

Questions Asked in the General Awareness Section

1. In which year Indian Muslim league was founded?
2. Bankapur wildlife sanctuary is situated in which state?
3. Who is the winner of miss world 2019?
4. Who is the winner of the Nobel prize for literature 2019?
5. When did Ibrahim Lodhi become the Sultan of Delhi?
6. How many windows are there in the Hawa Mahal?
7. Rohtang tunnel is renamed as_____.
8. Fundamental duties have been taken from the constitution of which country?
9. What is the tenure of the Chief justice of India?
10. Which country topped the Breastfeeding Index in 2020?
11. What is the time period of the 12th Five-year plan?
12. Who was the founder of the Pala dynasty?
13. Hirakud dam is situated on which river?
14. Karamyodha Granth book is based on which personality?
15. Sultan Azlan Shah Cup was held in which country?
16. When was the Rashtrapati Bhawan constructed?
17. Who wrote 'the Era of darkness' book?
18. When was the Indian Reform Association founded?
19. Kumaon Himalayas is situated between which two rivers?
20. Nobel Peace prize winner Abiy Ahmed Ali belongs to which country?
21. In which year "Right to property" was removed from fundamental rights?
22. How many districts are there in Ladakh Union territory?
23. Panchsheel agreement was signed between which countries?
24. What is the atomic number of Copper?
25. What is the value of Earth's gravitational constant?
26. Who is the current chairman of BCCI?
27. Which of the following are the water-soluble vitamins?
28. Which is the largest river island in the world?
29. Flagella is a locomotive organ of which of the following?
30. Where is the tomb of Shershah Suri located?
31. What is the number of base units in the international system of units?
32. Which of the following rulers belongs to the Chola dynasty?
33. What is the weight of Chandrayaan 2?
34. Ozone day is celebrated on which date?
35. Who is the CEO of YES Bank?
36. EEG is used to measure the functioning of _____.

37. Which state is mentioned in the 6th Schedule of the Indian Constitution?

38. UNICEF was established on _____.

39. Which waterfall is located on River Sharavati?

40. Sachin Tendulkar hit his first century in which ODI?

41. Laterite Soil is rich in _____.

Questions Asked in English language Section

1. Cloze Test was based on Uttarakhand - The valley of flowers.

2. Antonym = Exhale (ans. inhale)

3. Correctly spelt = Ecstasy

4. Correct spelling = Complacent

5. Idiom = cross a bridge when one comes to it (Ans. Deal with a situation when, and not before, it occurs.)

6. Antonym = Prim (ans. - synonym = formal, neat, and socially correct///// antonym = informal)

7. Idiom = back in the saddle (ans. doing something that you stopped doing for a period of time)

8. Antonym = Meddle

9. Idiom = Down to earth

10. Antonym = Surge

11. Correct Spelling = Contemptuous.

12. Cloze Test was based on Airport.

13. Syn = Cove

14. Correct Spelling = Piety

15. Active/Passive = He bought a new car for the journey.

Ans. A new car was bought by him for the journey.

16. Idiom = Pull up your socks

17. Cloze Test = based on the architecture of Ajanta Caves

18. One word = a close-fitting cover for the blade of a knife or sword. Ans. = Sheath

19. Antonym = Extensive

20. One word = a large natural or artificial lake used as a source of water supply. Ans. Reservoir

21. Idiom = Behind the scene

22. Idiom = Hats off

23. Antonym = Abbreviated

24. Synonym = Alluring

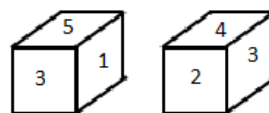
Questions Asked in Reasoning Section

1. Analogy:
Farmer: Field :: Artist : ?

Ans: Theatre

Logic: farmer works in fields similarly artist performs in theatre.

2. Find the letter is opposite to 5?



Ans. 2

3. Number series
126 , 217 , 344 , ?
pattern follows here :

$53 + 1 = 126$

$63 + 1 = 217$

$73 + 1 = 344$

$83 + 1 = 513$

Ans. 513

4. Fillers series :

Repeated pattern is: BCA/ BCA/ BCA/
BCA/ BCA

5. Triangle counting:



Ans. 28

6. Odd one out.

- A. Growl
- B. Yell
- C. Foal (baby horse) - odd one
- D. Screech

7. Syllogism-

Statements: Some wood are root.

All fruit are root.

No wood are fruit.

Conclusions:

I. Some root are fruits.

II. No fruit are wood.

Ans. Only I follows.

8. Analogy:

7 : 43 :: 8 : ?

