



CUET Memory Based (General Test paper- 2023)

1. Match the following

A	B
1 Jaipur	(i). Orange City
2 Amritsar	(ii). Blue City
3 Nagpur	(iii). Golden City
4 Jodhpur	(iv). Diamond City
5 Surat	(v). Pink City

- (a) 1-(ii), 2- (iii), 3- (v), 4- (iv), 5- (i)
(b) 1-(v), 2- (ii), 3- (iii), 4- (i), 5- (iv)
(c) 1-(v), 2- (iii), 3- (i), 4- (ii), 5- (iv)
(d) 1-(iv), 2- (v), 3- (ii), 4- (i), 5- (iii)

Ans. (c)

Rationale: Jodhpur is a popular tourist destination It is popularly known as the "Blue City" among people of Rajasthan and all over India. Jaipur in Rajasthan is known as Pink city due to pink colour of the buildings. Golden Temple, Amritsar The golden city of Amritsar dwells in Punjab and translates to "Pond of nectars". Surat, famous for its diamond cutting and polishing, is known as the Diamond City of India. Known as the "Orange City", Nagpur is the 13th largest city in India by population.

2. Match the following

Types of Vitamins	Deficiency Diseases
1. Anaemia	(i) C
2. Scurvy	(ii) D
3. Night blindness	(iii) B12
4. Rickets	(iv) A

- (a) 1- (ii), 2- (iv), 3- (i), 4- (iii)
(b) 1- (iii), 2- (i), 3- (ii), 4- (iv)
(c) 1- (iv), 2- (iii), 3- (i), 4- (ii)
(d) 1- (iii), 2- (i), 3- (iv), 4- (ii)

Ans. (d)

Rationale: B12 deficiency manifests as macrocytic anemia, and thus, the presenting symptoms often include signs of anemia, such as fatigue and pallor. A major vitamin C deficiency (consuming less than 7mg per day, which equates to around one segment of orange, for more than 4 weeks) can result in scurvy. Night blindness is one of the first signs of vitamin A deficiency. Vitamin D deficiency can lead to an array of problems, most notably rickets in children and osteoporosis in adults.

3. Which of the following is NOT a state?

- (a) Nagaland
(b) Sikkim
(c) Ladakh
(d) Manipur

Ans. (c)

Rationale: Ladakh is not a fledged state but a Union Territory. It was carved out from Jammu and Kashmir.



4. Match the following

Author	Book
1. Mahatma Gandhi	(i) Discovery of India
2. Balraj Krishna	(ii) Eternal India
3. Indira Gandhi	(iii) India's Bismarck
4. Jawahar Lal Nehru	(iv) The story of my experience & truth.

- (a) 1 - (ii), 2 - (iv), 3 - (iii), 4 - (i)
(b) 1 - (iv), 2 - (iii), 3 - (ii), 4 - (i)
(c) 1 - (iii), 2 - (ii), 3 - (i), 4 - (iv)
(d) 1 - (ii), 2 - (i), 3 - (iv), 4 - (iii)

Ans. (b)

Rationale: "Discovery of India" was written by Jawahar Lal Nehru, "India's Bismarck" was written by Balraj Krishna, while "Eternal India" by Indira Gandhi and "The Story of my experience & truth" by Mohan Das Karamchand Gandhi.

5. Match the following

Revolution	Field
1. Green	(i) Milk & Dairy
2. Blue	(ii) Agriculture
3. White	(iii) Jute
4. Golden	(iv) Fish & Aqua

- (a) 1 - (ii), 2 - (iv), 3 - (i), 4 - (iii)
(b) 1 - (iv), 2 - (ii), 3 - (iv), 4 - (i)
(c) 1 - (i), 2 - (iv), 3 - (ii), 4 - (iii)
(d) 1 - (iii), 2 - (ii), 3 - (i), 4 - (iv)

Ans. (a)

Rationale: Green Revolution for Agriculture, Blue Revolution for Fish & Aqua, White Revolution for Milk & Dairy, and Golden Revolution is for Jute.

