

## RRB NTPC Memory Based Model Paper Based on Jan 06 Exam



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### Logical Reasoning

1. Statements followed by some conclusions are given below.

#### Statements:

1. Some chocolates are bitter, some are sweet and some taste sour.
2. All bitter chocolates are dark and some white chocolates are sweet.

#### Conclusions:

- I. All dark chocolates are bitter.
- II. There is at least one sweet chocolate that is white.

Find which of the given conclusions logically follow from the given statements.

- a) Only conclusion I follows
- b) Only conclusion II follows
- c) Either conclusion I or II follows
- d) None of the conclusion follows

Answer: B)

I. All dark chocolates are bitter. – False

All bitter chocolates are dark implies some dark chocolates are bitter.

II. There is at least one sweet chocolate that is white.

– True

As, some white chocolates are sweet.

2. An assertion (A) and a reason (R) are given below.

**Assertion (A):** Cod liver oil is a good source of Vitamin D.

**Reason (R):** Cod liver oil is extracted from the liver of cod fish.

Choose the correct option.

- a) Both A and R is true and R is the correct explanation of A.
- b) Both A and R is true but R is not the correct explanation of A.
- c) A is true, but R is false.
- d) Both A and R is false.

Answer: B)

3. Choose the correct symbols from the options to complete the equation.

$$44 \_ 4 \_ 7 \_ 5 = 82$$

- a)  $\times, -, \div$
- b)  $+, \div, -$
- c)  $+, -, \div$
- d)  $\div, \times, +$

Answer: D)

$$d) \div, \times, +$$

$$44 \div 4 \times 7 + 5 = 82$$

$$\Rightarrow 11 \times 7 + 5 = 82$$

$$\Rightarrow 77 + 5 = 82$$

$$\Rightarrow 82 = 82$$

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4. Three of the following four letter-clusters are alike in a certain way and one is different. Pick the odd one out.

- a) FHKO
- b) UWZD
- c) LNPR
- d) WYBF

Answer: C)

- a) FHKO → F + 2 = H; H + 3 = K; K + 4 = O
- b) UWZD → U + 2 = W; W + 3 = Z; Z + 4 = D
- c) LNPR → L + 2 = N; N + 2 = P; P + 2 = R
- d) WYBF → W + 2 = Y; Y + 3 = B; B + 4 = F

5. If A = 2, B = 3, C = 4, and so on, what does the following number stand for?

20, 21, 19, 6, 2, 14

- a) TUSFBN
- b) STREAM
- c) STRING
- d) LOWER

Answer: B)

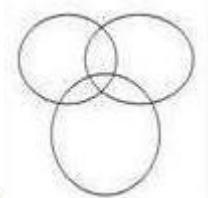
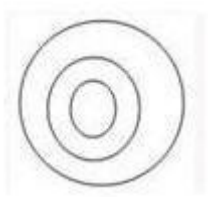
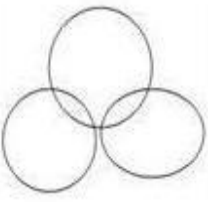
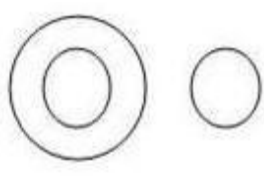
Given value = Original alphabet values + 1

So, the number stands for:

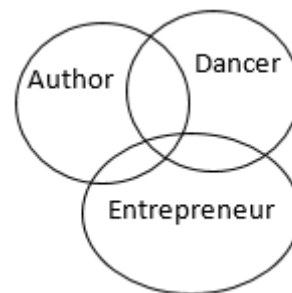
- 20 - 1 = 19 → S
- 21 - 1 = 20 → T
- 19 - 1 = 18 → R
- 6 - 1 = 5 → E
- 2 - 1 = 1 → A
- 14 - 1 = 13 → M

6. Identify the diagram that best represents the relationship among the given classes.

Entrepreneur, Author, Dancer

- a) 
- b) 
- c) 
- d) 

Answer: A)



Some author can be entrepreneur and dancer, some dancer can be author and entrepreneur and some entrepreneur can be author and dancer.

7. Which number will replace the question mark (?) in the following series?

108, 162, 243, 364.5, ?

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- a) 675
- b) 545
- c) 625.75
- d) 546.75

Answer: D)

$$108 \times \frac{3}{2} = 162$$

$$162 \times \frac{3}{2} = 243$$

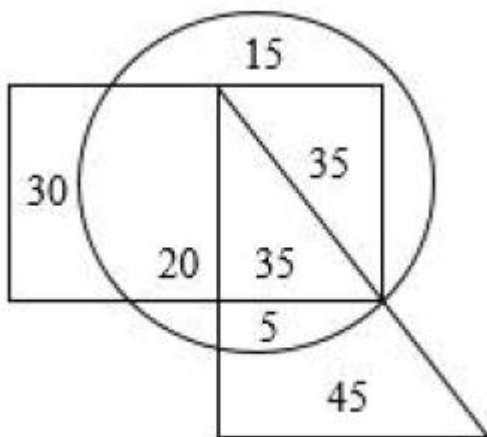
$$243 \times \frac{3}{2} = 364.5$$

$$364.5 \times \frac{3}{2} = \mathbf{546.75}$$

**Direction (8 – 10):** Study the diagram given below and answer the questions based on it.

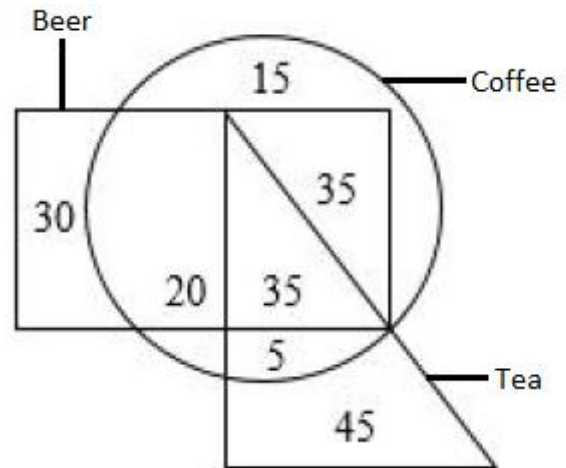
If triangles represent persons who like tea, Circle represents persons who like coffee and Square represents persons who like beer.