Ans. 49

logic(7: (7x6+1) similarly 8: (8x6+1)

9. Syllogism:

Statement:

1. Some paper are ink

2. Some pen are ink.

Conclusion:

1. All ink are pen.

2. Some pen are paper.

Ans. Neither I nor II follows.

10. Relation analogy:

'Work' is related to 'Joule' in the same way as 'Power' is related to?

Ans. watt

4. Classification: Find odd one out

Dehradun, Shimla, Ladakh, Gangtok

Ans. Ladakh is odd one out as it is not capital of any state of India.

11. Number series :

5,21,8,18,11,15,?,14

Logic: (+3,+3,+3,. Alternate -3,-3,-3)

Ans. 14

12. Coding decoding; If OPERATION is written as NQDSZUHPM

Then how is GUARANTEE coded in the same language?

Logic: (-1,+1,-1,+1,-1,+1..)

Ans. So, the code of GUARANTEE is FVZSZOSFD.

13. Number series:

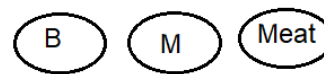
25, 5,49,10,81,20,121,?

Logic: (5x2=10; 10x2=20; 20x2= 40)

Ans. 40.

14. Logical Venn diagram:

Which diagram best represents the relationship between the given classes- Milk, Bread, Meat



15. The sum of the ages of mother, son and daughter is 96. After 5 years what is the sum of their age?

Ans. 111

Questions Asked in Maths Section

1. BC is a chord of a circle with centre O. OD is the perpendicular to BC. If length of BC is 24 cm, find the diameter of the circle.

2. If $x - y = 43$, $xy = 15$, find $x^2 + y^2$?

3. In triangle ABC, m is a point on BC, such that $BM = MC$. If area of triangle ABM is 18 cm^2 , find the area of triangle ABC?

4. If $\text{cosec}\theta + \cot\theta = 2$, find $\sin\theta$?

5. The sides AB & BC of a triangle are 8 cm & 3 cm respectively. What is the possible value of AC?

6. $\frac{\sin 60^\circ - \cos 60^\circ}{\cos 30^\circ - \sin 30^\circ} = ?$

7. Perimeter of a rectangle is 50m. The ratio of area & length of rectangle is 5 : 1, find the value of length?

8. A batsman scores 77 runs in his 11th inning by which his average is increased

by 3. Find his new average after 11 innings?

Ans. 47

9. The salary of x is 25% more than that of y salary of y is what percent less than salary of x?

10. If we add x to numerator & denaturation of a fraction $4 : 7$, the ratio becomes $2 : 3$ find the value of x?

Ans. 2

11. $7^{81} + 7^{82} + 7^{83}$ is completely divisible by.

12. Y completes a piece of work in 40 days. X and Y complete the same work in 25 days. In how many days X alone will complete the same work?

13. A and B can do a piece of work in 10 days and 5 days respectively. B works for 2 days and then left. In how many days A completes the remaining work?

14. Cost price of 5 articles is equal to selling price of 7 articles. What is the profit or loss percent?

15. What is the value of $\cos 225^\circ$ in decimal fraction?

16. Radius of sphere is 7.5 cm, find its volume?

17. Ratio of length & breadth of a rectangle is $5 : 3$ and the difference of length & breadth is 8 cm. What is the area of rectangle?

18. On dividing a certain number by 3, remainder is 2. If 5 is added to that number and divided by 3, then what is the remainder?

19. What is the circumference of the circle of diameter 12 inches?

20. Five years ago, mothers age was 3 times of sons age, five years hence age of mother will be 2 times of sons age. Find the percent age of the son?

21. The ratio of length & length & breadth of a rectangle is $3 : 2$. Perimeter of a rectangle is 740 cm. What is the area of the rectangle?

22. A and B can do a piece of work in 15 days 12 days respectively. If A & B started together then what is the percentage of work remaining after 4 days?

23. If $\cot\theta = \frac{39}{80}$, then $\operatorname{cosec}\theta = ?$

24. If $a - b = 6$ and $a^2 - b^2 = 60$, then $a^3 + b^3 = ?$

25. If cost price & selling price of an article are Rs 925 and Rs. 978 respectively, What is the percent profit?

26. A train and a car having speeds from the same point 72 km/hr and 54 km/hr respectively moving at right angles to each other. What is the distance between then after 20 seconds?

27. What is the area of the triangle having sides 5 cm, 6 cm, and 7 cm?

28. If $\sin\theta = \frac{4}{5}$, then $\sin 3\theta = ?$

29. What is the area of equilateral triangle having height 12 cm?

30. $\frac{1}{3} \times \frac{1}{5} \times 11760 = 22\%$ of x, find x?

