region of the country, which includes the National Capital Region.**
- The Refinery is located along the Delhi-Agra National Highway about 154 KM away from Delhi.

Question 20 :

There are metalloids in the modern periodic table.

Difficulty : Moderate

Average Time : 52 Seconds

Options :

1. 5
2. 4
3. 7
4. 6

Solution :

The correct answer is **option 4** i.e. **6**

- A **metalloid** is an element that has properties that are intermediate between those of metals and nonmetals. Metalloids can also be called semimetals.
- **The number of metalloids in the modern periodic table is 6.**
- The names are boron, silicon, germanium, polonium, tellurium, arsenic.

Question 21 :

Which is the only non-metal placed on the left side of the Modern Periodic Table?

Difficulty : Moderate

Average Time : 51 Seconds

**Options :**

1. Hydrogen
2. Carbon
3. Neon
4. Helium

Solution :

The correct answer is **option 1** i.e. **Hydrogen**.

- The diatomic and polyatomic nonmetal elements are on the upper right side of the periodic table. The light green and aqua-ish elements on the right side (not the very far right) are the nonmetals
- **Hydrogen number one on the periodic table is on the left side and is a non-metal gas.** Hydrogen is on the left side because like members of the IA group containing Lithium, Sodium, and Potassium it has a normal charge of +1.

Question 22 :

An electric iron of 750 W is used for 8 hours per day. Then the energy consumed in one day by the iron is:

Difficulty : Moderate**Average Time : 65 Seconds****Options :**

1. 6 units
2. 600 units
3. 0.6 units
4. 60 units

Solution :

The correct answer is **option 1** i.e. **6 units**.



- The unit of electrical energy is the kilowatt-hour (kWh), found by multiplying the power use (in kilowatts, kW) by the number of hours during which the power is consumed.
- Power of electric iron = 750W
usage per day = 8hrs
The Electrical energy consumed,
 $E = Pxt$
 $= 750 \times 8$
 $= 6000WH = 6KwH = 6 \text{ units}$

Question 23 :

Coins of denomination were introduced by the Reserve Bank of India (RBI) to mark MG Ramachandran's 1 birth centenary.

Difficulty : Moderate**Average Time : 60 Seconds****Options :**

1. 200
2. 100
3. 500
4. 20

Solution :

The correct answer is **option 2** i.e. **100**



- Government of India, in a notification said, "The ministry in the exercise of the powers conferred by clauses (d) and (e) of sub-section (2) of section 24 of the Coinage Act, 2011 (11 of 2011), the Central Government, has decided to coin Rs 100 – which are presently distributed in notes form, and introduce Rs 10 and Rs 5 coins with new features at the Mint for issue under the authority of the Central Government to commemorate the occasion of Birth Centenary of Dr. M. S. Subbulakshmi and Dr. M.G. Ramachandran Birth Centenary."
- **Rs 100 coins will be launched in two formats first one bearing the mark of Dr. M. S. Subbulakshmi and the second one bearing of Dr. M.G. Ramachandran Birth Centenary.**
- Maruthur Gopalan Ramachandran, popularly known as M.G.R, was an Indian politician and film actor who served as the Chief Minister of Tamil Nadu for ten years between 1977 and 1987.

Question 24 :

The energy obtained from atoms is known as.....

Difficulty : Moderate

Average Time : 75 Seconds

Options :

1. Solar energy
2. Heat energy
3. Nuclear energy
4. Chemical energy

Solution :

The correct answer is **option 3** i.e. **Nuclear energy**.



- **Nuclear energy is energy stored in the nucleus of an atom;** it is the energy that holds the nucleus together.
- **Nuclear energy** comes from splitting atoms in a reactor to heat water into steam, turn a turbine, and generate electricity.
- **Solar energy** is radiant light and heat from the Sun that is harnessed using a range of ever-evolving technologies such as solar heating, photovoltaics, solar thermal energy, solar architecture, molten salt power plants, and artificial photosynthesis.
- **Heat energy** is the result of the movement of tiny particles called atoms, molecules, or ions in solids, liquids, and gases.
- **Chemical energy** is energy stored in the bonds of chemical compounds, like atoms and molecules.

Question 25 :

Which of the following is NOT true about the vascular system?

Difficulty : Moderate

Average Time : 76 Seconds

Options :

1. Life span of human RBC is 115-120 days.
2. The vascular system forms about 7-8% of the body weight.
3. Blood is white or red vascular connective tissue.
4. There is about 6.8 liters of blood in an adult person

Solution :

The correct answer is **option 4** i.e. **There is about 6.8 liters of blood in an adult person.**



- The **vascular system**, also called the **circulatory system**, is made up of the vessels that carry blood and lymph through the body. The arteries and veins carry blood throughout the body, delivering oxygen and nutrients to the body tissues and taking away tissue waste matter.
- The Life span of human RBC is 115-120 days.
- The average adult has about 1.2 to 1.5 gallons (4.5 to 5.5 liters) of blood circulating inside their body.
- The vascular system forms about 7-8% of the body weight.
- Blood is considered a connective tissue because it has a matrix. The living cell types are red blood cells, also called erythrocytes, and white blood cells also called leukocytes.

Question 26 :

Calculate the relative molecular mass of water (H₂O).

Difficulty : Moderate

Average Time : 80 Seconds

Options :

1. 18 u
2. 1.8 u
3. 2.0 u
4. 20 u

Solution :

The correct answer is **option 1** i.e. **18 u**.

For H₂O molecule -

The relative mass of hydrogen (H) = **1 u**

The relative mass of oxygen (O) = **16 u**

According to the formula of water contains 2 hydrogen atoms,

So, relative mass of water = $2 \times (1\text{u}) + 16\text{u} = 18\text{u}$

So, Relative mass of water = 18u

Question 27 :

Which type of cell, skin is made up of:

Difficulty : Moderate

Average Time : 53 Seconds

Options :

1. Epidermal cells
2. Connective tissue
3. Permanent tissues
4. Parenchyma

Solution :

The correct answer is **option 1** i.e. **Epidermal cells**.

- **The epidermis is the outer of the two layers that make up the skin.** The epidermal cells perform a barrier function in the human body, protecting against invasion of bacteria and foreign particles and regulating the amount of water released from the body.

Question 28 :

The magnitude of the buoyant force depends on the of the fluid.

Difficulty : Moderate

Average Time : 51 Seconds

Options :



mass

2. temperature

3. volume

4. density

Solution :

The correct answer is **option 4** i.e. **Density**.

- Buoyancy or upthrust is an upward force exerted by a fluid that opposes the weight of a partially or fully immersed object.
- **The magnitude of the buoyant force depends on the density of the liquid.** If the density of the liquid is more than that of the object then the object sinks in the liquid. when the density of the liquid is less than that of the object, the object floats.

Question 29 :

Who among the following inaugurated the Dr. A.P.J. Abdul Kalam Memorial in Rameswaram?

Difficulty : Moderate

Average Time : 59 Seconds

Options :

1. Narendra Modi
2. O. Panneerselvain
3. Pranab Mukhejee
4. K. Palaniswami

Solution :

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

- Avul Pakir Jainulabdeen Abdul Kalam was an aerospace scientist who served as the 11th President of India from 2002 to 2007.
- **The Prime Minister, Narendra Modi, on 27 July 2017 inaugurated the Dr. APJ Abdul Kalam memorial at Pei Karumbu, Rameswaram in Tamil Nadu.**
- The PM unveiled the statue of Dr. Kalam and offered floral tributes at Kalam Sthal.