6. Match the following

Movement	Year
1. Quit India	(i) 1922
2. Non Co-operation	(ii) 1942
3. Civil Dis-obedience	(iii) 1916
4. Home rule	(iv) 1930

- (a) 1 - (i), 2 - (iv), 3 - (iii), 4 - (ii)
(b) 1 - (iv), 2 - (iii), 3 - (ii), 4 - (i)
(c) 1 - (ii), 2 - (i), 3 - (iv), 4 - (iii)
(d) 1 - (i), 2 - (ii), 3 - (iv), 4 - (iii)

Ans. (c)

Rationale: Quit India Movement is associated with 1942, Non Co-operation Movement is associated with 1920-22, Civil Dis-obedience is associated with 1930, Home rule Movement is associated with 1916.

7. Who authored the book name "Why the sky is blue"?

- (a) Dr. C.V. Raman
(b) Dr. G. Homi Bhabha
(c) Dr. A.P.J Abdul Kalam



(d) None of the above

Ans. (a)

Rationale: Dr C.V. Raman loved the universe, loved science, loved speaking to children. He wrote the book "Why the sky is blue"

8. Which city in India is located at the bank of the river Yamuna?

- (a) Agra
- (b) Aligarh
- (c) Delhi
- (d) All of the above

Ans. (a) & (c)

Rationale: Agra and Delhi both cities are located at the bank of the Yamuna river.

9. Match the following

River	City
1. Narmada	(i) Erode
2. Mahanadi	(ii) Guntur
3. Krishna	(iii) Jabalpur
4. Kaveri	(iv) Sambalpur

- (a) 1 - (iii), 2 - (iv), 3 - (ii), 4 - (i)
- (b) 1 - (ii), 2 - (iii), 3 - (iv), 4 - (i)
- (c) 1 - (iii), 2 - (iv), 3 - (ii), 4 - (i)
- (d) 1 - (iv), 2 - (i), 3 - (ii), 4 - (iii)

Ans. (c)

Rationale: Erode is a city in Tamil Nadu. It is located on the banks of the Kaveri River and is surrounded by the Western Ghats. Guntur is located on the bank of Krishna. Jabalpur a city situated on the banks of Narmada River in the state of Madhya Pradesh. Sambalpur lies on the bank of the river Mahanadi.

10. Kanha National park is located in which state in India?

- (a) Chhattisgarh
- (b) Odisha
- (c) Andhra Pradesh
- (d) Madhya Pradesh

Ans. (d)

Rationale: Kanha Tiger Reserve, also called Kanha National Park, is one of the tiger reserves of India and the largest national park of Madhya Pradesh, state in the heart of India.

11. Who is the current chairperson of ISRO.

- (a) K Ranjan
- (b) S Somanath
- (c) B S Bommai
- (d) None of these

Ans. (b)

Rationale: The ISRO Chairman is S. Somanath and his full name is Sreedhara Panicker Somanath.

12. Who was the founder of ISRO?

- (a) J. H. Bhabha



- (b) K. Ranjan
- (c) Vikram Sarabhai
- (d) Dr. A.P.J. Abdul Kalam

Ans. (c)

Rationale: Vikram Sarabhai is known as the father of ISRO.

13. Which of the following countries were not part of the USSR?

- (a) Russia
- (b) Uzbekistan
- (c) China
- (d) Belarus

Ans. (c)

Rationale: China was not the part of USSR-Union of Soviet Socialist Republics.

14. At which National Park were Cheetah brought from Africa?

- (a) Khaziranga National Park
- (b) Samlilpal National Park
- (c) Kuno National Park
- (d) Baba Budan National Park

Ans. (c)

Rationale: Kuno National Park received eight cheetahs from Namibia and 12 from South Africa seven decades after their population went extinct in the country.

15. Which of the following is NOT a state?

- (a) Tripura
- (b) Arunachal Pradesh
- (c) Jammu & Kashmir
- (d) Meghalaya

Ans. (c)

Rationale: Jammu & Kashmir is a Union Territory not a full state.