31. AB is the chord of the circle with centre O and OD is the perpendicular on AB. AB = 24 cm and OD = 5 cm, what is the area of the circle?

Questions Asked in the General Awareness Section

Q. Financial emergency is included in which of the following articles of Indian constitution? - 360 Article, Other emergencies are: Art 352- National emergency, Art 356- State emergency or President rule

Q. Where did the third edition of Khelo India held in?- Guwahati, held from 10 January 2020 and 22 January 2020 in Guwahati, Assam

Q. Who invented Dynamite?- Alfred Nobel, He Invented Dynamite in 1867

Q. Who won the Dadasaheb Phalke Award 2020?- Amitabh Bacchan

Q. Who won the Women's World Chess Championship (WWCC) for 2019?- Ju Wenjun from China

Q. Who has been appointed as the deputy governor of RBI? Michael Patra, & governor of RBI Shaktikanta Das

Q. How many MBs are there in 1 gigabyte ? - 1024 megabytes (MB)

Q. What was India's Rank in Asian Athletic Championship in 2019?- 4th position with 17 medals

Q. Who has won the Sir Garfield Sobers Trophy of the year 2019? Ben Stokes (England)

Q. Kala azar is caused by_____. - Protozoa

Q. How many art forms are there in kathakali? - 5 Forms

Q. Who is the Chief of defence staff of Indian army? Bipin Rawat

Q. Chief of the Army Staff- General Manoj Mukund Naravane

Q. Chief of the Naval Staff-Admiral Karambir Singh

Q. Chief of the Air Staff- Air Chief Marshal Rakesh Kumar Singh Bhadauria

Q. Hard Disk is which type of storage? - Secondary Storage device

Q. Who won the Durand cup 2019? Gokulam Kerala

Q. Durand Football Tournament was first held in 1888 in Annadale, Shimla.

Q. Who was the chairman of the drafting committee of the Indian Constitution? BR Ambedkar

Q. Asian Youth Games Venue 2021- Shantou in China

Q. Match the following for Governor of States

Q. What is the scientific name of Blackbuck? - Antilope cervicapra

Q. Who is the ICC ODI Cricketer of the year 2019 ? - ROHIT SHARMA

Q. Ethiopian PM Abiy Ahmed Ali got the Nobel Prize for his efforts for peace between which countries? - Ethiopia and Eritrea

Q. Which of the following rivers fall into the Bay of Bengal? - Kaveri River

Q. Which state has the maximum no of the Lok Sabha seats? - Uttar Pradesh (80 seats)

Q. In which year Telangana state was formed? - 2 June 2014

Q. In Which house the parliament impeachment of the president can be initiated? - either of the two houses of the parliament

Q. Which country knocked out India in the cricket world cup 2019? New Zealand

Q. Who is the Director General (DG) of National Security Guard (NSG)? - Anup kumar Mishra

Q. Article 156 is related to ____ ? Term of the Office of Governor (5 Years)

Q. What is the rank of India in the Henley passport index 2020? 84

Q. Who is the Times Magazine person of the year 2019? - Greta Thunberg

Q. Who was the Prime Minister of Britain in July 1947? Clement Attlee

Q. Which of the following is the Oldest mountain Range of India? Aravalli Range

Q. Lakshadweep comes under which high court?- Kerala High Court

Q. Where is Phodong Monastery Located? - Sikkim

Q. Which of the following countries has topped in the ISSF (International Shooting Sport Federation) rankings in 2019? INDIA

Q. Who is the head of the government in the State? - (Chief Minister is Executive Head & Governor is the Nominal Head of State)

Q. Smriti Mandhana is associated with which game? - Cricket

Q. Who became the first education minister of India after Independence? - Maulana Abul Kalam Azad

Q. What is makar sankranti called in Gujarat? - Uttarayan

Q. Who was the ICC Cricketer of the Year, ICC ODI Cricketer of the year and ICC Test player of the year in 2018? -

Q. What is the SI unit of temperature? - Kelvin

Q. Which among the following regulates the monetary policy? Reserve Bank of India (Established in 1935 - First Governor - Osborne Smith - First Indian Governor - CD Deshmukh)

Q. Who is known as the Father of Nation? Mahatma Gandhi (Title given by Subhash Chandra Bose)

Q. When was the partition of Bengal announced? (July 1905 - In response to this Swadeshi Movement was started by Congress)

