Section: General Knowledge/Awareness

1. _____ is the brightest planet in the Solar system.

   1. Mars
   2. Venus
   3. Saturn
   4. Jupiter

Ans: 2

Solution:Venus is the brightest planet in our Solar System. Venus was given the nickname evening star **and morning star because of its bright, consistent presence. It is often called Earth's twin because it is** similar in shape and size to our own planet.

2. Who among the following became the first woman to receive Sahitya Akademi Award in Maithili for her novel Marichika?

   1. Lily Ray
   2. Shefalika Verma
   3. Usha Kiran Khan
   4. Niraja Renu

Ans: 1

Solution: Sahitya Akademi Awards has been integrally associated with Indian regional literature since 1954, conducted solely by the Sahitya Academy itself, India's most honourable award under the canopy of such prestige. In 1982, Lily Ray became the first woman to receive Sahitya Akademi Award in Maithili **for her novel 'Marichika'.**

3. Which of the following countries is the largest producer of milk?

   1. China
   2. Brazil
   3. Australia
   4. India

Ans: 4

Solution: World cow's milk production in 2014 stood at 656 million tonnes. The USA was the largest cow's milk producer in the world in 2014, accounting for 14.2% of world production. India is the second largest cow's milk producer, accounting for 10.1% of world production and producing over 66 million tonnes in 2014. Among all the options India is largest producer of milk.

4. What is the role of the Attorney General of India?

   1. To oversee the functioning of the Supreme Court and the High Courts
   2. To provide legal advice to the Government of India
   3. To provide free legal services to citizens who cannot afford legal fees
   4. To review the income and expenditure of the Government of India

Ans : 2

Solution :Attorney-General for India.-
(1) The President shall appoint a person who is qualified to be appointed a Judge of the Supreme Court to be Attorney-General for India.
(2) It shall be the duty of the Attorney-General to give advice to the Government of India upon such legal matters, and to perform such other duties of a legal character, as may from time to time be referred or assigned to him by the President, and to discharge the functions conferred on him by or under this Constitution or any other law for the time being in force.
(3) The Attorney-General shall hold office during the pleasure of the President.

5. What is "WhatsApp" Messenger?

   1. An instant messaging application
   2. A rapid search engine
   3. An app-based advertising portal
   4. A free game exchange platform

Ans : 1

Solution : WhatsApp Messenger is a freeware, cross-platform and end-to-end encrypted instant messaging application for smartphones.

6. Who was the twenty-fourth Jain Tirthankara?

   1. Parasnath

2. Mahavira
3. Rishabha
4. Gomateshwara

Ans : 2

Solution: In Jainism, a tirthankara is a saviour and spiritual teacher of the dharma. Adinatha (Risabhdev) was the first Tirthankara of Jainism. Lord Mahavir was the twenty-fourth and the last Tirthankara of the Jain religion.

7. Who is the current Vice President of India?

1. Nasim Zaidi
2. S. M. Krishna
3. Sumitra Mahajan
4. Mohammad Hamid Ansari

Ans : 4

Solution :The Vice-President of India is the second-highest constitutional office in India, after the President. Article 63 of Indian Constitution states that "there shall be a Vice-President of India." The Vice-President of India is also ex officio Chairperson of the Rajya Sabha. The current Vice-President is Mohammad Hamid Ansari, since 11 August 2007, and re-elected on 7 August 2012.

8. Identify the ore from which Aluminum is extracted.

1. Malachite
2. Bauxite
3. Uraninite
4. Argentite

Ans : 2

Solution : Bauxite- an aluminium ore, is the world's main source of aluminium.
Malachite- Used as an ore of copper
Uraninite- Formerly pitchblende, is a radioactive, uranium-rich mineral
Argentite- a silver sulfide mineral, is an important constituent of silver ore deposits.

9. Who won 2016 Chess Championship title?

1. Gary Kasparov
2. Vishwanathan Anand
3. Magnus Carlsen
4. Sergey Karjakin

Ans: 3

Solution:Magnus Carlsen is World Chess Champion 2016. He successfully defended the title in a match with Sergey Karjakin, after 6-6 in the classical part and 3,0-1,0 in the tiebreaks.

10. Which of the following is the hottest planet in the Solar system?

1. Mercury
2. Mars
3. Jupiter
4. Venus

Ans : 4

Solution:Venus is the hottest planet even though Mercury is the closest planet to the Sun. The reason that Venus is hotter than Mercury is because it has an atmosphere made of carbon dioxide; it also has clouds of acid inside its atmosphere. This is called greenhouse effect.

11. Who is the founder of IT giant Infosys?

1. Vishal Sikka
2. Nandan Nilekani
3. Narayana Murthy
4. Azim Premji

Ans : 3

Solution:Infosys Limited is an Indian multinational corporation that provides business consulting, information technology and outsourcing services. It has the main headquarter in Bengaluru, India. Infosys is the second-largest Indian IT services company by 2016 revenues, and the largest employer of H-1B visa.
Co-founded in 1981 by 7 Engineers N. R. Narayana Murthy, Nandan Nilekani, N. S. Raghavan, S. Gopalakrishnan, S. D. Shibulal, K. Dinesh and Ashok Arora.

12. Which schedule of the India Constitution has provisions regarding powers, authority and responsibilities of Panchayats?

1. Twelfth Schedule
2. Eleventh Schedule
3. Eighth Schedule
4. Tenth Schedule

Ans : 2

Solution:Eleventh Schedule- By 73rd amendment in 1992. Contains provisions of Panchayati Raj.

Twelfth Schedule- By 74thamendment in 1992. Contains provisions of Municipal Corporation.

Eighth Schedule- List of 22 languages of India recognized by Constitution

Tenth Schedule- Added by 52nd amendment in 1985. Contains provisions of disqualification of grounds of defection

13. Which is the deepest point on earth?

1. Challenger Deep in Mariana Trench
2. Tagebau Hambach mine, Germany
3. Milwaukee Deep
4. Voronya Cave, Georgia

Ans: 1

Solution:The Challenger Deep in the Mariana Trench is the deepest known point in Earth's oceans. In 2010 the United States Center for Coastal & Ocean Mapping measured the depth of the Challenger Deep at 10,994 meters (36,070 feet) below sea level with an estimated vertical accuracy of ± 40 meters.

14. Which of following isIndia's highest point?

1. Mt. Everest
2. K1
3. Nanda Devi
4. Kanchenjunga

Ans: 4

Solution:The Kangchenjunga is the highest mountain peak in India and ranked 3rd highest summit in the world with an elevation of 8,586 m.

Masherbrum (formerly known as K1)- Gilgit Baltistan of Pakistan-(7,821 m)

Nanda Devi (7816 m) is the second highest mountain in India

Mount Everestis Earth's highest mountain. Its peak is 8,848 m above sea level.

15. **What is 'Jallikattu'?**

1. A traditional bull-taming sport popular in Tamil Nadu
2. A bull worship festival at Pashupatinath temple, Nepal
3. A popular watersport enjoyed by the Marina beach, Chennai
4. **The traditional name for "People's Leader" in Tamil**

Ans : 1

Solution:Jallikaatu could be referred to as bull taming event typically practiced in Tamil Nadu as a part of Pongal celebrations on Mattu Pongal day, third day of the four-day Pongal festival. The term 'jallikattu' is derived from the tamil words 'jalli' and 'kattu'. Jalli refers to gold or silver coins. Kattu means 'tied'. Therefore, combined together it refers to coins being tied to the bulls' horns, which is considered the prize for whoever tames the bull.

16. **Where has India's first floating elementary scho**ol been inaugurated?

1. Loktak Lake, Manipur
2. Kake Pichola, Udaipur
3. Naini Jheel, Nainital
4. Dal Lake, Srinagar

Ans : 1

Solution : The largest freshwater lake in the country, Loktak lake has now become home to the first of its kind loktak floating elementary school. Situated about 50 km from Imphal, the school has been inaugurated at Langolsabi Leikai of Champu Khangpok village in Manipur.

17. In 2016, who became the second woman Prime Minister of Great Britain?

1. Angela Merkel
2. Melania Trump

3. Margaret Thatcher
4. Theresa May

Ans : 4

Solution :Margaret Thatcher was the first woman PM of Great Britain. Currently Theresa May is the PM who is second woman PM of Great Britain.

18. What does SIDBI stand for?

1. Synchronised Investment Deployment Board of India
2. Strategic Industries Development Board of India
3. Small-scale Investment and Deployment Bank of India
4. Small Industries Development Bank of India

Ans : 4

Solution :Small Industries Development Bank of India (SIDBI) is an independent financial institution aimed to aid the growth and development of micro, small and medium-scale enterprises in India.

19. Which of the following statements about the President of India is correct?

1. The President of India must be a member of Rajya Sabha.
2. The President of India must be a member of Lok Sabha.
3. The President of India shall be a member of a House of the Legislature of any State.
4. The President of India shall not be a member of either House of Parliament or of a House of the Legislature of any State.