Question 30 :

Geneva-based International Campaign to Abolish Nuclear Weapons (ICAN) received 2017 _____.

Difficulty : Moderate

Average Time : 54 Seconds

Options :

1. Nobel Peace Prize
2. Albert Einstein Peace Prize
3. Gandhi Peace Award
4. Bruno Kreisky Award

Solution :

The correct answer is **option 1** i.e. **Nobel Peace Prize**.

- **The 2017 Nobel Peace Prize has been awarded to International Campaign to Abolish Nuclear Weapons (ICAN),** a coalition of non-governmental organisations from over 100 countries around the globe

Question 31 :

..... element is represented by the given symbol.

Difficulty : Moderate

Average Time : 47 Seconds

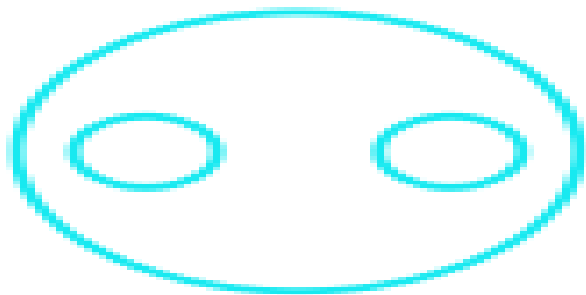


Options :

1. Hydrogen
2. Mercury
3. Carbon
4. Gold

Solution :

The correct answer is **option 2** i.e. **Mercury**.



Question 32 :

....., the Sultan of Delhi shifted his capital from Delhi to Daulatabad.

Difficulty : Moderate

Average Time : 38 Seconds

Options :

1. Iltutmish
2. Akbar
3. Ghiyas-ud-din Balban
4. Muhammad-bin-Tughlaq

Solution :

The correct answer is **option 4** i.e. **Muhammad-bin-Tughlaq**.



- Muhammad bin Tughluq was the Sultan of Delhi from 1325 to 1351. He was the eldest son of Ghiyas -Ud -Din -Tughlaq, the founder of the Tughluq dynasty. He was born in New Delhi. His wife was the daughter of the Raja of Dipalpur.
- In 1327, **Muhammad-bin-Tughluq** passed an order to move his capital from Delhi to Daulatabad (in present-day Maharashtra) in the Deccan region of India.

Question 33 :

A solar cell is made up of:

Difficulty : Moderate

Average Time : 54 Seconds

Options :

1. Carbon
2. Gallium
3. Silicon
4. Teflon

Solution :

The correct answer is **option 3** i.e. **Silicon**.

- By far, the most prevalent bulk material for **solar cells** is crystalline silicon (c-Si), also known as "solar grade silicon".

Question 34 :

The author of the book "The People's President: Dr. A P J Abdul Kalam" is:

Difficulty : Moderate

Average Time : 45 Seconds

Options :

1. Tarun Vijay



Sumitra Mahajan

3. KC Pant

4. SM Khan

Solution :

The correct answer is **option 4** i.e. **SM Khan**.

- Caliph Umar, Mahatma Gandhi, Albert Einstein, Emperor Ashoka, and Abraham Lincoln were the five greatest human beings to have lived on this earth according to Dr. Kalam.
- The author, **SM Khan**, acquaints us with lesser-known facts and stories which went towards making the great Dr. Kalam the 'People's President'

Question 35 :

1 kW =?

Difficulty : Moderate

Average Time : 49 Seconds

Options :

1. 1000 W
2. 10 W
3. 100 W
4. 10000 W

Solution :

The correct answer is **option 1** i.e. **1000 W**

- Kilowatt (symbol: kW) is a unit of electric power.
- One kilowatt (kW) is equal to 1000 watts (W)

Question 36 :

A body of mass 200g is rotating in a circular path of radius r with constant velocity. The work done in one complete



revolution is _____.

Difficulty : Moderate

Average Time : 45 Seconds

Options :

1. Zero
2. $100/r$ J
3. $100r$ J
4. $200/r$ J

Solution :

The correct answer is **option 1** i.e. **Zero**.

Mass of the body, $m = 200$ gm

We know that in a circular motion, the work done by the object is zero as the object is always perpendicular to its velocity and displacement i.e the angle between force and displacement is 90 degrees.

$$W = Fd \cos\theta$$

$$\theta = 90^\circ$$

$$W = 0 \text{ J}$$

So, the work done in one complete revolution is $\hat{€} 0$ Joules.

Question 37 :

Rate of change of displacement is known as

Difficulty : Moderate

Average Time : 64 Seconds

Options :

1. Acceleration
2. Velocity
3. Speed
4. Distance

**Solution :**

The correct answer is **option 2** i.e. **Velocity**.

- The **rate of change of displacement of an object (displacement over elapsed time) is velocity**.
Velocity is a vector since it has both magnitude (called speed) and direction.
- **Speed** is the distance traveled per unit of time.
- **Acceleration** is the rate of change of the velocity of an object with respect to time.
- **Distance** is a scalar quantity that refers to "how much ground an object has covered" during its motion.

Question 38 :

Which is the state animal of Andhra Pradesh?

Difficulty : Moderate

Average Time : 60 Seconds

Options :

1. Mithun
2. Ox
3. One-homed rhinoceros
4. Blackbuck

Solution :

The correct answer is **option 4** i.e. **Blackbuck**.

- Andhra Pradesh has retained undivided AP's symbol of state animal- **Krishna Jinka** or **blackbuck**- as its state animal.

Question 39 :

A solution contains 33 g of common salt in 320 g of water. Calculate the concentration in terms of mass, by the mass percentage of the solution.

Difficulty : Moderate

Average Time : 47 Seconds

Options :

1. 13.05%
2. 9.09 g
3. 9.35g
4. 9.35%

Solution :

The correct answer is **option 4** i.e. **9.35%**

Mass of solute - NaCl =33gm
Mass of solvent - water =320gm
Mass of solution =(40+320) gm
=353gm

Concentration in terms of Mass by mass percentage

$$\begin{aligned} &= \frac{\text{mass of solute}}{\text{mass of solution}} \times 100 \\ &= \frac{33}{353} \times 100 \\ &= 9.35\% \end{aligned}$$

Question 40 :

..... is the new capital of Andhra Pradesh.

Difficulty : Moderate

Average Time : 50 Seconds

Options :

1. Amaravati
2. Hyderabad
3. Secunderabad
4. Tirupati

**Solution :**

The correct answer is **option 1** i.e. **Amaravati**.

- **Amaravati is the State Capital city of Andhra Pradesh.** It is located on the banks of river Krishna. The city was constructed to serve as Andhra Pradesh's new capital after Telangana was split off as a separate state in 2014.
- The former Andhraite capital, Hyderabad, is now the capital of Telangana.

Question 41 :

Who among the following is the first Indian female gymnast ever to compete in the Olympics?

Difficulty : Moderate

Average Time : 53 Seconds

Options :

1. Bindu Bhosle
2. Dipa Karmakar
3. Jyoti More
4. Aruna Reddy

Solution :

The correct answer is **option 2** i.e. **Dipa Karmakar**.

- **Dipa Karmakar** (born 9 August 1993) is an Indian artistic gymnast.
- Karmakar first gained attention when she won a bronze medal at the 2014 Commonwealth Games in Glasgow, becoming the first Indian female gymnast to do so in the history of the Games.
- **Budda Aruna Reddy** is an Indian female artistic gymnast, representing at international competitions. She won the bronze medal in 2018 World Cup Gymnastics in women's vault event in Melbourne.