16. The circumference of two circles is in the ratio 2:3. Find the ratio of their area.

- (a) 4:9
- (b) 3:4
- (c) 1:2
- (d) 2:1

Answer option (a)

Rationale:

The circumference of two circles = 2: 3

Let the radius be R1 and R2

The Circumference of the circle is = $2 \pi r$

ATQ:

$$\rightarrow \frac{2\pi r_1}{2\pi r_2} = \frac{2}{3}$$

$$\rightarrow \frac{r_1}{r_2} = \frac{2}{3}$$

$$\text{Ratio of area} = \pi r_1^2 : \pi r_2^2 = 2^2 : 3^2$$

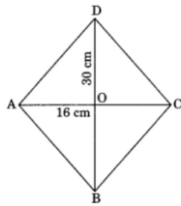
→ 4 : 9

17. The diagonal of the rhombus measures 16 cm and 30 cm. Find its perimeter.

- (a) 34 cm
- (b) 68 cm
- (c) 45 cm
- (d) 60 cm

Answer option (b)

Rationale:



Let ABCD be a rhombus, all sides of the rhombus have equal length and its diagonal AC and BD are intersecting each other at a point O.

As we know that the diagonals in the rhombus bisect each other at 90°.

So, AO can be written as $(AC/2)$

$$= 16/2$$

$$= 8 \text{ cm}$$

And, DO can be written as $(BD/2)$

$$= 30/2$$

$$= 15 \text{ cm}$$

Then, consider the triangle AOD and apply Pythagoras theorem,

$$AD^2 = AO^2 + DO^2$$

$$AD^2 = 8^2 + 15^2$$

$$AD^2 = 64 + 225$$

$$AD^2 = 289$$

$$AD = \sqrt{289}$$

$$AD = 17 \text{ cm}$$

Hence, the length of each side of the rhombus is 17 cm

Now,

The perimeter of rhombus = $4 \times$ side of the rhombus

$$= 4 \times 17$$

$$= 68 \text{ cm}$$

Therefore, the perimeter of the rhombus is 68 cm.

18. In the given figure, find the measure of the interior A



- (a) 55°
- (b) 65°
- (c) 75°



(d) 105°

Answer option (A)

Rationale:

Sum of two interior angle $\angle X + \angle 50 =$ exterior angle
 $\angle X + \angle 50$ degrees = 105 degrees
 $\angle X = 55$ degrees

19. What is the series of 2, 4, 6, 32,

(a)64 (b) 84 (c) 40 (d) 128

Answer option (a)

20. A, B and C can all together do a piece of work in 10 days, in which B takes three times as long as A and C together do the work and C takes twice as long as A and B together take to do the work. In how many boys B can alone do the work?

(a)35 days (b) 33 days (c) 43 days (d) 40 days

Answer option (d)

Rationale:

Given $A+B+C = 10$ and that B takes 3 times as $A+C$,
So $A+C$ is three times stronger than B So this means that 4 times stronger can do work in 10 days
So 1 time stronger(B) in $4*10 = 40$ days

21. If the total ages of Iqbal and Shikhar is 12 years more than the total age of Shikhar and Charu. Charu is how many years younger than Iqbal?

(a)11 years (b) 13 years (c) 15 years (d) None of the above

Answer option (d)

Rationale:

Given that, total ages of Iqbal and Shikhar is 12 years more than total age of Shikhar and Charu.

Let, the age of Iqbal be x.

The age of Shikhar be y.

The age of Charu be z.

So,

$$(x+y) - (y+z) \Rightarrow x + y - y - z = 12 \Rightarrow x - z = 12$$

Therefore, Charu is 12 years younger than Iqbal.

22. In what time will Rs. 72 become Rs. 81 at $6\frac{1}{4}\%$ per annum simple interest?

(a)2 years (b) 3 years (c) 2 years 6 months (d) None of these

Answer option (a)

Rationale:

$$\rightarrow SI = \frac{PRT}{100}$$

$$\rightarrow 9 = \frac{72 \times 25 \times T}{100 \times 4}$$

$$\rightarrow 2 \text{ Year}$$

23. The sum of the first n terms of the AP: 9, 17, 25, ... is 636?

The value of n is



(a) 10 (b) 12 (c) 14 (d) 16

Answer option (b)

Rationale:

To find: the total term of AP: 9, 17, 25, . . .

Given: $S_n = 636$

Here, the first term (a) of AP is 9 and the common difference (d) is $17 - 9 = 8$.

Now, we know that, $S_n = n/2 [2a + (n - 1) d]$ or $S_n = n/2 [a + 1]$ is the formula for calculating the sum of the first n terms of an AP.