Ans : 4

Solution :Conditions of President's office
(1) The President shall not be a member of either House of Parliament or of a House of the Legislature of any State, and if a member of either House of Parliament or of a House of the Legislature of any State be elected President, he shall be deemed to have vacated his seat in that House on the date on which he enters upon his office as President.
(2) The President shall not hold any other office of profit.

20. Who was the Governor General of India during the "First War of Independence of 1857"?

1. Lord Canning

2. Lord Dalhousie
3. Lord Warren Hastings
4. Lord Cornwallis

Ans : 1

Solution :Lord Canning was the Governor General of India during the "First War of Independence of 1857". Lord Canning served as Governor General of India from 1856 to 1862. During his tenure, the Government of India Act, 1858 was passed which created the office of Viceroy to be held by the same person who was Governor General of India. Thus, Lord Canning also served as first Viceroy of India

21. Who was the last Mughal emperor of India?

1. Alamgir II
2. Ahmad Shah Bahadur
3. Bahadur Shah II
4. Aurangzeb

Ans : 3

Solution :Bahadur Shah II was the last Mughal emperor. He was the second son of and became the successor to his father, Akbar II, upon his death on 28 September 1837.

22. Identify the nearest planet from the Sun.

1. Neptune
2. Jupiter
3. Mars
4. Mercury

Ans: 4

Solution:Here's the order of the planets, starting nearest the sun and working outward through the solar system: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. The nearest planet to the Sun is Mercury.

23. Which film won in the 'Best Film' category in the 70th British Academy Film Awards (BAFTA) given away in February 2017?

1. The Jungle Book
2. Manchester by the Sea
3. Moonlight
4. La La Land

Ans : 4

Solution :The 70th British Academy Film Awards, and for sponsorship reasons the EE British Academy Film Awards, more commonly known as the BAFTAs, were held on 12 February 2017. La La Land won the most awards at the event, winning five including Best Film. Damien Chazelle won Best Director, Emma Stone won Best Actress in a Leading Role, Linus Sandgren won Best Cinematography, and Justin Hurwitz won Best Original Music.

24. **Who among the following won the 2016 Asian Champions (Women's) Trophy?**

1. China
2. Australia
3. India
4. Iran

Ans : 3

Solution : The 2016 Asian Women's Hockey Champions Trophy was the 4th edition of the Asian Hockey Champions Trophy for women. The tournament was held in Singapore. Top five Asian teams (China, India, Japan, South Korea and Malaysia) participated in the tournament. India won the Trophy by defeating China.

25. Who became the first Indian woman to be nominated as a member of the International Olympic Committee (IOC)?

1. Sumitra Mahajan
2. Sonia Gandhi
3. Nita Ambani
4. Supriya Sule

Ans : 3

Solution : Nita Ambani became the first Indian woman to be nominated as a member of the International Olympic Committee (IOC). Sir Dorabji Tata was the first Indian representative in the IOC, Raja Randhir Singh is an honorary member as he was a member from 2000-2014.

Section:Numerical Ability

1. **The curved surface area of a hemisphere is 72π cm^2**, then its radius is :

   1. 8 cm
   2. 7 cm
   3. 6 cm
   4. 5 cm

Ans : 3

Solution :

The curved surface area of hemisphere with radius r is given as:

CSA = 2πr^2

∴ 72π = 2πr^2

⇒ r = 6 cm

2. If two is added to the denominator of a rational number it becomes 1 and if 4 is added to the numerator it becomes ½. Then the sum of the numerator and the denominator of the rational number is:

   1. -22
   2. -2
   3. 2
   4. 22

Ans : 1

Solution :

Let the rational number be p/q.

As per the given condition: if 2 is added to the denominator, it becomes 1.

$$\therefore \frac{p}{q+2} = 1$$

$\Rightarrow$ p – q = 2   ----(i)

Also, if 4 is added to the numerator it becomes ½.

$$\therefore \frac{p + 4}{q} = \frac{1}{2}$$

$\Rightarrow$ 2p – q = -8   ---(ii)

Solving (i) and (ii), we get:

p = -10 and q = -12

sum of the numerator and the denominator of the rational number = p + q = -10 – 12 = -22

3. If x_1 and x_2 are the roots of the equation $2x^2 + 3x – 9 = 0$ then the equation which has the roots $1/x_1$ and $1/x_2$ is :

1. $9x^2 + 3x – 2 = 0$
2. $-9x^2 – 3x – 2 = 0$
3. $9x^2 – 3x – 2 = 0$
4. $9x^2 – 3x + 2 = 0$

Ans : 3

Solution :

We know that, for a quadratic equation $ax^2 + bx + c$,

Sum of its roots = -b/a and product of roots = c/a

For $2x^2 + 3x – 9 = 0$:

$x_1 + x_2$ = -3/2 and x_1x_2 = -9/2

For the equation whose roots are $1/x_1$ and $1/x_2$,

Sum of roots $= \frac{1}{x_1} + \frac{1}{x_2} = \frac{x_1+x_2}{x_1x_2} = \frac{-3}{-9} = \frac{1}{3}$

Product of roots $= \frac{1}{x_1x_2} = -\frac{2}{9}$

$\therefore$ the quadratic equation becomes: $x^2 - \frac{1}{3}x - \frac{2}{9} = 9x^2 - 3x - 2$

4. If y exceeds x by 15 % then x is less than y by what percent?

1. $13\frac{1}{25}$
2. $13\frac{1}{23}$
3. $13\frac{1}{24}$
4. $13\frac{1}{22}$

Ans : 2

Solution :

y exceeds x by 15%.

∴ y = 1.15x

x = y/1.15

Required percentage $= \frac{y-\frac{y}{1.15}}{y} \times 100 = \frac{1.15-1}{1.15} \times 100 = 13\frac{1}{23}$

5. The total number even factors of $2^5 \times 3^3 \times 5^2$ is :

1. 30
2. 5
3. 10
4. 60

Ans : 4

Solution :

We know that, any factor of the ($2^5 \times 3^3 \times 5^2$) can be expressed as $2^a \times 3^b \times 5^c$, where a ranges from 0 to 5, b ranges from 0 to 3 and c ranges from 0 to 2.

Here, we need to find even factors of $2^5 \times 3^3 \times 5^2$, so there has to be at least one factor of 2 in the given number. So, a will range from 1 to 5.

As a result, a can take 5 values, b can take 4 values and c can take 3 values.

∴ total number of even factors = 5 × 4 × 3 = 60

6. An army of 2100 men has provision for 50 days. After 10 days due to injuries some of them left and the food were now enough for next 50 days for remaining men. The number of men left is :

1. 400
2. 420
3. 410
4. 650

Ans : 2

Solution :

Let's assume that every person consumes x units of food every day.

Initially, army of 2100 men has provision for 50 days.

∴ total supplies = 2100 × 50 × x

Let's assume n men left after 10 days. So for first 10 days, there were 2100 men, but for next 50 days, there were (2100 – n) days.

∴ 2100 × 50 × x = 2100 × 10 × x + (2100 – n) × 50 × x

⇒ 2100 × 40 = (2100 – n) × 50

⇒ 2100 – n = 1680

⇒ n = 420

7. For a positive integer n, $2^{5n} - 5^{2n}$ is divisible by :

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

Ans : 3

Solution :

We know that, $(a^b)^c = a^{bc}$

∴ $2^{5n} - 5^{2n} = (2^5)^n - (5^2)^n = 32^n - 25^n$

We also know that, from binomial expansion: $(a^n - b^n)$ is divisible by $(a - b)$.

∴ Here, $32^n - 25^n$ is divisible by $(32 - 25) = 7$

8. **The number of terms in the sequence 5, 20, 80, 320,................., 5120 is :**

1. 9
2. 7
3. 6
4. 8

Ans : 3

Solution :

The given sequence is 5, 20, 80, 320, ..., 5120

We can see that, the given series is is a geometric progression with common ratio 4.

n^{th} term of a geometric progression is given as: ar^{n-1}

Where, a = first term, r = common ratio

$\therefore 5 \times 4^{n-1} = 5120$

$\Rightarrow 4^{n-1} = 5120/5 = 1024$

$\Rightarrow n - 1 = 5$

$\Rightarrow n = 6$

9. If the sum of 2 numbers is 185, their LCM is 1700 and HCF is 5. Then the difference between 2 numbers is :

1. 15
2. 10
3. 25
4. 20

Ans : 1

Solution :

Since their HCF is 5, let the two numbers be 5x and 5 y, where x and y are coprime numbers.

We know that, product of numbers = LCM × HCF

$\therefore 5x \times 5y = 1700 \times 5$

$\Rightarrow$ xy = 340 $\Rightarrow$ y = 340/x

Also, 5x + 5y = 185 $\Rightarrow$ x + y = 37

$\Rightarrow$ x + 340/x = 37

$\Rightarrow$ x^2 − 37x + 340 = 0

$\Rightarrow$ (x − 17)(x − 20) = 0

$\Rightarrow$ x = 17 and y = 20 OR x = 20 and y = 17

$\therefore$ the two numbers are: 5 × 17 = 85 and 5 × 20 = 100

$\therefore$ difference of two numbers = 100 − 85 = 15

10. In a chemistry lab two beakers A and B contains 36% and 40% of spirit respectively. If two liters from A is mixed with 4 liters of B. The ratio of sprit and water in the resulting mixture is :

1. 19 : 46
2. 29 : 46
3. 29 : 55
4. 29 : 45

Ans : 2

Solution :

A has 36% spirit.