**Question 42 :**

Which of the following statements is/are true/false about the speed of sound in different media at 25 °C? A. In oxygen gas, the speed of sound is 316 km/s. B. In water (distilled), the speed of sound is 1498 km/s

Difficulty : Moderate

Average Time : 67 Seconds

Options :

1. Only A is true
2. Both A and B are true
3. Neither A nor B is true
4. Only B is true

Solution :

The correct answer is **option 3** i.e. **Neither A nor B is true.**

The speed of sound depends on the type and properties of the medium through which it is traveling.

Substance	Speed in m/s
Sea Water	1531
Distilled Water	1498
Air	346
Oxygen	316

Question 43 :

Which of the following statements about the reaction below is INCORRECT? $2\text{PbO}(s) + \text{C}(s) \rightarrow 2\text{Pb}(s) + \text{CO}_2(g)$ A. Carbon dioxide is getting, oxidized B. Lead is getting reduced C. Carbon is oxidized D. Lead oxide is getting reduced

Difficulty : Moderate

Average Time : 63 Seconds

Options :

1. A and C
2. A and B
3. B and C



A, B and C

Solution :

The correct answer is **option 2** i.e. **A and B**

- In the given balanced reaction $2\text{PbO}(\text{s}) + \text{C}(\text{s}) \rightarrow 2\text{Pb}(\text{s}) + \text{CO}_2(\text{g})$, lead is reduced and carbon is oxidized

Question 44 :

The potential difference between the terminals of an electric heater is 60 V when it draws a current of 4 A from the source. What current will the heater draw if the potential difference is increased to 127.5 V?

Difficulty : Moderate

Average Time : 51 Seconds

Options :

1. 8.5 A
2. 24 A
3. 10 A
4. 12 A

Solution :

The correct answer is **option 1** i.e. **8.5 A**

Given :

Potential Difference in heater = 60v

current $I=4A$

Resistance =R?

By Ohm's law :

$$V=IR$$

$$R=V/I$$

$$=60/4=15 \text{ ohms}$$

Now if the potential is increased to 127.5 V

$I=?$

$$V=IXR$$

$$I=V/R$$

$$=127.5/15$$

$$=8.5 \text{ A}$$

Hence current drawn by the electric heater is 8.5 A

Question 45 :

The resistors of values 4 , 8 , and 12 are connected in parallel. What will be equivalent resistance in the circuit?

Difficulty : Moderate

Average Time : 55 Seconds

Options :

1. 2.2

2. 1.8

3. 2

4. 1

Solution :

The correct answer is **option 1** i.e. **2.2**

CONCEPT	UNDERSTANDING	APPLICATION
---------	---------------	-------------

<p>To find Equivalent resistance the reciprocal ($1/R$) value of the individual resistances are all added together instead of the resistances themselves with the inverse of the algebraic sum giving the equivalent resistance as shown</p> <p>resistor-res9 or type unknown</p>	<p>To find: Equivalent resistance</p> <p>Given</p> <ul style="list-style-type: none"> • $R_1 = 4$ • $R_2 = 8$ • $R_3 = 12$ 	$\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$ $= \frac{1}{4} + \frac{1}{8} + \frac{1}{12}$ $= \frac{6 + 3 + 2}{24}$ $\frac{1}{R} = \frac{11}{24}$ $R = \frac{24}{11}$ $= 2.2$
--	--	---

Question 46 :

The force exerted on an object is 200 N and its mass is 100 kg. Find the acceleration of the object.

Difficulty : Moderate

Average Time : 76 Seconds

Options :

1. 2 ms^1
2. 2 ms^2
3. 2 ms^1
4. 20 ms^2

Solution :

The correct answer is **option 2** i.e. 2 ms^{-2}

CONCEPT

UNDERSTANDING

APPLICATION

The quantity of force is expressed by the vector product of mass (m) and acceleration (a). The equation or the formula for force can mathematically be expressed in the form of:

$$F = ma$$

Where,

- m = mass
- a = acceleration

It is articulated in Newton (N) or Kgm/s².

To find:
Acceleration.

Given:

- Force = 200 N
- Mass = 100 kg

$$F = m \times a$$

$$a = \frac{F}{m}$$

$$= \frac{200}{100}$$

$$= 2 \text{ ms}^{-2}$$

Question 47 :

If a : b = 32 : 35 and b : c = 21 : 32, then a : c is?

Difficulty : Moderate

Average Time : 75 Seconds

Options :

1. 5 : 3
2. 3 : 5
3. 1 : 1
4. 5 : 7

Solution :

The correct answer is **option 2** i.e. **3 : 5**

Application



Given

$$a : b = 32 : 35 \dots(i)$$

$$b : c = 21 : 32 \dots(ii)$$

Multiply by 3 in equation (i) and by 5 in
equation (ii), we get

$$a : b = 96 : 105 \text{ and } b : c = 105 : 160$$

Now,

$$a : b : c = 96 : 105 : 160$$

$$a : c = 96 : 160 = 3 : 5$$

Question 48 :

Kiran swims in a 90 m long pool. He covers 360 m in two minutes by swimming from one end to the other and back 0 along the same straight path, twice. Find the average speed of Kiran.

Difficulty : Moderate**Average Time : 53 Seconds****Options :**

1. 4ms^{-1}
2. 6ms^{-1}
3. 3ms^{-1}
4. 5ms^{-1}

Solution :

The correct answer is option 3 i.e. 3ms^{-1}

Understanding/Application/Calculation



Given,

Distance = 360m

Time = 2 min = (2 × 60) sec = 120 sec

Speed = $360/120 = 3\text{m/sec}$.

Pool length = 90 m

Total distance = $90 \times 2 \times 2 = 360\text{ m}$

Time = $360/2 = 180\text{ sec} = 3\text{ min}$

Now,

Average speed = Speed (Because all part travel with constant speed)

So, Average speed = $3\text{m/sec} = 3\text{ms}^{-1}$

Question 49 :

The base of a pyramid is a rectangle whose length and breadth are 16 cm and 12 cm respectively. If the length of all the lateral edges passing through the vertex of the right rectangular pyramid is 26 cm, then find the volume of the pyramid in cubic centimeter?

Difficulty : Moderate**Average Time : 65 Seconds****Options :**

1. 1536 cm^3
2. 1024 cm^3
3. 718 cm^3
4. 2072 cm^3

Solution :

The correct answer is option 1 i.e. 1536 cm^3

Understanding



Given,

Length of base area of pyramid = $L = 16$ cm

Breadth of base area of pyramid = $B = 12$ cm

Diagonal of the base area of the rectangular pyramid = $(16^2 + 12^2) = 20$ cm

Slant height of edge = hypotenues = 26 cm

Base = $D/2 = 20/2 = 10$ cm

Height = $H = (26^2 - 10^2) = 24$ cm

Formula:

volume of a rectangular-based pyramid = $1/3 (L \times B \times H)$

Application

volume of a rectangular-based pyramid = $1/3 (16 \times 12 \times 24) = 1536$ cm³

Question 50 :

If two flood gates A and B function simultaneously, the reservoir will be filled in 6 hours. Gate A fills the reservoir 5 hours faster than gate B. How many hours does the faster flood gate take to fill the reservoir?