Now, after putting the values in the formula, we will get

$$n/2 [2 \times 9 + (n - 1) 8] = 636$$

$$n/2 [18 + 8n - 8] = 636$$

$$n/2 [10 + 8n] = 636$$

$$n[5 + 4n] = 636$$

$$5n + 4n^2 = 636$$

$$4n^2 + 5n - 636 = 0$$

$$4n^2 + 53n - 48n - 636 = 0$$

$$n(4n + 53) - 12(4n + 53) = 0$$

$$(4n + 53)(n - 12) = 0$$

$$\text{Either } 4n + 53 = 0 \text{ or } n - 12 = 0$$

$$n = -53/4 \text{ or } n = 12$$

Since, we have to obtain the total number of terms hence, the value of 'n' cannot be in fraction. So, the total number of terms for the given AP: 9, 17, 25, . . . whose sum is 636, is 12.



24. In which state did the Sunderban National Park locate?

- (a) West Bengal
- (b) Tripura
- (c) Odisha
- (d) All of the above

Ans. (a)

Rationale: Sunderban National Park is located to **south-west of the Bangladesh**. The delta is densely covered by mangrove forests, and is one of the largest reserves for the Bengal tiger.

25. Events

year

- | | |
|--------------------------|------------|
| 1. Champaran Satyagraha | (i) 1905 |
| 2. Ahamadabad Satyagraha | (ii) 1911 |
| 3. Partion of Bangal | (iii) 1917 |
| 4. Delhi Darbar | (iv) 1918 |

- (a) 1 – (iv), 2 – (iii), 3 – (i), 4 – (ii)
- (b) 1 – (ii), 2 – (iv), 3 – (iii), 4 – (i)
- (c) 1 – (iv), 2 – (i), 3 – (ii), 4 – (iii)
- (d) 1 – (iii), 2 – (iv), 3 – (i), 4 – (ii)

Ans. (d)

Rationale: Champaran Satyagraha was in 1917, Ahamadabad Satyagraha was in 1918, Partion of Bangal took place in 1905 and Delhi Darbar took place in 1911.

26. If 1st January 2005 was Friday then what was the day of the week was on 1st January 2007?

- (a) Friday
- (b) Wednesday
- (c) Sunday
- (d) Tuesday

Answer option (C)

Rationale:

If 1st January 2005 was Friday

Then

1st January 2006 was Saturday

Finally 1st January 2007 was Sunday

27. If 22nd January 2011 was a Saturday, then what was the day of the week on 23rd January 2015?

- (a) Saturday
- (b) Friday
- (c) Monday
- (d) Sunday

Answer option (b)

Rationale:

If 22nd January 2011 was a Saturday,

then 22nd January 2012 was a Sunday

then 22nd January 2013 was a Tuesday



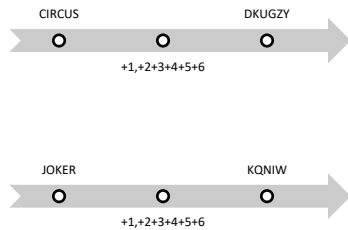
then 22nd January 2014 was a Wednesday
then 22nd January 2015 was a Thursday
then what was the day of the week on 23rd January 2015 = Friday

28. In a code language, CIRCUS is written as DKUGZY. How will JOKER be written in the same language?

- (a) KQUIV (b) KRNJW (c) KQMJW (d) KQNIW

Answer option (d)

Rationale:



29. What is the angle made by both hands of the clock when the time is 4:40 O'clock.

- a) 90 degrees
b) 85 degrees
c) 75 degrees
d) 100 degrees

Answer option (d)

Rationale:

$$\text{Angle} = Hr \times 30 - Min \times \frac{11}{2}$$

$$\text{Angle} = 4 \times 30 - 40 \times \frac{11}{2}$$

$$\text{Angle} = 120 - 220$$

$$\text{Angle} = 100 \text{ degrees}$$

30. What is the angle made by both hands of the clock when the time is 8:40 O'clock.

- (a) 30 degrees (b) 95 degrees (c) 75 degrees (d) 20 degrees

Answer option (d)

Rationale:

$$\text{Angle} = Hr \times 30 - Min \times \frac{11}{2}$$

$$\text{Angle} = 8 \times 30 - 40 \times \frac{11}{2}$$

$$\text{Angle} = 240 - 220$$

$$\text{Angle} = 20 \text{ degrees}$$

31. What is the angle made by both hands of the clock when the time is 7:42 O'clock.

- (a) 21 degrees (b) 250 degrees (c) 750 degrees (d) 500 degrees

Answer option ()