Q. In which state of India, the sun rises first? Arunachal Pradesh

Q. Which among the following is called the Brain of Computer? -Central Processing Unit

Q. What drugs are used for pain relief? Analgesic

Q. India is declared open defecation free on which day ? Oct 2, 2019

Q. Kudanku lam nuclear power plant was made with the help of which country? - Russia

Q. Which of the following salt is obtained from sea? Sodium Chloride (NaCl)

Q. Firewall in computer used for__? Preventing unauthorized access to or from a private network.__.

Questions Asked in English language Section

- Q. Synonym = Earthly (ans.
- Q. Synonym = Choosy
- Q. Antonym = Jovial
- Q. Idiom = Take one's hat off (In sentence form)
- Q. Incorrect spelling = Definition
- Q. Incorrect spelling = Commemorate
- Q. Cloze Test = Usage of Internet
- Q. Narration/ active passive = Sita asked me why you did keep that smartphone in the bin.
- Q. Incorrect spelling = Commemorate
- Q. Syn = Kit (ans. equipment/tools/instruments)
- Q. Antonym = Versatile (ans. inflexible/limited)
- Q. One word = Scullery = a small kitchen or room at the back of a house used for washing dishes and other dirty household work.
- Q. Cloze Test was based on Sanchi stupa
- Q. Synonym = Anodyne (ans. a painkilling drug or medicine/not likely to cause offence or disagreement and somewhat dull. = painkiller/inoffensive)
- Q. Antonym = Nebulous (ans. Well defined).
- Q. Idiom = Touch the base (ans. briefly make or renew contact with someone)
- Q. Incorrect spelling = Meticulous

Q. Active passive = She asked me if I had seen the movie yesterday.

Q. (Ans. I was asked by her if I had seen the movie yesterday.)

Q. Cloze Test was based on 'Personal point of view'.

Q. Idiom = Cut to the chase. (ans. come to the point.)

Q. Antonym = Placate (syno = pacify/calm --- Anto = provoke/angry)

Q. One word = Egoist (ans. a person who is preoccupied with his own interests; a selfish person.)

Q. Incorrectly spelt = Environment

Q. Synonym = Explicit (ans. clear/direct)

Q. Antonym = Stagnant (ans. Flowing, running)

Q. Synonym of Instigate

Questions Asked in Reasoning Section

- Q. Fillers : series is - e _ g _ e f f g _ _ e _ f f _ g _ g
o The complete series will be : efg/ eeffgg/ eefffgg
o Ans. fegeefgg

Q Analogy:

- o Chair : furniture :: ? : Stationary
o Ans. letter (among the given options)

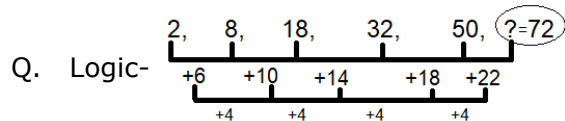
Q. Roshan is a 10 year old boy, if his mother is 20 yr older than him and his father is 6 yr elder to his mother. What is the age of his father?
Ans. 36

Q. Pointing to a photograph a girl said to a boy, "the person in the photograph is your

mother's only daughter. How is the boy related to girl?
 Ans. Brother

Q. Analogy related number- $9 : 121 :: 7 : ?$
 o Logic- $9+2= 11$ (square of 11) = 121
 o Similarly, $7+2= 9$ (square of 9) = 81
 o Ans. 81

Q. Number series: 2, 8, 18, 32, 50, ?



Ans. 72

Q. A can complete a work in 30 days and B can complete a work in 18 days. A work for 4 days after that B joined. In how many days total work is completed?
 o Ans. $13 \frac{1}{2}$

Q. B doesn't have a sister. A is sister in-law of B. D is the only brother of B. Then F is the father of B. K is the wife of F. How is K related to A?
 o Option A. Mother in-law
 o Option B. Father in-law
 o Option C. Daughter
 o Option D. Sister
 o Ans. Mother in-law

Q. Logical Venn diagram - Tortoise, Amphibians, Mammals.
 o Ans. All are different therefore,



Q. Odd one out (number)-
 o Option A. 2514
 o Option B. 1428
 o Option C. 3132
 o Option D. 2658
 o Ans. 2514 (sum of the digits is an even number).

Q. Related number analogy- $81 : 11 :: 4 : ?$
 o Ans. 4
 o Logic- square root $81 = 9 + 2 = 11$
 o Similarly,
 o Square root $4 = 2 + 2 = 4$.