Difficulty : Moderate

Average Time : 74 Seconds

Options :

1. 7 hrs
2. 13 hrs
3. 5 hrs
4. 10 hrs

Solution :

The correct answer is option 4 i.e. 10 hours

Understanding

Given,

$$A + B = 6 \text{ hr}$$

$$A \text{ fill alone} = x \text{ hr}$$

$$B \text{ fill alone} = (x + 5) \text{ hr}$$

$$\text{Total capacity} = \text{LCM of 6 and 5} = 30 \text{ liters (let)}$$

$$\text{Efficiency of } (A + B) = 30/6 = 5$$

$$\text{Efficiency of } A = 5 - a$$

$$\text{Efficiency of } B = 5$$

Application

$$30/a - 30/(5 - a) = 5$$

$$150 - 30a - 30a = 25a - 5a^2$$

$$5a^2 - 85a + 150 = 0$$

$$5a^2 - 10a - 75a + 150 = 0$$

$$5a(a - 2) - 75(a - 2) = 0$$

$$(a - 2)(5a - 75) = 0$$

$$a = 2 \text{ and } 15$$

we take 2 (15 is not less than 5)

$$\text{Efficiency of } B = 2$$

$$\text{So, efficiency of } A = 5 - 2 = 3$$

$$\text{faster flood gate} = A = 30/3 = 10 \text{ hours}$$

Question 51 :

The two roots of a quadratic equation are given as $x=1/7$ and $x=-1/8$. The equation can be written as:

Difficulty : Moderate

Average Time : 73 Seconds

Options :

1. $(7x - 1)(8x - 1) = 0$



$$(7x - 1)(8x + 1) = 0$$

3. $(7x + 1)(8x - 1) = 0$

4. $(7x + 1)(8x + 1) = 0$

Solution :

The correct answer is option 2 i.e. $(7x - 1)(8x + 1) = 0$

Understanding/Application/Calculation

Given,

$$x = 1/7 \text{ and } x = -1/8$$

$$x = 1/7$$

$$7x = 1$$

$$7x - 1 = 0$$

And, $x = -1/8$

$$8x = -1$$

$$8x + 1 = 0$$

The equation is:

$$(7x - 1)(8x + 1) = 0$$

Question 52 :

What is the Compound interest on ? 5000 in 3 years, if the rate of interest is 4% for the first year, 3% for the second year and 2% for the third year?

Difficulty : Moderate

Average Time : 52 Seconds

Options :

1. ? 435.21

2. ? 453.12

3. ? 436.12

4. ? 463.12

Solution :

The correct answer is option 4 i.e. 463.12

Understanding/Application/Calculation

Given,

Principal = 5000

Time = 3 years

1st year rate = 4%

2nd-year rate = 3%

3rd year rate = 2%

Now, CI after 3 year.

Interest of 1st year = $(5000/100)4 = 200$

P after 1st year = $5000 + 200 = 5200$

Interest of 2nd year = $(5200/100)3 = 156$

P after 2nd year = $5200 + 156 = 5356$

Interest of 3rd year = $(5356/100)2 = 107.12$

So,

Total interest = $200 + 156 + 107.12 = 463.12$

Question 53 :

7/9 of the people present in a hall are sitting in 9/13 of the chairs available and the rest are standing. If there are 28 empty of 91 sitting chairs, how many chairs would have been still empty if everyone in the hall was sitting?

Difficulty : Moderate

Average Time : 60 Seconds

Options :

1. 15

2. 12

3. 18

4. 10

Solution :

The correct answer is option 4 i.e. 10

Understanding

Given,

Present people = $7/9$ (i)

Available chairs = $9/13$ (ii)

Multiply (i) by 9 and (ii) by 7, we get

Present people = $(7 \times 9)/(9 \times 9) = 63/81$

Available chairs = $(9 \times 7)/(13 \times 7) = 63/91$

$91 - 63 = 28$ (i.e given)

Application

Here, we find out the total number of chairs and the total number of people
i.e

Total people = 81

Total chairs = 91

If all peoples sit, still empty chairs = $91 - 81 = 10$ chairs

Question 54 :

From a square plate with each side 7 cm, squares of area 0.25 cm^2 are cut out at each corner and the remaining plate is folded along the cuts to form a cuboid. The volume of this open-top cuboid will be..... cm^3

Difficulty : Moderate

Average Time : 65 Seconds

Options :

1. 21

2. 16

3. 18

4. 20

Solution :

The correct answer is option 3 i.e. 18 cm^3

Understanding/Application

Length of side of square = 7 cm

Cut by each corner of area = 0.25 cm^2

length of cutting are of 1 corner = (area) = $(0.25) = .5 \text{ cm}$

New length = New breadth $7 - (.5 + .5) = 6 \text{ cm}$

Height of cuboid = $.5 \text{ cm}$

Formula:

Area of cuboid = $L \times B \times H = (6 \times 6 \times .5) \text{cm}^3 = 18 \text{ cm}^3$

Question 55 :

The following pie chart shows information on sales of a toy making company "XYZ" during 2017-18 financial year. The total revenue made by sales of the toys was Rs 38,72,0004. Which type of toys made highest revenue for the company?

Difficulty : Moderate

Average Time : 62 Seconds

Options :

1. Toddler toys
2. Musical toys
3. Soft toys
4. Learning blocks

Solution :

The correct answer is option 2 i.e. Musical toys

Understanding/Application

Study the pie chat which has maximum arc also maximum revenue.

i.e blue, Musical toys.

Question 56 :

The potential difference between the terminals of an electric heater is 60 V when it draws a current of 4 A from the source. What current will the heater draw if the potential difference is increased to 127.5 V ?



Difficulty : Moderate

Average Time : 48 Seconds

Options :

1. 8.5 A
2. 24 A
3. 10 A
4. 12 A

Solution :

The correct answer is option 1 i.e 8.5 A

case (I) when

Potential difference = 60 volt

current $i = 4$ A

then resistance $R = 60/4 = 15$ ohm

case(II) when

Potential difference = 127.5 volt

then current $i = 127.5/15 = 8.5$ A

Question 57 :

X can complete a task in 8 days, whereas Y can complete the same task in 10 days. If they work together, in how many days will the task be completed?

Difficulty : Moderate

Average Time : 44 Seconds

Options :

1. 40/9
2. 9/40
3. 44/9
4. 9

Solution :

The correct answer is option 1 i.e. 40/9 days



Understanding/Application

Given,

A = 8 days

B = 10 days

Total work = LCM of 8 and 10 = 40 (let)

Efficiency of A = T.W./Days = $40/8 = 5$ units per day

Efficiency of B = T.W./Days = $40/10 = 4$ units per day

When work together

Efficiency of (A + B) = $5 + 4 = 9$ units per day

Days = T.W./Efficiency of (A + B) = $40/9$ days

Question 58 :

The LCM of 72 and 84 is:

Difficulty : Moderate

Average Time : 49 Seconds

Options :

1. $12 \times 6 \times 7$

2. $6 \times 2 \times 7$

3. $12 \times 7 \times 3$

4. 72×84

Solution :

The correct answer is **option 1** i.e. $12 \times 6 \times 7$

Understanding/Application

LCM of 72 and 84

$$72 = 2^3 \times 3^2$$

$$84 = 2^2 \times 3 \times 7$$

$$\text{So, LCM of 72 and 84 is} = 2^3 \times 3^2 \times 7 = 12 \times 6 \times 7$$

Question 59 :



Raghu bought an article for Rs 14,360 and spent Rs 240 on its transportation. At what amount he has to sell it to get a profit of 15%? (in ?)

Difficulty : Moderate

Average Time : 51 Seconds

Options :

1. Rs 16,000
2. Rs 16,790
3. Rs 16,150
4. Rs 16.500

Solution :

The correct answer is option 2 i.e. Rs 16790

Understanding/Application

Given,

CP = 14360

Transportation = 240

Total Expencc/Cost = $14360 + 240 = 14600$

Gain amount= $15\% \text{ of } 14600 = (14600/100)15 = 146 \times 15 = 2190$

Selling price = Total Expencc/Cost + Gain amount = $14600 + 2190 = \text{Rs } 16790$

Question 60 :

Which of the numbers given below is the square root of 14161?