Rationale:



$$\text{Angle} = Hr \times 30 - Min \times \frac{11}{2}$$

$$\text{Angle} = 7 \times 30 - 42 \times \frac{11}{2}$$

$$\text{Angle} = 210 - 231$$

$$\text{Angle} = 21 \text{ degrees}$$

32. What is the angle made by both hands of the clock when the time is 10:40 O'clock.

- (a) 90 degrees (b) 80 degrees (c) 75 degrees (d) 70 degrees

Answer option (b)

Rationale:

$$\text{Angle} = Hr \times 30 - Min \times \frac{11}{2}$$

$$\text{Angle} = 10 \times 30 - 40 \times \frac{11}{2}$$

$$\text{Angle} = 300 - 220$$

$$\text{Angle} = 80 \text{ degrees}$$

33. Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster. REST::SCTR::BEST:?

- (a) SBTR (b) CCRT (c) CCTR (d) CDTR

Answer option (c)

Rationale:

The logic followed here is:



Similarly,



34. Which latter will come last if arranged according to dictionary.

- (a) Running (b) Roasting (c) Resting (d) Rust

Answer option (d)

Rationale:

rust

35. 'Second' is related to 'Minute' in the same way as 'Day' is related to '_____'.

- (a) Dusk (b) Dawn (c) Week (d) Night

Answer option (c)

Rationale:

Week

36. Select the correct mirror of the given figure when the mirror is placed to the right side of the letter.

'TER\$MI5NATE'



- (a) TERMINATE
- (b) TERMINATE
- (c) TERMINATE
- (d) TERMINATE

Answer option (d)
Rationale:

37. If 'x' means '-', '÷' means '+', '+' means 'x' and '-' means '÷', then what will be the value of the following expression?

$16 \div 32 - 4 \times 2 + 1 = ?$

- (a) 7.5 (b) 32 (c) 22 (d) 10

Answer option (c)
Rationale: After changing the expression's $16 + 32 \div 4 - 2 \times = ?$ $24 - 2 = 22$

38. Statements: All cats are birds.

Some tigers are cats.

All bees are tigers.

- Conclusions: I. All bees are birds.
II. Some bees are birds.
III. Some birds are tigers.
IV. All tigers are birds.

- (a) Only conclusion IV follows
- (b) Only conclusion II follows
- (c) Only conclusion III follows
- (d) Only conclusion I follows

Answer option (C)
Rationale: 



39. Select the option in which the words share the same relationship as that shared by the given pair of words.

Purification: Filter

- (a) Digging: Spade (b) Selling: Car (c) Coloring: House (d) Walking: Exercise

Answer option (a)

Rationale:

Select the option in which the words share the same relationship as that shared by the given pair of words.

Purification : Filter

40. Select the number that can replace the question mark (?) in the following series. \

7, 8, 12, 39, 55, 180, 216, ?

- (a) 555 (b) 559 (c) 595 (d) 599

Answer option (c)

Rationale:

The logic behind the given series is as follows:

$$7 + 1^2 = 8$$

$$8 + 2^2 = 12$$

$$12 + 3^2 = 39$$

$$39 + 4^2 = 55$$

$$55 + 5^2 = 180$$

$$180 + 6^2 = 216$$

$$216 + 7^2 = 559$$

The value of '?' is 559.

41. Statements: All plants are herbs.

Some herbs are trees.

All trees are shrubs.

Conclusions: I. Some shrubs are plants.

II. Some shrubs are herbs.

III. Some trees are plants.

(a) Only conclusions I and III follow

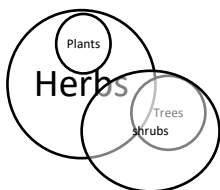
(b) Only conclusion II follows

(c) Only conclusions I and II follow

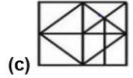
(d) Only conclusion I follows

Answer option (b)

Rationale:



42. Select the option figure in which the given figure is embedded. (Rotation is not allowed)



Answer option (d)
Rationale:

43. In each question some statements followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements.

- Statements:** (I) Some Doctors are Professors
(II) Some Professors are Authors
(III) All Authors are Teachers
(IV) No Doctor is Singer

- Conclusion:** (I) Some Professors are Singers
(II) Some Doctors are not Professors
(III) Some Singers are not Professors