Q. Coding Decoding- If CUT = 42 and STAR = 56 the how would you code PEN=?
 o Logic - sum of the digits of place value of each letter (-2).
 o Ans. PEN = 33

Q. Number series : 13, 18, 28, 48, ?
 o Logic -(+5,+10,+20,+40)
 Ans. 88

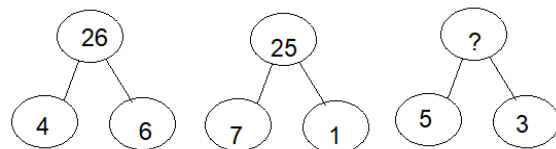
Q. Related number pair - $23 : 120 :: ? : ?$
 o Logic: (x5, +5)
 Ans. 45 : 230

Q. Analogy word- Cow : Stable :: Owl : ?
 Ans. Barn (all other options show Feminine- masculine relationship).

Q. Logical Venn-diagram-
 o Instrument, Thermometer, Guitar

Q. Fillers series - z _ nno _ _ nno _ z _ no
 Complete series will be:
 zznno/zznno/zznno
 Ans. Zzzzn

Q. Missing number:



Logic- $4^2 + 6^2 = 16 + 36 = 52/2 = 26$ and,
 $7^2 + 1^2 = 49 + 1 = 50/2 = 25$ and,
 Similarly,
 $5^2 + 3^2 = 25 + 9 = 34/2 = 17$.
 Ans. 17

Q. Odd one out(number)-
 Opt. (A) 198 - 891
 Opt. (B) 546 - 645
 Opt. (C) 246 - 264 (odd one)

Opt. (D) 156 - 651

Ans. option C is odd one as it follows random jumbling of number.

Questions Asked in Maths Section

Q. A and B can do a certain work in 30 days and 18 days respectively. If A works for 6 days, then in how many days both A and B finish the remaining work?

Q. An amount of Rs. 10000 is lent in two parts, one at the rate of 15% and other is at 10%. Total simple interest for 5 years is Rs 6500. Find the amount of each part?

Q. If $a \cos + b \sin = c$ and $a \sin - b \cos = x$, find x ?

Q. If $\tan A = 23$, $\operatorname{cosec} 2A - 2 \sec 2A \operatorname{cosec} 2A - 3 \sec 2A = ?$.

Q. If $a + b + c + d = 2$ then find the Max value of $(1+a)(1+b)(1+c)(1+d)$.

Q. If $\sin x = -\frac{1}{2}$ then find x .

Q. P is three times better workman than Q and Q does a certain work in 24 days then in how many days P and Q complete the total work.

Q. If 30% of 400 + $x\%$ of 70 = 25% of 576 then $x = ?$

Q. If two circles with centre O and O' touch each other externally. The distance between their centres is 8 cm and the radius of one circle is 3 cm. Then find the radius of the other circle.

Q. If the ratio of length to perimeter of a rectangle is 1:6 and the area of the rectangle is 288 cm^2 . Find the length of the rectangle.

Q. If there are 100 students in a school and the number of boys is x and the number of girls is $x\%$ of the total students. Then find the number of boys.

Q. If a wheel of diameter 210 cm rotates at the speed 120 kmph. Find the number of revolutions made by the wheel in 1 min.

Q. If $p + \frac{1}{p} = 2$ then find p^3 .

Q. ABC is an isosceles triangle such that the length of the base of the triangle is 33 cm and the perimeter of the triangle is 125 cm. Find the length of the two equal sides of the triangle.

Q. If $\sin \theta - \cos \theta = \frac{1}{29}$ then find $\cos \theta + \sin \theta$.

Q. If a man travels 300 m in 6 min then find his speed in kmph.

Q. If $\sin(60^\circ - \theta) = \cos(30^\circ + \theta)$ then find the value of θ .

Q. The average of 4 consecutive even numbers is 27. If one more even number is added then the new average becomes 28. Find that number.

Q. A number "N" is such that when divided by 7 leaves remainder 2. Then which of the following will be completely divisible when divided by 7:

Q. N + 2 B. N + 5 C. N + 3 D. N + 7

Q. $\frac{16 \cdot x}{\sqrt{(30 + \sqrt{(30 + \sqrt{(30 + \sqrt{(30 + \dots \dots \dots \infty))}))})})} =$ then find the value of x .

Q. A and B can do work in 10 days and 15 days respectively. They work together for 5 days and leave. The fraction of the remaining work.

Q. If $\cos x = \frac{4}{5}$ then find $\sin x - \sin^3 x$.

Q. In an isosceles triangle ABC, AB and AC are of equal length. Side BC = 26 cm. If the perimeter is 90 cm then find the length of equal sides.