Difficulty : Moderate

Average Time : 43 Seconds

Options :

1. 119
2. 121
3. 131
4. 129

Solution :



The correct answer is option 1 i.e. 119

Understanding/Application

14161

Divide 3:2 i.e 141 and 61

$141 = 11^2$ (the number which is square is 141 or less than 141)

Now, 11 multiply by its next number i.e 12

$11 \times 12 = 132$ (132141)

11^2 141 12^2

We take 11

61 = 1 or 9 (last digit is 1 i.e comes in square of 1 or 9)

we take 9 (because $141 > 132$, 141 is larger so we also take larger possibility)

hence, $14161 = 119$

Question 61 :

1/8th of the audience of a program Jabardast were children, 2/5th of the audience were men and the rest women. If the number of women audience is 380, find the total number of audience in the program?

Difficulty : Moderate

Average Time : 61 Seconds

Options :

1. 600
2. 500
3. 400
4. 800

Solution :

The correct answer is option 4 i.e. 800

Understanding/Application



Let,

Total number of audience = x

So, A/q-

Children = $x/8$

Men = $2x/5$

Female = 380

Now,

$$x/8 + 2x/5 + 380 = x$$

$$(5x + 16x + 15200)/40 = x$$

$$15200 + 21x = 40x$$

$$19x = 15200$$

$$x = 15200/19 = 800$$

Question 62 :

The data shows the information on the number of children vaccinated in the year 2016 in different cities: If the total number of children vaccinated in the year 2016 is 1,20,000, then how many children from city 'A' were vaccinated?

Difficulty : Moderate**Average Time : 52 Seconds****Options :**

1. 36,000
2. 24,000
3. 12,000
4. 48,000

Solution :

The correct answer is option 3 i.e. 12,000

Understanding/Application

Given,
Arc A = 10%
Total = 120000
Number of children in A = $(120000/100) \times 10 = 12000$

Question 63 :

In a class there were 28 boys and some girls. In a test the mean score obtained by the boys was 12.5 while that obtained by the girls was 14.5. If the overall average was 13.1, what was the total number of students in the class?

Difficulty : Moderate**Average Time : 45 Seconds****Options :**

1. 42
2. 44
3. 40
4. 38

Solution :

The correct answer is option 3 i.e. 40

Understanding

Given,

No. of boys = 28

No. of girl = x (let)

Mean of score of boys = 12.5

Mean of score of girl = 14.5

Boys and girls together mean = 13.1

Application

$$28 \times 12.5 + x \times 14.5 = 13.1 \times (28 + x)$$

$$350 + 14.5x = 366.8 + 13.1x$$

$$3500 + 145x = 3668 + 131x$$

$$14x = 168$$

$$x = 168/14 = 12$$

So, no. of girls = 12

$$\text{Total number of students} = 28 + 12 = 40$$

Question 64 :

Solve the following equation to find x: $(x - 2)^2 - 36 = 0$: $x \in \mathbb{N}$

Difficulty : Moderate

Average Time : 55 Seconds

Options :

1. 4

2. 8

3. -8

4. -4

Solution :

The correct answer is option 2 i.e. 8

Understanding/Application

$$(x - 2)^2 - 36 = 0 : x$$
$$x^2 + 4 - 4x - 36 = 0 : x$$
$$x^2 - 4x - 32 = 0 : x$$
$$x^2 + 4x - 8x - 32 = 0 : x$$
$$x(x + 4) - 8(x + 4) = 0 : x$$
$$(x + 4)(x - 8) = 0 : x$$
$$x = 8 \text{ and } -4$$
$$x = 8$$

Question 65 :

The minimum value of LCM of given numbers is the product of all the given numbers.

Difficulty : Moderate**Average Time : 51 Seconds****Options :**

1. always greater than
2. always less than
3. always equal to
4. never equal to

Solution :

The correct answer is option 2 i.e. always less than

Understanding/Application

Let,

Number is: 2, 3, 5 and 6

LCM of 2, 3, 5, 6 = 30

Multiplication of numbers = $2 \times 3 \times 5 \times 6 = 120$

Here, $120 > 30$

Hence, Multiplication of numbers $>$ LCM of numbers

The minimum value of LCM of given numbers is ..."always less than".. the product of all the given numbers

Question 66 :

Raghu goes to college at a speed of 4 kmph and returns at a speed of 3 kmph. If he takes 5.95 hrs in all, then what is the distance between his home and the college?

Difficulty : Moderate

Average Time : 59 Seconds

Options :

1. 10.2 km
2. 10.5 km
3. 10 km
4. 20 km

Solution :

The correct answer is option 1 i.e. 10.2 km

Understanding/Application



Given,

Distance = x

Time₁ = 4 hours

Time₂ = 3 hours

Total time = 5.95 hours

$x/4 + x/3 = 5.95$

$(3x + 4x)/12 = 5.95$

$7x = 5.95 \times 12$

$x = 10.2 \text{ km}$

Question 67 :

What is the least number that when divided by 63 and 105 leaves remainder 4 in each case?

Difficulty : Moderate

Average Time : 47 Seconds

Options :

1. 634
2. 256
3. 214
4. 319

Solution :

The correct answer is option 4 i.e. 319

Understanding/Application

LCM of 63 and 105

$63 = 3^2 \times 7$

$105 = 3 \times 5 \times 7$

So, LCM = $3^2 \times 5 \times 7 = 315$

Number = LCM of numbers + Remainder = $315 + 4 = 319$

Question 68 :



ABCD is a quadrilateral inscribed in a circle (radius = r). The bisectors of the angles DAB and BCD intersect the circle at X and Y, respectively. What is the length of the straight line XY?

Difficulty : Moderate

Average Time : 47 Seconds

Options :

1. r^2
2. $2r$
3. $(r + 2)$
4. $r^2/2$

Solution :

The correct answer is option 2 i.e. $2r$

Understanding/Application

ABCD is quadrilateral,

O is the centre of the circle.

A/q-

DAB intersect at x and BCD intersect at y

Both are the opposite angle of quadrilateral.

AO = Radius of circle = r

CO = Radius of circle = r

$(AO + CO) = XY \text{ length} = (r + r) = 2r$

Question 69 :

Two numbers are in the ratio of 15 : 11. If their HCF is 13, then the greater number is?

Difficulty : Moderate

Average Time : 54 Seconds

Options :

1. 195
2. 125
3. 175

120

Solution :

The correct answer is option 1 i.e. 195

Understanding/Application
Ratio of number = 15:11
HCF = 13
Number = $15 \times 13 = 195$ and $11 \times 13 = 143$
Greater number = 195

Question 70 :

At what time between 4 o'clock and 5 o'clock will the two hands of the clock be at the right angle to each other for the first time?

Difficulty : Moderate**Average Time : 42 Seconds****Options :**

1. 58/11 min past 4 o'clock
2. 422/11 min past 4 o'clock
3. 60/11 min past 4 o'clock
4. 420/11 min past 4 o'clock

Solution :

The correct answer is option 3 i.e. 60/11 min past 4 o'clock.

- Minute hands cover 5 minutes if the angle between 4 o'clock and 5 o'clock will 90.
- To be 90° between 4 o'clock and 5 o'clock, the minute hands must gain 5 minutes.