Amount of spirit in 2 liters of A = 0.36 × 2 = 0.72 liters

B has 40% spirit.

Amount of spirit in 4 liters of B = 0.4 × 4 = 1.6 liters

Total amount of mixture = 2 + 4 = 6 liters

Amount of spirit in the final mixture = 0.72 + 1.6 = 2.32 liters

Amount of water in the final mixture = 6 − 2.32 = 3.68

Required ratio = 2.32 : 3.68 = 29 : 46

11. The average of 7 numbers is 28. The average of first three of them is 23 and the last three of them is 42. Then the fourth number is :

1. 3
2. 2
3. 1
4. 0

Ans : 3

Solution :

We know that, Average = Sum of all quantities/number of quantities

Average of 7 numbers = 28

∴ sum of all numbers = 28 × 7 = 196

Average of first 3 numbers is 23.

Sum of first 3 numbers = 3 × 23 = 69

Average of last 3 numbers os 42.

Sum of last 3 numbers = 3 × 42 = 126

4th number = 196 – 69 – 126 = 1

12. A can finish the work in 30 days and B in 40 days. They both work together for 5 days and then B leaves. How many days will A take to complete the remaining work?

1. 22 days
2. 21.75 days
3. 21.25 days
4. 21 days

Ans : 3

Solution :

A finishes the work in 30 days, so A does $1/30^{th}$ part of work in one day.

B finishes the work in 40 days, so B does $1/40^{th}$ part of work in one day.

A and B together work for 5 days.

∴ Part of work finished by both in 5 days $= 5 \times \left(\frac{1}{30} + \frac{1}{40}\right) = \frac{7}{24}$

Part of work remaining $= 1 - \frac{7}{24} = \frac{17}{24}$

Number of days taken by A to finish remaining work $= \frac{17}{24} \div \frac{1}{30} = 21.25$

13. Mr. Vivek divides Rs. 1703 such that 4 times the 1st share, thrice the 2nd share and twice the third share amount to the same. Then the value of the 2nd share is :

    1. Rs. 452
    2. Rs. 524
    3. Rs. 520
    4. Rs. 542

Ans : 2

Solution :

Let the three shares be a, b and c.

As per given information, 4a = 3b = 2c = k

⇒ a = k/4, b = k/3 and c = k/2

Now, a + b + c = 1703

$$\Rightarrow \frac{k}{4} + \frac{k}{3} + \frac{k}{2} = 1703$$

$$\Rightarrow \frac{(3 + 4 + 6)k}{12} = 1703$$

⇒ k = 1703 × 12/13 = 1572

∴ 2nd share = b = k/3 = 1572/3 = 524

14. If -5 ≤ x ≤ 3 and -1 ≤ y ≤ 0, then the minimum value of 2y − 3x is :

    1. -8
    2. -9
    3. -11
    4. -10

Ans : 3

Solution :

The given expression 2y – 3x will be minimum when y is minimum and x is maximum.

Minimum value of y = -1

Maximum value of x = -5

Minimum value of given expression = 2 × (-1) – 3 × (3) = -2 – 9 = -11

15. Find x, given $5(\sqrt{5})^{x+6} = (\sqrt{5})^{2x+7}$:

1. x = 1
2. x = -1
3. x = -2
4. x = 0

Ans : 1

Solution :

$$5(\sqrt{5})^{x+6} = (\sqrt{5})^{2x+7}$$
$$(\sqrt{5})^{2}(\sqrt{5})^{x+6} = (\sqrt{5})^{2x+7}$$
$$(\sqrt{5})^{x+6+2} = (\sqrt{5})^{2x+7}$$

From laws of indices: x + 8 = 2x + 7

⇒ x = 1

16. If three sides of the triangle is given 18 cm, 41 cm and 41 cm. Then the area of triangle is :

1. 375 cm^2
2. 350 cm^2
3. 360 cm^2
4. 400 cm^2

Ans : 3

Solution :

As we can see, the given triangle is an isosceles triangle. The altitude in this triangle divides the triangle in two equal parts, as show in figure.
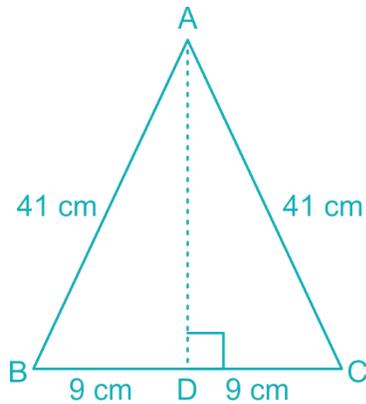
In right angled triangle ADC, $AD^2 + DC^2 = AC^2$

$AD^2 = 41^2 - 9^2 = 1600$

$AD = 40$ cm

∴ Area of triangle ABC = ½ × BC × AD = ½ × 40 × 18 = 360 cm²

17. A train 130 meters long travelling at 54 km/hr crosses the bridge in 30 sec. Then the length of the bridge is :

1. 320 meters
2. 350 meters
3. 325 meters
4. 375 meters

Ans : 1

Solution :

Speed of train = 54 km/hr = 54000/3600 m/s = 15 m/s

When a train crosses a bridge, it travels a distance equal to its own length and the length of the bridge.

Since the train crosses a bridge in 30 sec,

Distance traveled by train = 30 × 15 = 450m

∴ Length of train + Length of bridge = 450

⇒ Length of arrow = 450 – 130 = 320m

18. Ms. Hema invests Rs. 8000 for six months at 20% per annum compounded quarterly. The total amount she gets after 6 months is :

1. Rs. 8820
2. Rs. 8880
3. Rs. 8800
4. Rs. 8802

Ans : 1

Solution :

We know that, $A = P\left(1 + \frac{R}{100}\right)^T$

Where, A = total amount, P = Principal, R = % interest rate; T = time period

Here, the interest rate is 20% per annum, and interest is compounded quarterly.

∴ interest rate per interest period is 20/4 = 5%.

Also, the interest is calculated after six months, number of periods = 6/3 = 2

∴ Amount $= 8000 \times \left(1 + \frac{5}{100}\right)^2 = 8000 \times \frac{21}{20} \times \frac{21}{20} = 8820$

19. Mr. Arun rows a boat with the stream at 10 km/hr and against the stream in 5 km/hr. In still water, his rate of rowing in km/h is :

1. 2
2. 2.5
3. 1
4. 3

Ans : 2

Solution :

Let's assume the speed in still water is x km/hr and speed of the stream is y km/hr.

Now, speed with the stream = x + y km/hr

And speed against the stream = x – y km/hr

As per given information, x + y = 10 and x – y = 5

Solving the two equations simultaneously, we get: x = 7.5 and y = 2.5

(Note: Here, the question asks about speed of rowing in still water, which is 7.5 km/hr, but none of the given options matches with this answer. Closest from the given options is 2.5 km, which is the speed of stream)

20. Due to economic surges the price of eggs suddenly reduced to 40%. This enabled a woman to buy 64 more for $30. Then the reduced price per dozen is :

(Here, the question is p**hrased incorrectly. The correct wording should be, "price of eggs suddenly reduced by 40%")**

1. $ 2
2. $ 2.25
3. $ 2.75
4. $ 2.5

Ans : 2

Solution :

Let's assume that the original price of eggs is $x per dozen.

Now, the reduced price = x – 40% of x = $ 0.6x per dozen

As per given condition, reduced price enabled a woman to buy 64 more eggs for $30

$$\therefore \frac{30}{0.6x} - \frac{30}{x} = \frac{64}{12}$$

$$\Rightarrow \frac{30}{0.6x} - \frac{18}{0.6x} = \frac{12}{0.6x} = \frac{64}{12}$$

⇒ 0.6x = 12 × 12/64 = 2.25

∴ Reduced price = $ 2.25 per dozen

21. A flight has to travel between 2 cities A and B, 2000 km apart. The flight was slowed down due to bad weather. Its average speed for the trip reduced by 200 km/hr and the time of flight increased by 30 min. The duration of the flight with original speed is :

1. 2 hrs
2. 2.25 hrs
3. 2.6 hrs
4. 2.75 hrs

Ans : 1

Solution :

Let's assume that the original speed is x km/hr.

∴ Original time taken = 2000/x hrs

When the speed reduces by 200 km/hr, its speed = (x – 200) km/hr

This time, the flight takes 30 more minutes, i.e. ½ hour more.

$$\frac{2000}{x-200} - \frac{2000}{x} = \frac{1}{2}$$

$$\Rightarrow \frac{2000[x-(x-200)]}{x(x-200)} = \frac{1}{2}$$

$$\Rightarrow \frac{2000 \times 200}{x^2 - 200x} = \frac{1}{2}$$

⇒ x^2 – 200x – 800000 = 0

⇒ (x – 1000)(x + 800) = 0

⇒ x = 1000 or x = -800

Taking only positive value, x = 1000 km/hr

Original time taken = 2000/1000 = 2 hours

22. In a bio gas plant the population of yeast bacteria increases at a rate of 19% per annum but there is an additional annual increase of 1% in population due to various other inputs in the system. The percentage increase in the yeast population after 2 years is:

1. 41%
2. 44%

3. 45%
4. 40%

Ans : 2

Solution :

The population of bacteria increases by 19% per annum and 1% due to additional factors, so every year, there is a net increase of 20% in yeast population.