- (a) Only conclusion III follows
(b) Only conclusion II follows
(c) Both conclusion II and III follows
(d) Either conclusion I follows or III follows

Answer option (d)
Rationale:

44. In each question some statements followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements.

- Statements:** All Sunday are Monday
Some Tuesday are Sunday



No Monday is Saturday

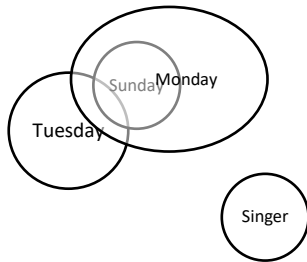
Conclusions: I. Some Tuesday are not Monday

II. All Tuesday are Monday

- (a) Neither I nor II follows
- (b) Either I or II follows
- (c) Only I follows
- (d) Both of them follows

Answer option (b)

Rationale:



45. There would be 10% loss if a toy is sold at Rs.10.80 per piece. At what price should it be sold to earn a profit of 20%?

- (a) Rs.12
- (b) Rs.12.96
- (c) Rs.14.40
- (d) None of these

$x = 13$ $y = 12$

Answer option (c)

Rationale:

Sell price of a toy = 10.80 Rs. Loss = 10% Formula used : Cost price = sell price \times 100/(100 - loss)

Calculation : C.P = $10.80 \times 100/90 = 12$

To earn a profit of 20% the selling price of the toy = $12 \times 120/100 = 14.40$

46. If $x = \frac{1}{3}y$ and $y = \frac{1}{2}z$, then is equal to z, x: y: z

- (a) 3:2:1
- (b) 1:2:6
- (c) 1:3:6
- (d) 2:4:6

Answer option (c)

Rationale:



$$x = \frac{1}{3}y = \frac{1}{3} \times \frac{1}{2}z = \frac{1}{6}z$$

$$\text{Let } x = \frac{1}{3}y = \frac{1}{6}z = k$$

Then,

$$x = k, y = 3k, z = 6k$$

$$\therefore x : y : z = k : 3k : 6k$$

$$= 1 : 3 : 6$$

47. Which of the following fractions is the smallest?

→ $\frac{9}{7}, \frac{11}{13}, \frac{15}{17},$ and $\frac{19}{21}$?

(a) $\frac{11}{13}$ (b) $\frac{9}{7}$ (c) $\frac{15}{17}$ (d) $\frac{19}{21}$

Answer option (a)

Rationale:

LCM of 7, 13, 17 and 21 = 4641

To compare these fractions, we have to make Denominator of fractions equal to its LCM.

$$9/7 = (9 \times 663)/(7 \times 663)$$

$$\Rightarrow 9/7 = 5967/4641$$

$$\Rightarrow 11/13 = (11 \times 357)/(13 \times 357)$$

$$\Rightarrow 11/13 = 3927/4641$$

$$15/17 = (15 \times 273)/(17 \times 273)$$

$$\Rightarrow 15/17 = 4095/4641$$

$$19/21 = (19 \times 221)/(21 \times 221)$$

$$\Rightarrow 19/21 = 4199/4641$$

(3947/4641) has the smallest numerator, which is equivalent to 11/13.

∴ 11/13 is the smallest fraction.

48. In 4 years, the simple interest on certain sum of money is $\frac{9}{25}$ of the principal. The annual of interest is equal to ?

(a) $9/4$ % (b) $4(1/2)$ % (c) 9% (d) 10 %

Answer option (a)

Rationale:

$$\rightarrow \frac{9P}{25} = \frac{PR4}{100}$$

$$\rightarrow R = 9/4 \%$$

49. What will be the next number in the given series?

3, 28, 4, 65, 5, 126, 6,

(a) 264 (b) 317 (c) 217 (d) 246

Answer option (c)

Rationale:



- $3^3+1 = 28$
- $4^3+1 = 65$
-
- $6^3+1 = 217$
-

50. X % of 130 = 10.4

- (a) 80 (b) 8 (c) 0.8 (d) 0.08

Answer option (b)

Rationale:

$$\begin{aligned} \rightarrow \frac{X}{100} \times 130 &= 10.4 \\ \rightarrow X &= \frac{104}{13} \\ \rightarrow x &= 8 \end{aligned}$$