As we know,

55 minutes are gained in = 60 minute

5 minutes are gained in = $(60/55) \times 5 = 60/11$ minute

Required time = **60/11 min past 4 o'clock.**

Question 71 :

Which of the following statements is/are true/false about the speed of sound in different media at 25 °C? A. In oxygen gas,



the speed of sound is 316 km/s. B. In water (distilled), the speed of sound is 1498 km/s

Difficulty : Moderate

Average Time : 68 Seconds

Options :

1. Only A is true
2. Both A and B are true
3. Neither A nor B is true
4. Only B is true

Solution :

The correct answer is **option 3 i.e. Both A and B are true.**

- Both A and B are true because the speed of sound in different media at 25°C is different.
- In oxygen gas, the speed of sound is 316 m/s.
- In water (distilled), the speed of sound is 1498 m/s.

Question 72 :

You are given a question and two statements. Identify which of the statements is/are necessary/sufficient to answer the question. Question: What is the colour of Jasmine? Statements: I. Blue is called white, white is called red and red is called yellow. II. Yellow is called purple, purple is called black, white is called brown and brown is called orange.

Difficulty : Moderate

Average Time : 62 Seconds

Options :

1. Data in I alone is sufficient
2. Data either in I alone or II alone is sufficient
3. Data in both I and II together is not sufficient
4. Data in II alone is sufficient

Solution :

The correct answer is option 4 i.e. **Data in II alone is sufficient.**

- As we know that the colour of Jasmine is a pale tint of yellow.

From statement I, we can't determine what is yellow called and hence it is not sufficient to answer the question.

From statement II, we can see that yellow is called purple.

So, the colour of Jasmine as per the coding must be purple.

Thus, **data in II alone is sufficient.**

Question 73 :

Read the following statement and the arguments that follow. Decide which of the arguments is strong. Statement: Should written examination in primary schools be abolished? Arguments: 1. Yes, young students feel the burden and such examinations do not help in the natural thinking process. 2. No, without examination students will not be serious about education and learning.

Difficulty : Moderate

Average Time : 75 Seconds

Options :

1. Both arguments I and 2 are strong
2. Only argument I is strong
3. Neither argument 1 nor 2 is strong
4. Only argument 2 is strong

Solution :

The correct answer is option 1 i.e. **Both arguments I and 2 are strong.**

- The exam is a word that most students fear off. Young students feel the burden of exam and such examinations do not help in the natural thinking process in them.
- The exam word has a magic power to change a happy person into a frustrated and nervous one.
- Hence, **arguments 1 is strong.**

- Written examination in primary schools should not be abolished because without examination students will not be serious about education and learning.
- The exam is the only way for the teachers to see the student's level.
- Hence, **arguments 2 is also strong.**
- So, **both arguments I and 2 are strong.**

Question 74 :

In a code language, BURN is written as YFIM. What is the code for WOUND?

Difficulty : Moderate

Average Time : 72 Seconds

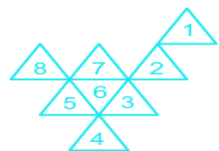
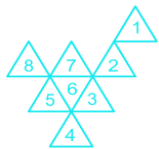
Options :

1. DLFMD
2. DLFMW
3. DNFMW
4. DPFMW

Solution :

The correct answer is option 2 i.e. **DLFMW**.

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14



From the above figure, we can see that just the opposite word of the alphabet is used in BURN.

Similarly, WOUND is coded as **DLFMW**.

Question 75 :

Find the next number in the given series. 9, 11, 15, 17, 21, 23, ?

Difficulty : Moderate

Average Time : 105 Seconds

Options :

1. 29
2. 28
3. 30
4. 27

Solution :

The correct answer is option 4 i.e. 27.

- $9 + 2 = 11$
- $11 + 4 = 15$
- $15 + 2 = 17$
- $17 + 4 = 21$
- $21 + 2 = 23$
- $23 + 4 = 27$.

Hence, the complete series is 9, 11, 15, 17, 21, 23, **27**.



Question 76 :

Choose the best suitable Venn diagram for the following words: transport vehicle, truck, van

Difficulty : Moderate

Average Time : 37 Seconds

Options :

1. 
2. 



Solution :



The correct answer is option 3 i.e.

- Transport vehicle" means a public service vehicle, a goods carriage, an educational institution bus, or a private service vehicle." **Truck and van are a transport vehicle.**
- The above diagram is the best suitable Venn diagram for the words transport vehicle, truck, van
- Hence, option 3 is the correct answer.

Question 77 :

Mathur's uncle's daughter's brother is Salmi. How is Salmi related to Mathur?

Difficulty : Moderate

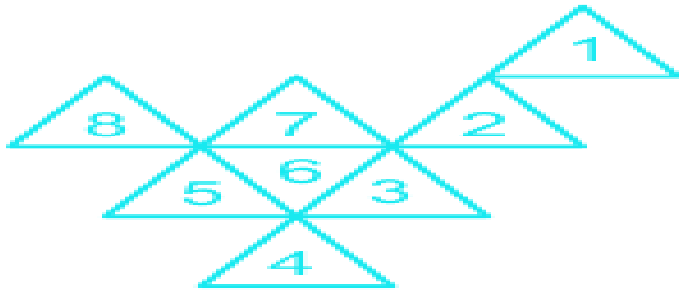
Average Time : 73 Seconds

Options :

1. **Cousin**
2. Son
3. Brother
4. Father

Solution :

The correct answer is option 1 i.e. **Cousin.**



From the above figure, we can say that Salmi is **Mathur's Cousin**.

Question 78 :

Four words have been given below of which three are alike in some way and one is different. Choose the odd one out.

Difficulty : Moderate

Average Time : 47 Seconds

Options :

1. Table
2. Chair
3. Cupboard
4. Cardigan

Solution :

The correct answer is option 4 i.e. **Cardigan**.

- A cardigan is a knitted woolen sweater but Table, Chair, and, Cupboard is a piece of furniture.
- Hence, **Cardigan** is the one that is different among the three others.

Question 79 :

Choose the figure which is different from the rest.

Difficulty : Moderate

Average Time : 41 Seconds

Options :

1. b
2. c
3. a
4. d

Solution :

The correct answer is option **3 i.e. a**.

- From the above figure, we can see that, in figure b, c, and, d the black dots are on an alternate side but in figure a, we can see that the black dots are on the same side.
- Hence, **Option 3 i.e. figure a** is different from the rest.

Question 80 :

..... element is represented by the given symbol.

Difficulty : Moderate**Average Time : 44 Seconds****Options :**

1. Hydrogen
2. Mercury
3. Carbon
4. Gold

Solution :

The correct answer is option **2 i.e. Mercury**.

- Mercury element is represented by the given symbol.
- It is also known as quicksilver and was formerly named hydrargyrum.
- Mercury is the only metallic element that is liquid at room temperature.

Some more facts about Mercury:-

Symbol	Hg
Atomic Number	80
Block in the periodic table	d block

Melting Point	--38.8°C
Boiling point	356.7 °C

Question 81 :

Out of the four option figures, three are similar in a certain manner. However, one figure is NOT like the other three. Select the figure which is different from the rest.

Difficulty : Moderate

Average Time : 78 Seconds

Options :

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

Solution :

The correct answer is option 2 i.e. D.

- From the above figure, we can see that in diagram a, b, c the outer diagram is different from the inner diagram.
- In figure **A**, a circle is inserted in a square.
- In figure **B**, a square is inserted in a triangle.
- In figure **C**, a square is inserted in the polygon.
- But in figure **D**, a circle is inserted with the circle.
- Hence, **figure D** is different from the rest.