Let's assume that the population today is x.

$\therefore$ Population after 2 years $= x \times \frac{120}{100} \times \frac{120}{100} = \frac{144x}{100} = 1.44x$

% increase in population = (1.44x – x)/x × 100 = 44

23. **The number of terms in the sequence 20, 25, 30, ..., 160 is :**

1. 22
2. 29
3. 23
4. 26

Ans : 2

Solution :

As we can see, the given series is an arithmetic progression, with first term 20 and common difference 5.

n^{th} term of an arithmetic progression is given as: a + (n – 1)d

160 = 20 + (n – 1)× 5

$\Rightarrow$ n – 1 = 140/5 = 28

$\Rightarrow$ n = 29

24. Pipe A can fill the tank 5 times faster than pipe B, if pipe A and B together fill the tank in 50 minutes, then pipe B alone can fill the tank in :

1. 300 minutes
2. 345 minutes

3. 330 minutes
4. 350 minutes

Ans : 1

Solution :

Let's assume that pipe B alone can the tank in x minutes, so pipe B fills 1/x[th] **part of tank in one minute.**

Pipe A can fill the tank 5 times faster than pipe B, so pipe A fills 5/x[th] part of tank in one minute.

Together, the two pipes fill the tank in 50 minutes, so together they fill 1/50th part in one minute.

$$\therefore \frac{1}{x} + \frac{5}{x} = \frac{1}{50}$$

⇒ 6/x = 50

⇒ x = 300 minutes

∴ Pipe B alone fills the tank in 300 minutes.

25. Mr. Shiva invested equal amount of money in two private firms which gives 15% simple interest per annum for 3.5 years and 5 years respectively. If the difference in their interests is Rs. 315. The amount invested by Mr. Shiva is :

1. Rs. 1400
2. Rs. 1450
3. Rs. 1405
4. Rs. 1500

Ans : 1

Solution :

Let's assume he invested Rs. x each in both firms.

We know that Simple interest = (P × R × T)/100

Where, P = principal, R = % rate of interest, T = time in years

For both investments, P = x, R = 15

T = 3.5 for first investment and T = 5 for second investment.

As per given information:

$$\frac{x \times 15 \times 5}{100} - \frac{x \times 15 \times 3.5}{100} = 315$$

$$\Rightarrow \frac{x \times 15 \times 1.5}{100} = 315$$

⇒ x = 315 × 100/22.5 = 1400

∴ He invested Rs. 1400 in each firm.

(Note: This question is phrased incorrectly. The question asks about total amount invested, which hould include the amount invested in both the firms together, i.e. 1400 + 1400 = Rs. 2800, but this answer is not among the given options.)

Section: Reasoning

1. Find the missing number from the given alternatives.
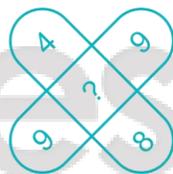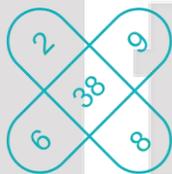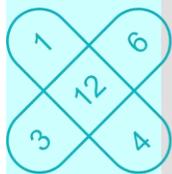
1. 42
2. 41
3. 51
4. 49

Ans: 4

Solution:

The Question given in the exam was wrong. Correct question is
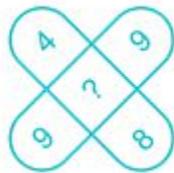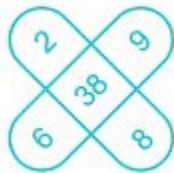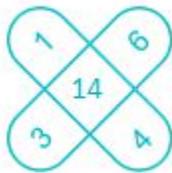
⇒ 6 × 3 − 4 × 1 = 14

⇒ 9 × 6 − 8 × 2 = 54 − 16 = 38

⇒ 9 × 9 − 4 × 8 = 91 − 32 = 49

Hence, "49" is missing term.

2. Hemant is older than Bipin. Vinod is older than Sudhanshu. Mamta is not as old as Vinod but is older than Bipin. Sudhanshu is not as old as Bipin. Who is the youngest?

1. Mamta
2. Bipin
3. Sudhanshu
4. Hemant

Ans : 3)

Solution :

1) Hemant is older than Bipin. (Hemant > Bipin)

2) Mamta is not as old as Vinod but is older than Bipin. (Vinod > Mamta > Bipin)

3) Sudhanshu is not as old as Bipin. (Bipin > Sudhanshu)

4) Vinod is older than Sudhanshu. (Viinod > Sudhanshu)

Vinod > Mamta > Hemant > Bipin > Sudhanshu

Hence, Sudhanshu is youngest in the family.

3. Five friends are sitting around a circular table. Rahul is to the right of Pramod and is second to the left of Sachin. Tushant is not between Pramod and Sachin. Kamal is second to the right of Tushant. Who is second to the left of Rahul?

1. Tushant
2. Kamal
3. Pramod
4. Sachin

Ans : 2

Solution:

Lets assume all are facing inside (as nothing is mention about direction then we can assume they are facing inside)

1) Rahul is to the right of Pramod and is second to the left of Sachin.

(if nothing in mention about what position right then we can assume Immediate right.)

2) Tushant is not between Pramod and Sachin. Kamal is second to the right of Tushant.
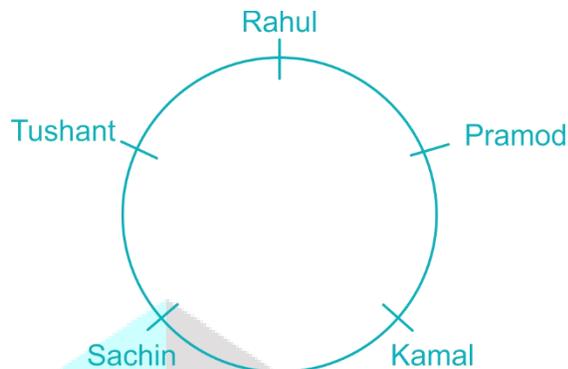
Therefore, second to left of Rahul Kamal is sitting.

4. How many triangles are there in the following figure?
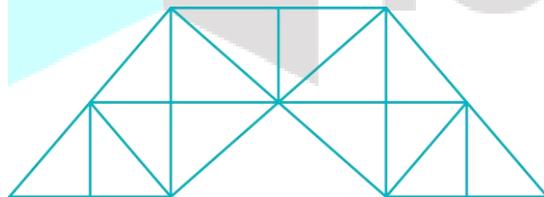
1. 30 or more
2. 14
3. 29
4. 25

Ans : 3

Solution:
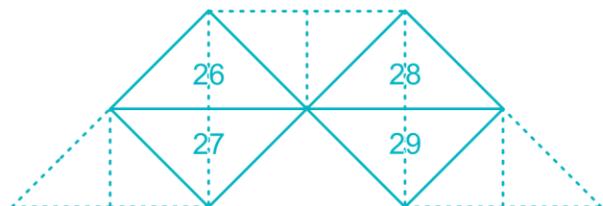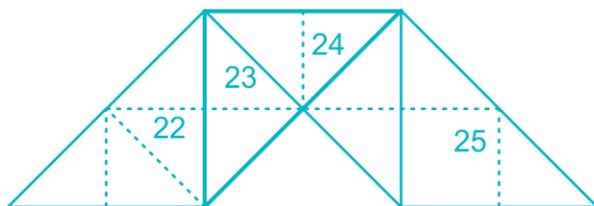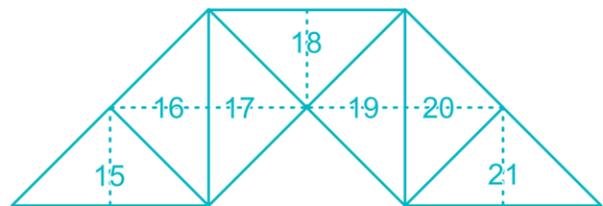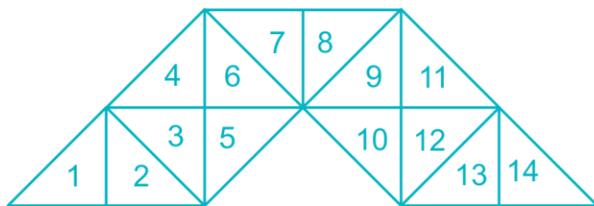
Hence, There will be total 29 triangles.

5. Which of the answer figure is exactly the mirror image of the question figure, when the mirror is held on the line X Y?


1.

2.

3.