Q. If $\sin \theta = 0.96$ then $\cot \theta = ?$

Q. If $2(a^2+b^2) = (a+b)^2$, then which of the following condition follows:

Q. An article is marked 20% above the cost price and sold with 15% discount. What is the profit percent?

Q. Single equivalent discount to 25%, 15% and 10% is equal to:

Q. Among the three numbers, first and second numbers are 25% and 15% more than third numbers respectively. What is the ratio of the first number to the second number?

Q. Perimeter of the right angle isosceles triangle is 30cm. What is the area of the triangle?

Q. What is the radius of the circle formed by adding the area of two circles having radius 7.5 cm and 4.4 cm?

Q. The train travelling with 54 km/hr covers a certain distance in 30 mins. By how much will the speed be increased to cover the same distance in 20 mins?

Q. In two concentric circles of radii 7.5 cm and 4.4 cm. A tangent is drawn from point A from the bigger circle touching the smaller circle at point B and again meeting the bigger circle at C. Then find the length of AC.

Q. A sum of money Rs.6000 is taken at 5% simple interest for 3 years and again lent further at $6\frac{1}{3}\%$ interest rate for the same time. Find the profit earned in 1 years time.

Quantitative Aptitude Section:

- What is the difference between compound interest calculated yearly and half-yearly on a sum of 8000 at 10% per annum for 1 year?
- What is the formula of the volume of the right circular cone?
- In what time does a sum of money become its 5 times at a simple interest rate of 16%?
- The Hypotenuse and base of a right-angled triangle is 10 cm and 8 cm. What is the perpendicular of the triangle?
- If $(\sin x + \cos x)/(\sin x - \cos x) = 6/5$ then Find $(\tan^2 x + 1)/(\tan^2 x - 1)$.
- In a Triangle ABC, angle A = 60 degree and Exterior angle at C is twice the angle B. Determine the type of triangle.
- Two tangents are drawn on a circle from an external point P. Then what is the relation between two tangents to the circle.
- An article is marked at Rs.900 and two successive discounts of 10% each are offered on the article. Find the S.P. of the article.
- If the average age of 65 men is 32 years and if 5 more men are added then the new average age becomes 36 years. Find the average age of the 5 men.
- If A, B, and C can complete 10, 12 and 15 days. Then in how many days they complete the whole working together.
- If $a = 2b$ then find $(a + b)/(a - b) = ?$
- If $x:y = 3:2$ and $x + y = 90$ then find the value of $(x - y)$.
- From an external point, A two tangents AB and AC to the circle are drawn. If the radius of the circle is 6 cm and $AO = 10$ cm then find the Area of ABOC.
- Mohan sells an article to Ram at 10% profit and Ram further sells it to Shyam at 20% profit. If Shyam pays Rs.1320 to Ram. Then find the cost price for Mohan.
- The Marked price of an article is Rs. 150. What is the selling price of the article after two successive discounts of 30% and 40%?
- A person covers a distance of 150 km in 5 hrs. If the speed is reduced to its $\frac{1}{3}$ rd then how much time will he take more to cover the same distance?
- Sunil and Anil can do a certain work in 8 days and 14 days respectively. The total wages of the two is Rs 4400 per day. What is the per day wages of Sunil?
• $\sin = 2x, \cos = 2/x$, then $4(x^2 + 1/x^2) = ?$
- Salary of Raman is Rs. 1000 per day, after some days the salary is increased to Rs 1160 per day. What is the percentage change in salary?
• $x^4 + 1/x^4 = 14159$, then $x + 1/x = ?$
- The average of 40 numbers is 36. If the average of the first 25 numbers is 19 and average of next 14 numbers is 41 then find the last number.
- If $2\cot = 3$ then find $(\sqrt{13}\sin - 2\tan)/(2\tan + \sqrt{13}\sin)$
- Two equal circles having the same radius 4 cm each have a distance of 17 cm between their respective centres. Find the length of their transverse common tangent.
- Two circles, touching each other externally, with radii 20 cm and 5 cm. Find the length of their direct common tangent.
- If $(a - b) = 18, (a^3 - b^3) = 325$ then find ab ?
- A man sold his bike at Rs.25000 at 25% profit, what was the S.P. if had to bear a loss of 15%.

• $A = \sqrt{\frac{\text{Cosec } x - 1}{\text{cosec } x + 1}}$ than find $[A - 1/A]$

• A and B can do a certain work in 9 days and 6 days respectively. In how many days they together complete the work?