Question 82 :

Anil is facing the East. He then turns 90° clockwise and then 135° anti-clockwise. In which direction is he facing now?

Difficulty : Moderate

Average Time : 58 Seconds

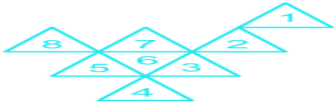
Options :

1. North
2. West
3. North-East
4. South-West

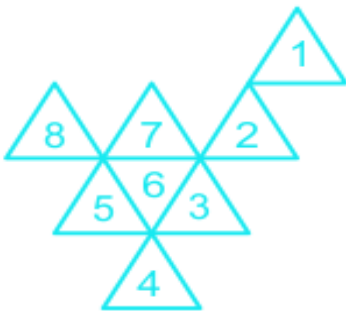
Solution :

The correct answer is option 2 i.e. **North-East**.

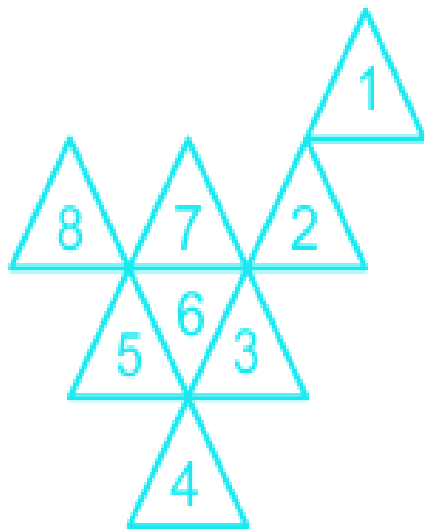
- When Anil is facing the East.



- He then turns 90° clockwise.



- Then he turns 135° anti-clockwise.



Hence, Anil's finally facing in **North-East** direction.

Question 83 :

Select the option that is related to the third word on the same basis as the second word is related to the first word. Real : Genuine :: Fake : ?



Difficulty : Moderate

Average Time : 65 Seconds

Options :

1. Authentic
2. Fell
3. Counterfeit
4. True

Solution :

The correct answer is option 3 i.e. **Counterfeit**.

- Real means actually existing as a thing or occurring in fact. Genuine means authentic. Real is the synonyms of Genuine.
- Similarly Fake means not genuine which is the synonyms of **Counterfeit**.
- Hence, **Counterfeit** is the word which is related to the third word on the same basis as the second word is related to the first word.

Question 84 :

A statement is followed by two arguments. Decide which of the arguments is/are strong with respect to the statement.
Statement: From a tender age, children must be trained to do household chores. Arguments: I. Yes, it will make them grow responsible for their work. II. No, it is enough that we send them to school as they learn everything there.

Difficulty : Moderate

Average Time : 65 Seconds

Options :

1. Neither I nor II is strong.
2. Only argument I is strong.
3. Only argument II is strong.
4. Both I and II are strong.

Solution :

The correct answer is option 2 i.e. **Only argument I is strong**.

- Yes, it is necessary that from the tender age children must be trained to do household chores. This will make them grow responsible for their work.
- Household chores help kids learn responsibility and self-reliance. Chores help teach teamwork and help to improve

planning and time management skills. It also gives families a chance to bond.

- Arguments 2 is weak.
- Hence, the **Only argument I is strong.**

Question 85 :

Find the mirror image of the given figure if the mirror is placed at line MN.

Difficulty : Moderate

Average Time : 62 Seconds

Options :

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



Solution :

The correct answer is option 1 i.e. C.



- Figure in option c is the correct mirror image of the given figure if the mirror is placed at line MN.
- Hence, **option 1** is the right answer.

Question 86 :

Choose the correct picture which fit the blank space from the figures given below.

Difficulty : Moderate

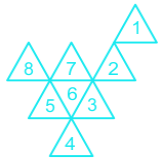
Average Time : 47 Seconds

Options :

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

Solution :

The correct answer is option 1 i.e. A.



- The above figure is the correct picture that fits the blank space from the question figures.
- Hence, **figure A in option 1** is the correct answer.

Question 87 :

Read the following statements and the conclusions that follow. Decide which of the two conclusions follow from the given statements. Statements: • All swans are parrots. • No parrot is a cuckoo. Conclusions: 1. No swan is a cuckoo. 2. All parrots are swans.

Difficulty : Moderate

Average Time : 53 Seconds

Options :

- 1. Only conclusion 2 follows
- 2. Only conclusion 1 follows
- 3. Either conclusion 1 or 2 follows
- 4. Both conclusions 1 and 2 follow

Solution :

The correct answer is option 2 i.e. **Only conclusion 1 follows.**



- Conclusions:
 1. No swan is a cuckoo = **True**.
 2. All parrots are swans = **False**.
- Hence, **Only conclusion 1 follows**.

Question 88 :

Choose the odd one out from among the given figures.

Difficulty : Moderate

Average Time : 52 Seconds

Options :

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

Solution :

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



- In option, **a**, **b**, and, **c** the sign of arrow is **on the corner** but in option **d**, the sign of arrow is **on the side** of the hexagon.
- Hence, Figure in **d** is the odd one out from among the given figures.

Question 89 :

What time does the mirror image of an analog clock at 5'O clock show?

Difficulty : Moderate

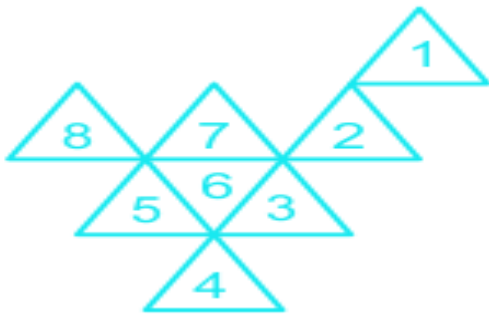
Average Time : 53 Seconds

Options :

1. 12 :00
2. 5 :00
3. 7 :00
4. 6 :00

Solution :

The correct answer is option 3 i.e. 7:00.



- From the above figure, we can see the time is **7'O clock** in the mirror image of an analog clock at 5'O clock.
- Hence, option 3 is the right answer.

Question 90 :

Each question given below consists of a statement, followed by two arguments numbered I & II. You have to decide which of the arguments is a 'strong' argument. Statement: Is global warming a real threat? Arguments : I. Yes, it is a threat leading to the consequences of sea-level rise, extreme heat, heightened wildfire risk, and drought and other water supply issues. II. No, Global warming is a misconception created by some people.

Difficulty : Moderate

Average Time : 64 Seconds

Options :

1. Only argument II is strong
2. Neither I nor II is strong
3. Only argument I is strong



Both I and II are strong.

Solution :

The correct answer is option 3 i.e. **Only argument I is strong.**

- Global warming a real threat to all living things in the Earth. This threat is leading to the consequences of sea-level rise, extreme heat, heightened wildfire risk, and drought and other water supply issues.
- Warmer air holds more water or rising temperatures cause higher surface evaporation that in turn increases the number and severity of rain events, now termed rain bombs, resulting in storm surge and the intensity, frequency and duration of hurricanes.
- Hence, the argument I is strong.
- No, Global warming is a misconception created by some people is **the argument 2 that is not true.**
- So, the **Only argument I is strong.**



Question 91 :

Rajaram's son's sister's mother is Ramani. How is Ramani related to Rajaram?