4.
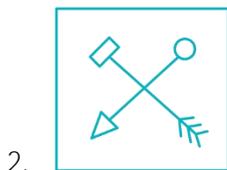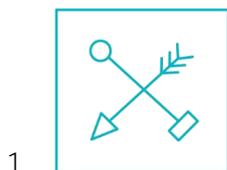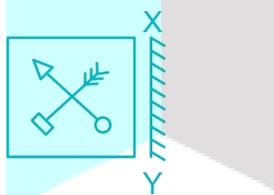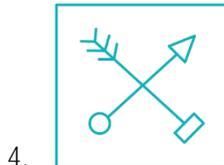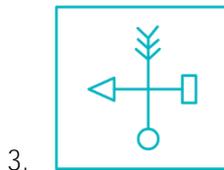
Ans : 4

Solution :
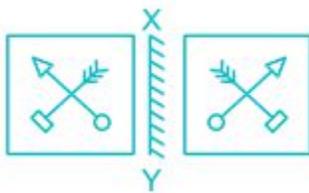
Above diagram shows the mirror image of question figure.

6. Dinesh walks 2 km towards South and turns to his right and walks 3 km. He then turns to his right and walks 4 km and turns again to his right and walks another 3 km. He then turns left and walks 1 km and stops there. How far and in which direction is Dinesh from the starting point?

1. 5 km West
2. 3 km North
3. 3 km East
4. 5 km South

Ans : 2

Solution :

Above path can be traced as,
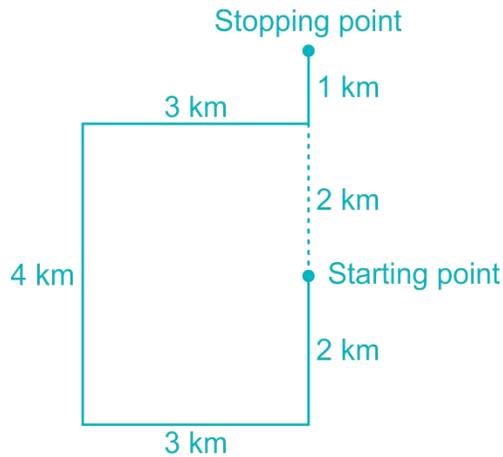
Hence Dinesh is 3 km North from his starting point.

7. Identify the word which belongs to the class of given words. Ring, Bracelet, Necklace, _____

1. Bangle
2. Gold
3. Jewellery
4. Ornament

Ans : 1

Solution:

Ring, Bracelet, Necklace are Ornament which are worn by People, So as Bangle.

Therefore, Bangle belong to same class as of Ring, Bracelet, Necklace.

8. Choose the correct alternative that will complete the given number series. 2, 9, 28, 65, ?, 217

1. 126
2. 102
3. 146
4. 193

Ans : 1

Solution :

Logic: (Number)^3 + 1 = Next term in series

$\Rightarrow 1^3 + 1 = 2$

$\Rightarrow 2^3 + 1 = 9$

$\Rightarrow 3^3 + 1 = 29$

$\Rightarrow 4^3 + 1 = 65$

$\Rightarrow 5^3 + 1 = 126$

$\Rightarrow 6^3 + 1 = 217$

Hence, 126 will complete the series.

9. Select the related number from the given alternatives.

29 : 65 : : 43 : ?

   1. 86
   2. 76
   3. 93
   4. 92

Ans : 3

Solution :

In 29 : 65

$\Rightarrow (29 \times 2) + 7 = 58 + 7 = 65$

Similarly,

In 43 : ?

$\Rightarrow (43 \times 2) + 7 = 93$

Hence, 93 is missing term.

10. 'R' is the husband of 'Q', 'P' is the daughter of 'R', 'S' is the husband of 'P', 'E' is the daughter of 'S'. What is the relationship of 'E' to 'Q'?

   1. Cousin
   2. Daughter

3. Grand Daughter
4. Niece

Ans : 3

Solution :

Table is drawn describing symbols and their meanings:

Symbol in Diagram	Meaning
○	Female
□	Male
═══	Married Couple
───	Siblings
│	Difference of A Generation

1) 'R' is the husband of 'Q'.

2) 'P' is the daughter of 'R'.

3) 'S' is the husband of 'P'.

4) 'E' is the daughter of 'S'.
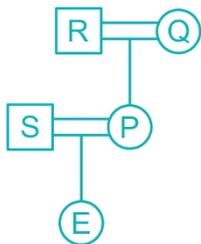
Hence, E is Granddaughter of Q.

11. From the given alternatives select the word which cannot be formed using the letters of the given words.

EXAMINATION

1. NATION
2. INMATE
3. EXAMINE
4. ANIMATION

Ans : 3

Solution :

1. NATION ⇒ Can be formed as EXAMINATION

2. INMATE ⇒ Can be formed as EXAMINATION

3. EXAMINE ⇒ Can not be formed as EXAMINATION as there are on one E in EXAMINATION and we need Two E in EXAMINE.

4. ANIMATION ⇒ Can be formed as EXAMINATION

Hence, EXAMINE cannot be formed from word EXAMINATION

12. The age of Manish is half of that of his mother. His mother is 9 years younger to his father, and Manish is 7 years older than his sister. The age of his father is three times that of his sister, what is the age of Manish?

1. 27 years
2. 30 years
3. 33 years
4. 32 years

Ans : 2

Solution :

Let Age of Manish Mother = X

Age of Manish = X/2

Age of Manish father = X + 9

Age of Manish Sister = (X/2) – 7

The age of his father is three times that of his sister

$\Rightarrow X + 9 = 3 \{(X/2) - 7\}$

$\Rightarrow X + 9 = 3X/2 - 21$

$\Rightarrow X + 9 = 1.5X - 21$

$\Rightarrow 9 + 21 = 1.5X - X$

$\Rightarrow 0.5X = 30$

$\Rightarrow X = 60.$

Age of Manish = X/2 = 60/2 = 30 Years.

13. What is related to 'Sympathy' in the same way as 'Virtue' is related to 'Vice'?

    1. Emotion
    2. Cruelty
    3. Kindness
    4. Charity

Ans : 2

Solution :

Vice is antonym of Virtue.

Similarly,

Sympathy is antonym of Cruelty.

14. Three positions of a cube are shown below. Which number will be opposite to the face containing 4?
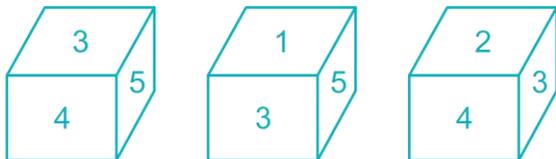
    1. 2
    2. 1
    3. 5
    4. 6

Ans : 2

Solution :

As we can see in first figure that 3, 5 are adjacent to 4 so they can't be opposite to 4.

Similarly in figure third figure that 2, 3 are adjacent to 4 so they also cannot be opposite to 4.

As we can see in second figure that 1 and 3 are adjacent to 5 and 4 is also adjacent to 3 and 5.

Hence we can conclude that 1 will be opposite the face contain 4.

15. Find the odd number pair from the given alternatives.

   1. 24 – 48
   2. 60 – 79
   3. 12 – 72
   4. 84 – 96

Ans : 2

Solution :

All are multiple of 12 except 60 – 79.

16. Select the related letters from the given alternatives. ADGJ : QTWZ : : BEHK : ?

   1. NQTV
   2. PQWZ
   3. PSVY
   4. CFIL

Ans : 3

Solution :

In ADGJ : QTWZ
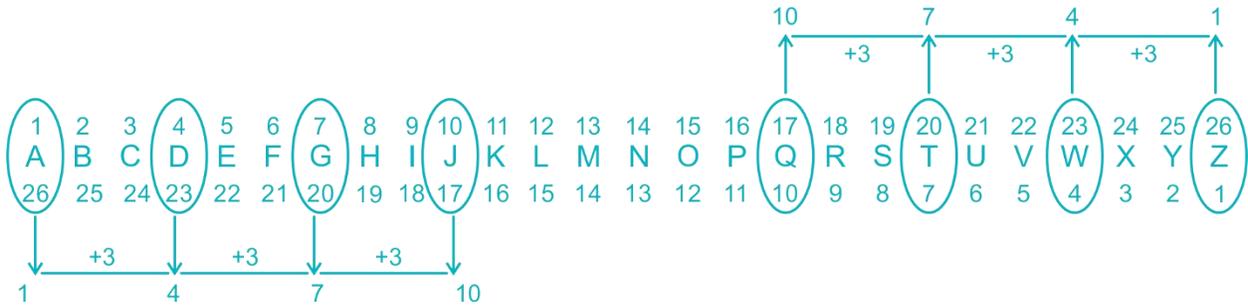
Similarly,
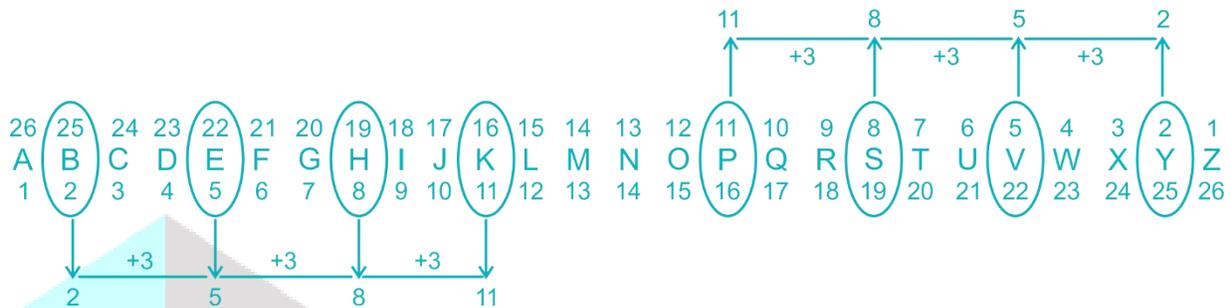
Hence, "PSVY" is correct option.