• $a = \frac{1+x}{1-x}$, then $a - 1/a = ?$

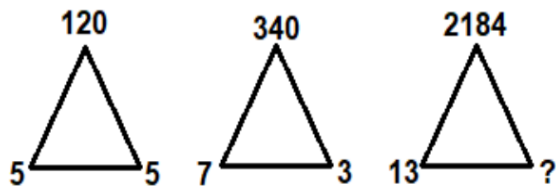
• AB is a chord of a circle with length 12 cm. Perpendicular is drawn from the centre O on the chord. Length of the perpendicular is 8 cm, what is the radius of the circle?

General Intelligence & Reasoning section:

• Mirror image: If a mirror is placed to the left of the question figure then which of the answer figures is the correct image of the given figure?

Ans figure.

• Missing Number series:



Logic- $5^3 - 5 = 125 - 5 = 120$

And,

$7^3 - 3 = 343 - 3 = 340$

Similarly,

$13^3 - ? = 2197 - 13 = 2184$

Ans. 13

• Odd one out:

196

226

257

290

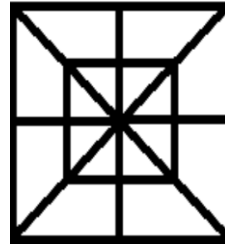
Ans. 196

Logic: only 196 is a perfect square.

• Mirror Image



• Count the number of triangles in the given figure:



Ans. 32

• Relation analogy:

Boxing is related to "Ring" in the same way Racing is related to?

Ans. Track

• Fillers:

M_OP_N_PMN_PM_OP

Ans. NMOON

(logic: Series of MNOP)

• Embedded figure -



Question figure:

• Analogy number:

12167:2197:: 4913 : ?

Ans. 343

Logic: $23^3 : 13^3$ similarly $17^3 : 7^3$

• Paper-cutting and folding :

Question

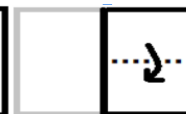
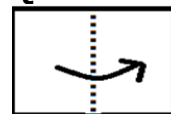
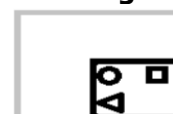


figure:



• Series:

G15H, J21K, M27N, ?

Ans. P33Q

Logic: $(H+2 \rightarrow J, K+2 \rightarrow M, N+2 \rightarrow P)$...and digit is the addition of the place value of both alphabets)

• Arrange the following in a Logical order: Accident, Treatment, Hospital, Injury, Ambulance

Ans. The order will be - 1,4,5,3,2.

• **Analogy word - Gloves : Hand :: Shoes : ?.**

Ans. Feet

• **Logical Venn Diagram - Male, Father, Infant**



Ans.

• **Analogy word - Diabetes : Disease :: Summer : ?**

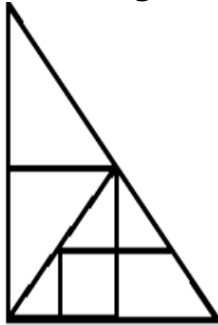
Ans. Season

• **Number series - 55, 43, 59, 40, 63, 37, ?**

Logic - (+4, -3.....)

Ans. 67

• **Counting of triangles:**



Ans. 11

• **Related number analogy:**

3 : 67 :: 6 : ?

Logic- $4^3 + 3 = 67$

Similarly,

$7^3 + 6 = 349$

Ans.349

• **Analogy word:**

Examination : Admit card :: Train : ?

Ans. Ticket.

• **Find the Odd one out-** Time, Hour, Minute, Second

Ans. Time

• **Number series: 19,20,24,51,67,?**

Ans. 192.

• **Fillers series - u _ dm u _ dm u p _ _ up _ m**

Pattern is - updm/ updm/ updm/ updm

Logic difference of cube and square alternate

• **Related analogy- 27:6 :: 8 : 4 :: 64 : ?**

Ans. 8

• **Logical order arrangement-** Competition, Prize, Marks, Participate, Winner.

Ans. the correct order is - 1,4,3,2,5

• **Analogy word- Painting : Color :: Homework : ?**

Ans. Ink

General Awareness Section:

• Who was the first Chief Election Commissioner of India? - Sukumar Sen (1950-1958)

• In which year Allahabad treaty was signed?- 1765, between Mughal Emperor Shah Alam II and Robert Clive as a result of the Battle of Buxar.

• What is invented in the 3rd generation computer? - ICs - Integrated Circuits

• What is Chemical formula of butane? - C₄H₁₀

• How many types of seismic waves are there?- Two types- 'Body wave' and 'surface wave'.

• Where is the Largest hockey stadium in the world situated? National Hockey Stadium - (Lahore, Pakistan) also known as Gaddafi Hockey Stadium

• Which one of the following is the Vascular system in plants? Xylem tissue transports water and dissolved minerals to the leaves and phloem tissue conducts food from the leaves to all parts of the plant.