Difficulty : Moderate

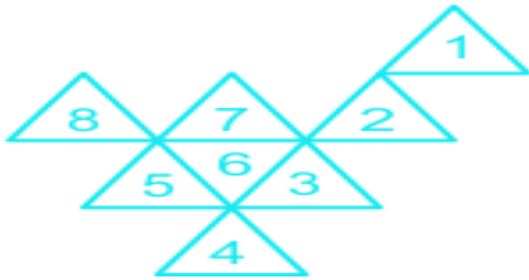
Average Time : 73 Seconds

Options :

1. Aunt
2. Wife
3. Sister
4. Cousin

Solution :

The correct answer is option 2 i.e. **Wife.**



- From the above diagram, we can see that Rajaram's son's sister's mother is Ramani.
- Hence, Ramini is the **wife** of Rajaram.

Question 92 :

A statement is followed by two arguments. Decide which of the arguments is/are strong with respect to the statement.

Statement: Should too much revealing dress be banned? Argument: 1. Yes, it disturbs the people and creates abuse. 2. No, wearing clothes of their choice is the fundamental right of the individual

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

1. Neither argument 1 and 2 is strong
2. Only argument 1 is strong
3. Only argument 2 is strong
4. Either argument 1 or 2 is strong

Solution :

The correct answer is option 3 i.e. **Only argument 2 is strong.**

- The statement, Should too much-revealing dress be banned, Argument 2 i.e. no, wearing clothes of their choice is the fundamental right of the individual makes the statement strong.
- **The right to adequate clothing, or the right to clothing, is recognized as a human right in various international human rights instruments.**
- Arguments 1 i.e. Yes, it disturbs the people and creates abuse is not strong with respect to the statement.
- Hence, **Only argument 2** is strong.

Question 93 :

Choose the correct picture that fits the blank place.

Difficulty : Moderate

Average Time : 61 Seconds

Options :

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

Solution :

The correct answer is option 4 i.e. A.



- The above picture is the correct picture that fits the blank place.
- Hence, **figure A** is the right answer.

Question 94 :

Which pattern will the given transparent sheet resemble when it is folded at the dotted line?

Difficulty : Moderate

Average Time : 45 Seconds

Options :

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

Solution :

The correct answer is option 2 i.e. A.



The above pattern will the given transparent sheet resemble when it is folded at the dotted line.

- Hence, **figure A** is the right answer.

Question 95 :

Find the next figure for the given series

Difficulty : Moderate

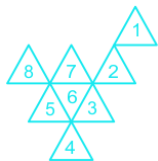
Average Time : 44 Seconds

Options :

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

Solution :

The correct answer is option 2 i.e. D.



- The above figure is the next figure for the given series.
- Hence, **Figure D** in **option 2** is the right answer.

Question 96 :

6 6 8 5 5 3 7 3 7 2 5 8 8 7 8 1 5 5 3 Using the above sequence find the term that does NOT belong to the group. 83, 35, 27, 81

Difficulty : Moderate

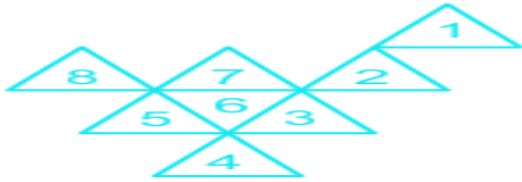
Average Time : 46 Seconds

Options :

1. 27
2. 83
3. 81
4. 35

Solution :

The correct answer is option 1 i.e. 27.



Hence, 27 does not belong to the group.

Question 97 :

Find the next term for the series given below: 5G, 6H, 7I, 8J, ?

Difficulty : Moderate

Average Time : 42 Seconds

Options :

- 1. 14K
- 2. 9K
- 3. 10K
- 4. 12G

Solution :

The correct answer is option 2 i.e. 9K.

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

- In the question, we can see that each word follows the alphabet pattern and each digit are in increasing order.





Hence, the complete series is 5G, 6H, 7I, 8J, **9K**.

Question 98 :

If + means \div , - means +, x means \div and \div means x then find the value of $27 \div 15 \ 36 + 6$?

Difficulty : Moderate**Average Time : 99 Seconds****Options :**

1. 411
2. 414
3. 416
4. 412

Solution :

The correct answer is option 1 i.e. 411.

+	\div
-	+
x	-
\div	x

After changing the sign we have,

$$27 \div 15 \ 36 + 6 = 27 \times 15 + 36 \div 6$$

$$27 \times 15 + 6$$

$$405 + 6$$

$$411.$$

Question 99 :

Count the number of triangles in the following figure:

Difficulty : Moderate

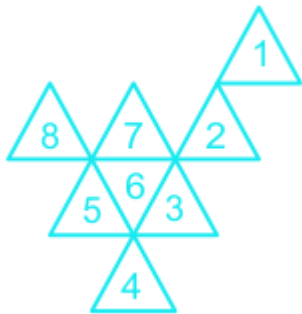
Average Time : 62 Seconds

Options :

1. 10
2. 7
3. 8
4. 9

Solution :

The correct answer is option 2 i.e. 9.



- There are a total of **9 triangles** in the above figure.
- **1, 2, 3, 4, 5, 6, 7, 8 and 9 (3 + 5+ 6+ 7)**

Question 100 :

Find the mirror image of the given figure if the mirror is placed at line MN.

Difficulty : Moderate

Average Time : 43 Seconds

Options :

1. C
2. A

D

4. B

Solution :

the correct answer is option 1 i.e. C



Rrb Group D CBT - 1 Previous Year Question Paper Analysis

The analysis of Rrb Group D CBT - 1 Previous Year Question Paper held on 2018-10-03 in the Morning exam is as follows:

1. 100 questions were moderate.
2. The safe score is 77 marks.
3. 100 questions were asked from CBT -1 and 100 questions were asked from CBT -1
4. 0 questions should have been skipped if you were short of time.

Rrb Group D CBT - 1 Previous Year Question Paper Topic Wise Weightage

CBT -1

Rrb Group D CBT - 1 Previous Year Question Paper Tips and Tricks



1. Try to solve Rrb Group D CBT - 1 Previous Year Question Paper without taking any help from the solutions.
2. Rrb Group D 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



KD Live is providing [Current Affairs](#) on a daily basis for Railways and a [Current Affairs Quiz](#) too for the practice.

KD Live Free Offerings



KD Live is Offering Every Information and Study Material required for the self study. Please click on the following links for accessing those.

- [Study Plan](#)
- [General Science](#)
- [General Awareness](#)
- [General Knowledge](#)
- [Quantitative Aptitude](#)
- [Logical Reasoning](#)
- [English Language](#)
- [Today In History](#)
- [Syllabus](#)
- [Know Your State](#)
- [Know Your Country](#)
- [Know Your City](#)
- [Know Your Leader](#)
- [Books And Authors](#)
- [Daily Vocabulary](#)
- [Daily Editorial](#)
- [Latest Notifications](#)
- [Exam Dates](#)
- [Admit Card](#)
- [Exam Results](#)
- [Exam Cutoff](#)
- [Exam Eligibility](#)
- [Exam Pattern](#)





[Answer Key](#)
[Important Days](#)

Further Guidance on Rrb Group D CBT - 1 Previous Year Question Paper

For Asking any query on Rrb Group D CBT - 1 Previous Year Question Paper please mail [Send Email](#) or you can fill the form at [KD Live](#).

About KD Live

KD live has an expertise in providing apt explanations for the Rrb Group D CBT - 1 Previous Year Question Paper since 2008. More than 10 lakh aspirants have cleared competitive exams under the guidance of Neetu Mam.

Study.kdcampus.live is providing free information on various topics and for the Rrb Group D Exam you can refer the following link [Click Here](#) however if you want to practice more questions then please refer the following link [Click Here](#).

About Neetu Mam

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