17. Identify the diagram that best represents the relationship among classes given below.

Boy, Girl, Student

1.

2.
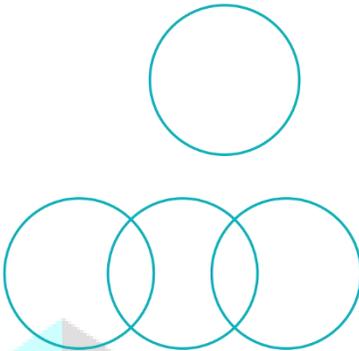
3.
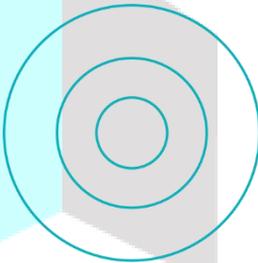
4.
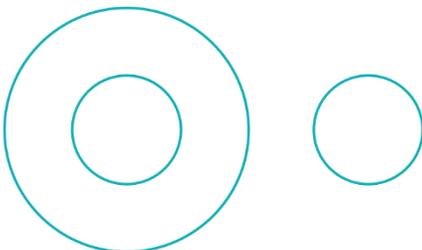
Ans : 2

Solution :

Both Boy and Girl can be student.

Therefore below diagram represent best relationship among Boy, Girl and Student.

Hence, Option 2) is correct option.

18. If 'x' means 'additions' , '– '   means 'division', '÷' means 'subtraction' and '+' means 'multiplication', then what will be the value of 16 + 5 – 10 × 6 ÷ 3 = ?

1. 8
2. 11
3. 15
4. 9

Ans : 2

Solution :

⇒ 16 + 5 – 10 × 6 ÷ 3 = ?

'x' means 'additions' ⇒ x → +

'– ' means 'division' ⇒ – → ÷

'÷ ' means 'subtraction' ⇒ ÷ → –

'+' means multiplication ⇒ + → ×

⇒ 16 × 5 ÷ 10 + 6 – 3 = ?

⇒ 8 + 6 – 3 = ?

⇒ 11 = ?

Hence, 11 is correct option.

19. In a row of boys, Sandeep is eleventh from the right and Deepak is also eleventh from the left. When Sandeep and Deepak interchange their positions, Deepak become seventeenth from the left. How many boys are there in the row?

1. 25
2. 30
3. 27
4. 26

Ans : 3 (CIL answer was option 4) which is 26)

Solution :

In a row of boys, Sandeep is eleventh from the right and Deepak is also eleventh from the left.

When Sandeep and Deepak interchange their positions, Deepak become seventeenth from the left.
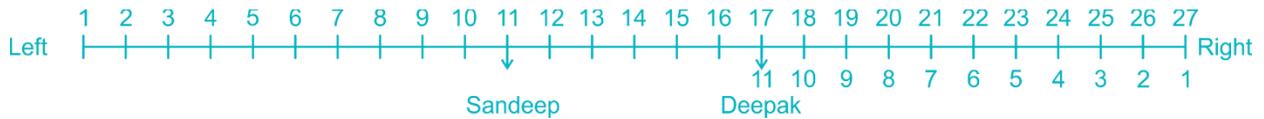

Therefore there will total 27 boys are there in row.

20. Select the figure from the alternatives which will complete the pattern in given question figure.

1.

2.

3.

4.
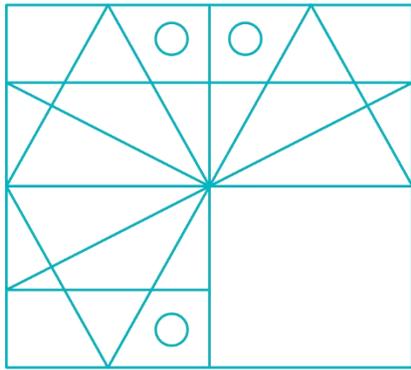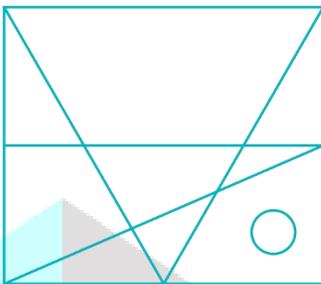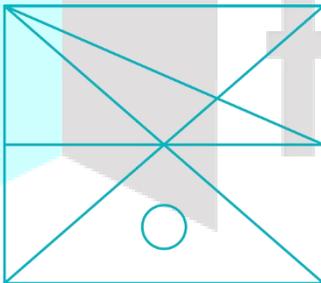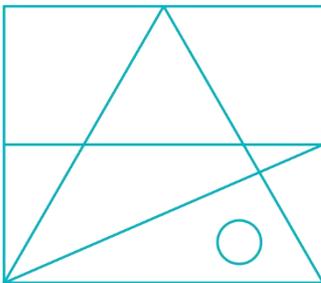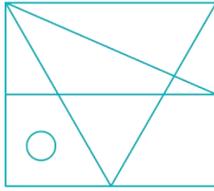
Ans : 4

Solution :
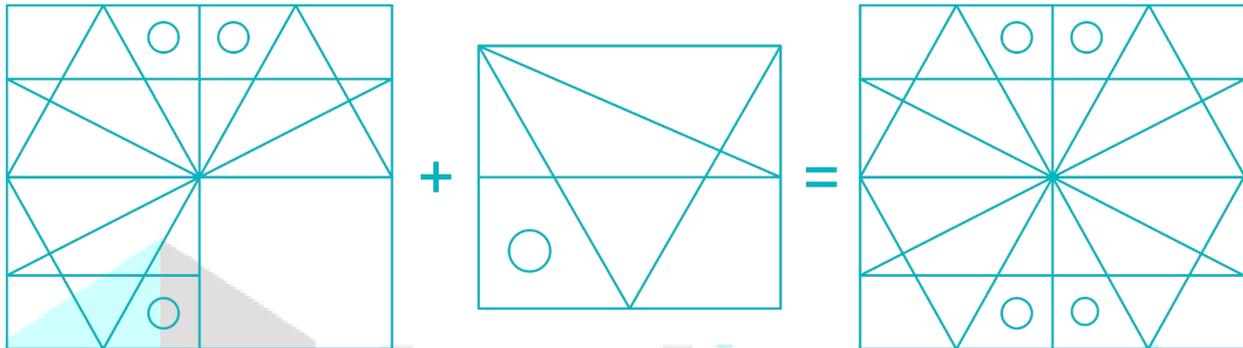
Above diagram represent complete pattern.

Hence, option 4) is correct answer.

21. Select the one which is different from other three alternatives.

1. BCKL
2. LNST
3. EFNO
4. HIQR

Ans : 2

Solution :

1. BCKL ⇒ B + 1 = C, C + 8 = K, K + 1 = L

2. LNST ⇒ N + 2 = N, N + 5 = S, S + 1 = T

3. EFNO ⇒ E + 1 = F, F + 8 = N, N + 1 = O

4. HIQR ⇒ H + 1 = I, I + 8 = Q, Q + 1 = R

Therefore **"LNST"** is different from other three option.

22. Four sets of three statements each are given below. Take these statements to be true even if they look factually absurd. Select one alternative in which third statement is implied by the first two statements.

1. All bats are balls. All stumps are bats. Therefore, all balls are stumps.
2. All fruits are flowers. All vegetables are fruits. Therefore all vegetables are flowers.
3. All train are roads. All buses are trains. Therefore, all roads are buses.
4. **All R's are T's. All T's are Q's. Therefore, all Q's are R's.**

Ans : 2

Solution :

1. All bats are balls. All stumps are bats. Therefore, all balls are stumps.
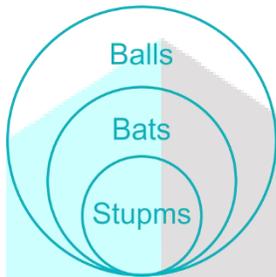
Here first 2 statement does not implies third statement.

2. All fruits are flowers. All vegetables are fruits. Therefore all vegetables are flowers.
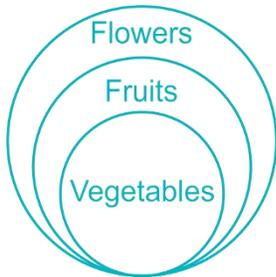
Here First two statemetns implies third statement.