- What is the radius of the moon? - 1,737.1 km
- When was the First Winter Olympics held? - 1924 (France)
- Who among the following is related to chess? - Ding Liren (China) - Was the correct option
- Which of the following sports is played on the green court? - Tennis
- Which of the following acids is present in tomatoes? Oxalic acid
- GST comes under which amendment bill? - 101st Amendment Act or 122nd Amendment bill
- NABARD was established in which year? -1982
- Who won the Sahitya Akademi award 2019 for Hindi? -Nand Kishore Acharya (Chheelte hue Khud Ko - Poem Name)
- Dudhsagar fall is located in which of the following States? Goa (Mandovi River)
- Vivekanand rock memorial is situated in _____. - Kanyakumari (TN)
- When was Rover cup started? 1891 (Football Tournament of India - Started by Britishers)
- Jitu rai is associated with which sports? - Shooting
- Lavani dance is associated with which of the following states? Maharashtra
- The total number of Lok Sabha seats in Rajasthan? -25
- Who was the runner-up of the CWC 2019? -New Zealand
- What is the name of the Brahmaputra river in Tibet? -Yarlung Tsangpo

- How many people received Padma Vibhushan in 2019? -4 (Ms. Teejan Bai, Shri Ismail Omar Guelleh (Foreigner), Shri Anilkumar Manibhai Naik, Shri Balwant Moreshwar Purandare)
- Konark Sun Temple is situated in which of the following states of India? Odisha (Built by Raja Narsinghdev 1 - Ganga Dynasty)
- Salsette Island is situated in which of the following states of India? Maharashtra (Mumbai is situated on this Island)
- Who was the 13th president of India? Pranab Mukherjee
- What was the theme of International Yoga Day 2019? Climate action
- In which year the 44th Amendment Act of the Indian constitution was passed? - 1978
- When was Eden Garden stadium built? - 1864
- Dachigam national park is situated in which state? -Jammu & Kashmir (Union territory)
- What is the relative density of Silver? 10.8
- What is the height of Tehri Dam? -260 m
- How many Indian states share a border with Bhutan? Four, Arunachal Pradesh, Assam, West Bengal & Sikkim
- Magnus Carlsen is related to which sports? Chess
- Which state topped the sustainable development index? Kerala
- SAARC was established in which year? 8th December 1985
- Proteins are made of how many amino acids?

- Treaty of Amritsar signed between____. East India Company and Maharaja Ranjit Singh (1809)
- Who got Rajeev Gandhi KHEL Ratan AWARD in 2019- Deepa Malik and Bajrang Punia
- Who is the current chief of the Army Staff? General Manoj Mukund Narvane
- What is the full form of VPA? Virtual Payment Address
- Who was the President of India at the time of the Emergency ?- President Fakhruddin Ali Ahmed

English Language & Comprehension Section :

- Synonym - adjustment (ans. Adaptation, accustoming)
- One word Substitution- Geology
- Antonym - unmanaged (ans. Manageable)
- Synonym - Comfortable (ans. Cosy, pleasant, agreeable)
- Antonym - Plausible (ans. Unlikely, improbable)
- Incorrect Spelling- Navigation
- Incorrect spelling- Simultaneous
- Idiom. Cut from the same cloth (ans. very similar in their character, attitudes, or behaviour.)
- Idiom. Every cloud has a silver lining (ans. every difficult or sad situation has a comforting or more hopeful aspect, even though this may not be immediately apparent.)
- One word substitution. Prayer sung in the praise of god - hymn
- Cloze test on Delhi air quality
- Synonym- Casual (ans. informal)

- Cloze Test was based on Forest Fire.
- Syn for Tarnish (ans. Defile, maculate, stain)
- Syn for Tame (ans. Chaste, domesticate)
- Idiom-Falling head over heels (ans. to fall deeply in love with someone, especially suddenly)
- Incorrectly Spelt - Accommodate
- Correctly Spelt - Scrutinizing
- One word substitution- Contemporary (ans . living or occurring at the same time.)
- Antonym for Dispute (ans. agreement)
- Narration. She said to her, "why has she done that?".Ans. = She asked her why she had done this.
- Idiom. Reinventing the wheel (Ans. to waste one's time working on creating something that has already been created by someone else, or trying to solve a problem that has already been solved by someone else.)
- Antonym for Unworthy
- Idiom- **In a fog**
- Idiom-**Fish and fowl**
- Incorrect spelt- Manipulate
- One word substitution - Hibernation
- Synonym- Penury
- Cloze Test was based on Art and Culture
- One word substitution- Somnambulism