51. If 15 % of (A+B) = 25 % of (A-B), then what percent of B is equal to A?

- (a) 10% (b) 60% (c) 200% (d) 400%

Answer option (d)

Rationale:

$$\rightarrow \frac{15}{100} \times (A + B) = \frac{25}{100} \times (A - B)$$

$$\begin{aligned} \Rightarrow 15(A + B) &= 25(A - B) \\ \Rightarrow 15A + 15B &= 25A - 25B \\ \Rightarrow 10A &= 40B \\ \Rightarrow A &= 4B \end{aligned}$$

Now, let p% of B is equal to A

$$\therefore \frac{p}{100} \times B = A$$

$$\Rightarrow \frac{p}{100} \times B = 4B$$

$$\therefore p = 400\%$$

52. Ratio of the principal and the amount after 1 year is 10:12. Then the rate of interest per annum is:

- (a) 12% (b) 16% (c) 18% (d) 20%

Answer option ()

Rationale:



53. $4M37094267N$ is the divisibility of 8 and 11. What is the value of M^2+N^2-18 .

(a) 11 (b) 12 (c) 13 (d) 14

Answer option (a)

The number which is divisible by 8 and 11 = $4M37094267N$

Concept Used

divisibility rule of 8 - if the last 3 digit of any number is divisible by 8, then the whole number divisible by 8

divisibility rule of 11 - the sum of odd place digits - the sum of even place digits = 0 or 11

Calculation

67N last 3 digits of the number

According to the rule of divisibility by 8, N should be 2

So, the value of N = 2

Now no. = $4M370942672$

\Rightarrow the sum of odd place digit - the sum of even digit place = 0 OR 11

$\Rightarrow (4 + 3 + 0 + 4 + 6 + 2) - (M + 7 + 9 + 2 + 7) = 11$

$\Rightarrow M = 5$

\therefore The value of M = 5 and N = 2

54. Out of 450 students of a school, 325 play football 175 play cricket and 50 neither play football nor cricket . How many students play both football and cricket?

(a) 100 (b) 300 (c) 400 (d) 500

Option (a)

Students who played either football or cricket = $450-50=400$

Students who played both = $(325+175)-400$
 $=500-400=100$

55. In which year University Grant Commission was established?

- (a) 1956
- (b) 1958
- (c) 1962
- (d) 1953

Ans. (d)

Rationale: The University Grants Commission (UGC) came into existence on 28th December, 1953 and became a statutory Organization of the Government of India by an Act of Parliament in 1956, for the coordination, determination and maintenance of standards of teaching, examination and research in university education.

56. Water metro is inaugurated in which state?

- (a) Kerala
- (b) West Bengal
- (c) Goa
- (d) Manipur

Ans. (a)

Rationale: Prime Minister Narendra Modi on Tuesday inaugurated India's first "Water Metro" services in Kerala's Kochi. Kochi Water Metro would be a "significant enhancement" to the port city's infrastructure, PM Modi had said.



57. Neeraj Chopra won gold medal in which game recently?

- (a) Diamond league
- (b) Asian game
- (c) ICC trophy
- (d) None of the above

Ans. (b)

Rationale: Creating yet another historic moment, world number one javelin thrower – India's Neeraj Chopra – on 4 October clinched a gold medal with a season-best throw of 88.88m at the 19th Asian Games taking place in China's Hangzhou.

58. Who is the first Indian to win gold medal in Olympic?

- (a) Shania Mirza
- (b) Saina Nehwal
- (c) Abhinav Bindra
- (d) Nove of the above

Ans. (c)

Rationale: Abhinav Bindra became the first Indian to win an individual Olympics gold medal when he won the gold in the 10-metre Air rifle event at the Beijing Olympics in 2008.

59. What is the full form of NITI Aayog?

- (a) National Institute for Transforming Indian
- (b) National Institute of Technical India
- (c) National Institute for Transforming India
- (d) None of the above

Ans. (c)

Rationale: National Institution for Transforming India (NITI Aayog). It replaced the earlier Planning Commission of India.

60. Rhino is natural habitate in which National Park in India?

- (a) Kagiraga National Park
- (b) Valmiki National Park
- (c) Rajiv Gandhi National Park
- (d) None of these

Ans. (a)

Rationale: The Indian state of Assam is home to the largest population of greater-one horned rhinos, with more than 90% in Kaziranga National Park.