3. All train are roads. All buses are trains. Therefore, all roads are buses.
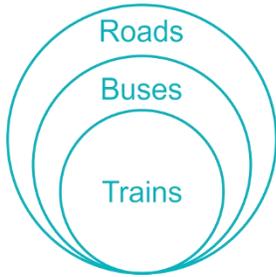
Here first 2 statement does not implies third statement.

4. All R's are T's. All T's are Q's. Therefore, all Q's are R's.

Here first 2 statement does not implies third statement.

Hence option 2) is correct option.

23. In a certain code language SHOWER is written as RINXDS. How will REPORT be written in that code language?

1. PERTRO
2. SDQPSS
3. QFOPQU
4. QFOQUP

Ans : 3

Solution :
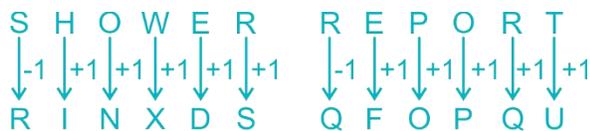
Hence, option 3) is correct option.

24. Some equations are solved on the basis of a certain system. Find the correct answer for the unsolved equation on that basis.

11 * 7 = 72, 14 * 7 = 147, 17 * 9 = ?

1. 240
2. 175
3. 208
4. 233

Ans : 3

Solution :

Logic: 11

$\Rightarrow 11 * 7 = 72 \Rightarrow 11^2 - 7^2 \Rightarrow 121 - 49 = 72$

$\Rightarrow 14 * 7 = 147 \Rightarrow 14^2 - 7^2 \Rightarrow 196 - 49 = 147$

$\Rightarrow 17 * 9 = 17^2 - 9^2 \Rightarrow 289 - 81 = 208$

Therefore 17 * 9 = 208

25. Which one set of letters when sequentially placed at the gaps in the given letter series shall complete it?

_ 1 m _ j 1 _ k _ _ m k j 1 m _

1. j k m j 1 j
2. j 1 m k j m
3. j k m 1 j j
4. j k m j 1 k

Ans : 4

Solution :

_ 1 m _ j 1 _ k _ _ m k j 1 m _

1. j k m j 1 j ⇒ j 1 m k j 1 m k j 1 m k j 1 m j

2. j 1 m k j m ⇒ j 1 m 1 j 1 m k k j m k j 1 m m

3. j k m 1 j j ⇒ j 1 m k j 1 m k 1 j m k j 1 m j

4. j k m j 1 k ⟹ j 1 / m k j 1 /m k j 1 /m k j 1 /m k

Therefore letters of option 4) j k m j 1 k will compete the series.

Section: General English

Q 1.In the following sentence, four words or phrases have been underlined. One of them is incorrect. Select the INCORRECT word or phrase from the given options.

This book isnot only beautifully printed yet is free from mistakes.
1. Is
2. Not only
3. From
4. Yet is

Ans : 4
Solution : Option 4 is the one that is incorrect. The compound sentence is joined with a correlative conjunction, however, only half of the conjunction is used and the second half is missing. The correct correlative conjunction should be 'not only… but also' because the main as well as the co-ordinate clause are speaking about the same subject 'the book'. Thus instead of 'yet is' which is used to point out a contrast; 'but also' should be used.

Q 2. Select the word that is spelled INCORRECTLY.
1. Monarchy
2. Monetary
3. Momentery
4. Monastery

Ans : 3
Solution : **Option 3 has been spelled wrongly, the correct spelling is 'momentary'. The meanings of the** other words are as follows:

1. Monarchy- a rule by a king
2. Monetary- refers to money matters
3. Momentary- fleeting, for a short span of time
4. Monastery- a place where the monks stay and pray.

Q3. In the following sentence, four words or phrases have been underlined. One of them is incorrect. Select the INCORRECT word or phrase from the given options.

I thinkmost of the problems could beovercomed if we tried hard enough.

1. Could be
2. Overcomed
3. Most of the
4. I think

Ans : 2

Solution : **Option 2 is incorrectly used, it should be 'overcome'. Here, 'could' cannot be used with another past form 'overcomed'. The correct word would be 'overcome'. Also, overcomed is an incorrect past form of 'overcome' and the correct past form is 'overcame'.**

Q4. Select the option that completes the sentence CORRECTLY.

The last rays of the sun _____ fading away when I reached home.

1. Are
2. Will be
3. Were
4. Was

Ans : 3

Solution : The given line has a past continuous structure as the action was going on when the writer **reached home and the subject is 'rays' a plural noun, so the verb too should be a plural past continuous tense to agree with it. Thus 'were fading ' is the right verb for the given line. Option 3 is thus the answer.**

Q5. Select the option that completes the sentence CORRECTLY.

The plan _____ is quite sound but I don't like the way it is being implemented.

1. Oneself
2. Itself
3. Myself
4. Himself

Ans : 2

Solution : **The subject 'plan' is a non living or a neuter gender that is being emphasized. So we need a neuter gender pronoun 'it' +'self' to make it into an emphasizing pronoun 'itself', and it needs to be** placed immediately after the noun it speaks about, thus option 2 is the answer that fits the blank correctly.

Q6. Select the word that best expresses the meaning of the underlined word.

If you <u>abstain</u> from unnecessary criticism, you will be happier in life.

1. Avoid
2. Indulge
3. Differ
4. Deny

Ans : 1

Solution : 'Abstain' means to avoid or keep away from, so option 1 best expresses the meaning of the underlined word.
   1. Avoid- means stay away from, refuse to do
   2. Indulge- means to accept and carry out the action willingly, yield oneself to enjoy a forbidden thing
   3. Differ- means to disagree, be dissimilar or different from another
   4. Deny- means to refuse, not accept

Q7. Select the ANTONYM of the given word.

ELEGANT

1. Natural
2. Neat
3. Tactless
4. Awkward

Ans : 4

Solution : 'Elegant' means stylish, graceful, well dressed so option 4 is the antonym as
   1. Natural- is something derived from nature, something unadulterated
   2. Neat- means tidy, clean
   3. Tactless- is a person who is blunt, indiscreet or inconsiderate
   4. Awkward- is someone who is uncoordinated, ungainly, graceless or lacking ease of movement, mostly a person who cannot walk properly.
   Tactless is generally used for insensitive and blunt person so we will opt 'awkward' as the best suitable answer.

Q8. Select the option that completes the sentence CORRECTLY.

We do not accept any liability _____ damage or losses.

1. At
2. With
3. For
4. Against

Ans : 3
Solution : 'Accepting liability' means to accept responsibility 'for' the use or the destruction of something, thus the correct **preposition to be used in the blank is option 3 'for', since the preposition 'for' is used to indicate the use of something.**

Q9. In the following sentence, four words or phrases have been underlined. One of them is incorrect. Select the INCORRECT word or phrase from the given options.

His parents prohibited him against joining the modeling career.

1. His
2. Prohibited
3. Against
4. Modeling career

Ans : 3
Solution : Option 3 is incorrectly and unnecessarily used in the sentence as we have already been told that the parents 'prohibited' means did not allow , so 'against' is also repeating the same sentiment of not allowing someone to do something. It can be rightly written as either, 'His parents prohibited him from joining a modeling career'.

Q10. Select the option that best expresses the meaning of the underlined phrase/group of words.

Several houses had to be demolished to decongest the road.

1. Put down
2. Taken down
3. Pulled down
4. Broken down

Ans : 3
Solution : 'Demolished' is to pull down or knock down or bulldoze a building, so that it is destroyed, and option 3 best expresses the meaning of the underlined phrase as :
    1. Put down- means to criticize someone and make him feel stupid
    2. Taken down -means to dismantle something constructed or hung up on a wall
    3. Pulled down -means to deliberately destroy something or demolish

4. Broken down- is something that is already in a ruined stated like the ruins of a fort, in a dilapidated or crumbling state

Q11. Select the ANTONYM of the given word.

INNOCENT

1. Naive
2. Unfamiliar
3. Childlike
4. Guilty

Ans : 4
Solution : **'Innocent' means without sin, pure, someone who is unaware of the negatives of life, who has** done nothing wrong, and option 4 is the antonym as :
1. Naïve- someone inexperienced, innocent, childlike
2. Unfamiliar **–** unknown, alien, not aware of something
3. Childlike- innocent, pure, trusting like a child
4. Guilty- someone who has done something wrong like a criminal, someone responsible for a wrong doing

Q12. In the following sentence, four words or phrases have been underlined. One of them is incorrect. Select the INCORRECT word or phrase from the given options.

You <u>need to</u> improve <u>your</u> voice control <u>in caseto win</u> the singing competition.

1. In case
2. Your
3. Need to
4. To win

Ans : 1
Solution : **' In case'** means 'in the event that', it is used to talk about things to do for the preparation of **a future situation, ex: Take a raincoat 'in case' it rains. After 'in case' we need to use a subject + verb =** [in case + it +rains]
However, in the given line that is not the way it is used, thus option 1 is incorrect.
So, 'in order' should replace 'in case' as it is apt to use it before the infinitive 'to'.

Q13. Select the word that is spelled INCORRECTLY.

1. Emmission
2. Emerge
3. Emergency
4. Eminence

Ans : 1
Solution : Option 1 is spelled incorrectly, **it should be spelled as 'emission'**

1. Emission- release, discharge like the car fuel tank / exhaust emits out vapors and gasses
2. Emerge- to come into view, become visible, appear
3. Emergency- a situation which requires urgent attention to resolve a problem that could become worse if unattended
4. Eminence- distinction, a person of importance

Q14. Select the option that best expresses the meaning of the underlined phrase/group of words.

His evidence has <u>revealed</u> the involvement of his neighbor in the crime.

1. Brought about
2. Brought off
3. Brought out
4. Brought round

Ans : 3
Solution : 'Revealed' means to bring to light, to divulge and option 3 best expresses the meaning of the underlined phrase.

1. Brought about—is to cause something to happen. Like 'His speech brought about a change in the child's way of thinking'.
2. Brought off—is to succeed in doing something difficult. 'The award night was a difficult event but he brought it off very well'.
3. Brought out—is to expose, to reveal. 'Ford brought out a new model of its car this year'
4. Brought round—is to make someone conscious, to make someone agree to your viewpoint, 'he did CPR and brought him round from an unconscious state.

Q15. Select the word that is spelled INCORRECTLY.

1. Finaly
2. Finale
3. Final
4. Finely

Ans : 1
Solution : Option 1 is spelled incorrectly, it should be 'finally'

1. Finally—means at last; 'Finally he accepted the truth'
2. Finale—is the ceremony held for the last episode when prizes are distributed
3. Final—is at the end when something finishes or comes to an end
4. Finely- is chopping very thin slices, something delicate, ' I need finely sliced onions for the curry'

Q16. Select the word that best expresses the meaning of the underlined word.

A corrupt officer is a <u>disgrace</u> to the whole department.

1. Disgust
2. Disturbance
3. Scandal
4. Shame

Ans : 4
Solution : 'Disgrace' is a shame, dishonor, option 4 best expresses the meaning of the underlined word.
1. Disgust—means distaste, revulsion, loathing
2. Disturbance—means to interrupt, distract, trouble someone
3. Scandal—means means doing an action that is morally and legally wrong
4. Shame—means humiliation, embarrassment, like in the given line 'if a police officer is corrupt then the whole police department has to bear the humiliation and shame when people come to know about him.'

Q17. Select the ANTONYM of the given word.

FINITE

1. Limited
2. Deep
3. Endless
4. Wide

Ans : 3
Solution : 'Finite' meanslimited, restricted, and option 3 is the antonym as :
1. Limited—is restricted, insufficient
2. Deep—bottomless, extensive

3. Endless—something that seems to have no end or limit
4. Wide—broad, extensive, spacious

Q18. Find the appropriate meaning of the underlined idiom.

Value education should be a part and parcel of any education system.

1. An essential part
2. A plus part
3. An additional part
4. An important part

Ans : 1

Solution : 'Part and parcel' means something that is an essential or an integral part of something, like the given line says, 'value education or the teaching of moral values, should be an integral part of every education system in the **world'. Option 1 is the answer.**

Q19. Select the word that best expresses the meaning of the underlined word.

He made some very pertinent comments. They would certainly help us revise the project.

1. Thoughtful
2. Relevant
3. Applied
4. Related

Ans : 2

Solution : **'Pertinent' means relevant, appropriate, suitable, and option 2 best expresses the meaning of** the underlined word as :
1. Thoughtful **– is to be considerate, thoughtful and caring**
2. Relevant**— is to be pertinent, applicable, appropriate, 'I like to surf the net i**n search for **products relevant to my needs'**
3. Applied— is to put to practical use
4. Related—means belonging to the same group or family

Q20. Select the option that completes the sentence CORRECTLY.

You are annoyed with me, _____?

1. **Don't you**

2. **Aren't you**
3. Are you
4. Do you

Ans : 2

Solution : **Option 2 is the correct answer. The Q Tag needed in the given line is 'aren't you?'** QTag , that is normally written at the end of the sentence as a rhetoric question, and has the format of--a positive sentence will have a negative tag and vice versa, the main auxiliary and verb is used to form the tag. A Q Tag is written by using the auxiliary of the sentence itself, and the pronoun that the subject indicates, however a positive sentence has a negative tag and a negative sentence has a positive tag, thus for the **given sentence it should be a negative tag, and the auxiliary is 'are' so the tag obviously is 'aren't you?'**

Comprehension Questions: 21-25
Q21-25. Read the following passage and answer the given questions.

Providing stable freshwater supplies is a priority for every country in the world. Yet stable supplies are increasingly hard to come by in many countries, as water-related risks increase. For example, recent droughts threatened GDP growth in the United States. Monsoon floods killed hundreds and displaced thousands in India. Increased competition for water may impact energy production in China, and the list goes on.

Worlds Resource Institute's Aqueduct project recently evaluated, mapped, and scored water risks like these in 100 river basins and 180 nations – the first such country-level water assessment of its kind. We found that 36 countries face "extremely high" levels of baseline water stress. This means that more than 80 percent of the water available is withdrawn annually by agricultural, domestic, and industrial users leaving businesses, farms, and communities vulnerable to scarcity. Such situations severely threaten national water security and economic growth—especially if a country does not have adequate water-management plans in place. This information is highly relevant for a country's economy, environment, and communities.

It's also important for countries to understand the underlying natural factors that drive their water-related risks and respond accordingly. Extremely high levels of baseline water stress, for example, don't necessarily mean that a country will fall victim to scarcity. Armed with the right information, countries facing extremely high stress can implement management and conservation strategies to secure their water supplies.

Singapore, for example, has the highest water stress ranking. The country is densely populated and has no freshwater lakes or aquifers, and its demand for water far exceeds its naturally occurring supply. Yet the country is consistently held up as an exceptional water manager. Singapore invests heavily in technology, international agreements, and responsible management, allowing it to meet its freshwater needs. Advanced rainwater capture systems contribute 20 percent of Singapore's water supply, 40 percent is imported from Malaysia, grey water reuse adds 30 percent, and desalination produces the remaining 10 percent of the supply to meet the country's total demand. These forward-thinking and

innovative management plans provide a stable water supply for Singapore's industrial, agricultural, and domestic users –even in the face of significant baseline water stress.

Q21. Singapore is held as an example for water management. Match the strategies with the actual practice.

a) Use of technology   i) import from Malaysia
b) International agreement   ii) rain water capture
c) Responsible management   iii) desalination and grey water use

1) a – ii, b – i, c – iii
2) a – ii, b – iii, c – i
3) a – iii, b – i, c – ii
4) a – i, b – ii, c – iii

Ans : 3
Solution : On reading the last paragraph of the passage carefully. Thus it could be inferred that desalination requires technology. Since 40% is imported from Malaysia thus it is a part of international agreement. Also it can be inferred that rainwater capture requires responsible management the correct answer is in option 3.

Q22. In water stressed countries, which of the following consume more water according to the passage?

1) Industries
2) Farms
3) Businesses
4) Communities

Ans : 1
Solution : According to the passage, in the 36 countries that face "extremely high" levels of baseline water stress about 80 percent of the water available is withdrawn annually by agricultural, domestic, and industrial users, thus option 1 can rightly be said to consume more water.

Q23. Which statement is NOT correct according to the passage?

1) In highly water stressed countries more than 80% water is used by agriculture, domestic and industrial users.
2) Forward-thinking and innovative management plans can provide a stable water supply for a country.
3) Extremely high levels of baseline water stress mean that a country will fall victim to scarcity.
4) Forward-thinking and innovative management plans can provide a stable water supply for a country.

Ans : 3
Solution : According to the passage, extremely high levels of baseline water stress, don't necessarily mean that a country will fall victim to scarcity. Armed with the right information, countries facing extremely high stress can implement management and conservation strategies to secure their water supplies; hence option 3 statement is not correct according to the passage.

Q24. In many countries stable water supply is difficult because:

1) Water related risks are on an increase
2) There is an increased competition for water
3) They have a high baseline water stress level
4) Providing fresh water is a priority for them

Ans : 1
Solution: Stable water supplies are increasingly hard to come by, as water-related risks increase. For example, droughts and Monsoon floods along with increased competition for water has impacted energy production, threatened GDP growth and displaced thousands. Hence it is important for countries to understand the underlying natural factors that drive their water-related risks and respond accordingly. Thus option 1 is the answer.

Q25. The main purpose of the passage is to:

1) Warn the water stressed countries to take necessary steps to manage water scarcity
2) Stress why it is important to analyze water risk at the country level
3) Report the baseline water stress study on 180 countries
4) Show that extremely high water stress can be managed

Ans : 1
Solution : The passage rightly says that36 countries face "extremely high" levels of baseline water stress leaving businesses, farms, and communities vulnerable to scarcity. Such situations severely threaten national water security and economic growth—especially if a country does not have adequate water-management plans in place, hence it warns the water stressed countries to take necessary steps to manage water scarcity. Thus option 1 is the right answer.