8. The difference between the number of persons who like beer and who like coffee is



- a) 15
- b) 20
- c) 5
- d) 10

Answer: D)



The number of persons who like beer =  $(30 + 20 + 35 + 25) = 120$

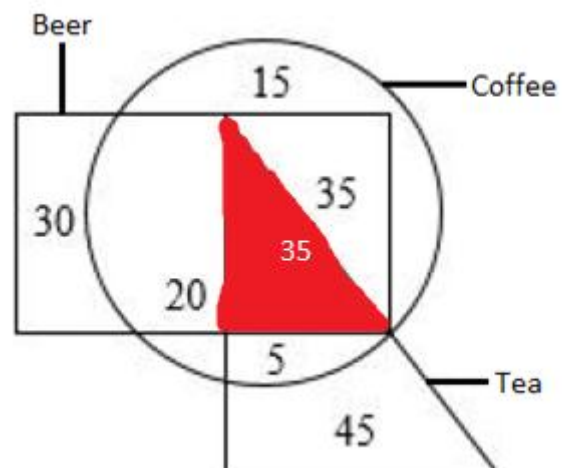
The number of persons who like coffee =  $(15 + 20 + 35 + 35 + 5) = 110$

Difference =  $120 - 110 = 10$

9. How many people like both beer and tea?

- a) 35
- b) 70
- c) 60
- d) 40

Answer: A)



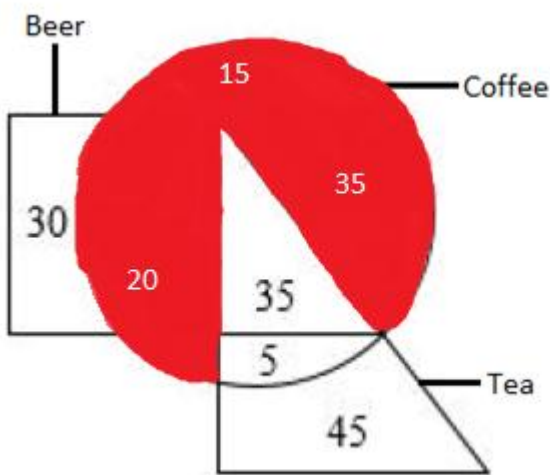
Number of people who like both beer and tea = 35

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10. How many person like coffee but not tea?

- a) 55
- b) 70
- c) 60
- d) 50

Answer: B)



Number of persons who like coffee but not tea = 15 + 35 + 20 = 70

11. Find the similarity in the following.

Orange, Peach, Indigo, Beige

- a) All of them are name of seasons.
- b) All of them are fruits.
- c) All of them are shades of yellow.
- d) All of them are colours.

Answer: D)

12. 'Annual' is related to 'One Year' in the same way

'Quinquennial' is related to '\_\_\_\_\_':

- a) 4 years
- b) 5 years

- c) 100 years
- d) 1000 years

Answer: B)

**Direction (13 - 15):** Read the information given below and answer the questions based on it.

Five friends – Gaurav, Saurav, Deepak, Rahul and Girish are standing in a row, in a random order, from left to right.

1. Neither Rahul nor Gaurav is at any of the extreme ends.

2. Girish is second to the right of Deepak.

3. Rahul is third to the left of Saurav.

13. Gaurav is \_\_\_\_\_ to the left of Saurav.

- a) Fourth
- b) Third
- c) Immediate
- d) Second

Answer: C)

Deepak Rahul Girish Gaurav Saurav

Gaurav is immediate to the left of Saurav.

14. There are two friends between which of the following \_\_\_\_\_.

- a) Rahul and Saurav
- b) Deepak and Saurav
- c) Rahul and Gaurav
- d) Girish and Gaurav

Answer: A)

Deepak Rahul Girish Gaurav Saurav

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15. Who among the following is standing in the middle of the row?

- a) Rahul
- b) Girish
- c) Saurav
- d) Deepak

Answer: B)

Deepak Rahul Girish Gaurav Saurav

16. Choose the pair which is related in the same way as the words in the first pair from the given choices.

MUSICIANS : BAND :: STAIRS : ?

- a) FLOCK
- b) LADDER
- c) FLIGHT
- d) GANG

Answer: C)

Collective Noun

A band of Musicians.

A flight of stairs.

17. Arpita said, "Arun is my maternal grandmother's only daughter's only grandson". How is Arun related to Arpita?

- a) Brother
- b) Son
- c) Father
- d) Son-in-law

Answer: B)

Grandmother

Mother

Arpita

Arun (+)

So, Arun is son of Arpita.

18. Choose the odd one out.

- a) Bishop
- b) Knight
- c) Rook
- d) Soldier

Answer: D)

All options except 'soldier' are terms used in chess game.

19. Choose the one which is different or odd from the following.

- a) Deer
- b) Camel
- c) Elephant
- d) Giraffe

Answer: A)

The young one of Deer is called Fawn.

The young one of Camel, Elephant and Giraffe are called Calf.

20. In this question, two statements are given followed by two conclusions. Choose the

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Conclusion(s) which best fit(s) logically.

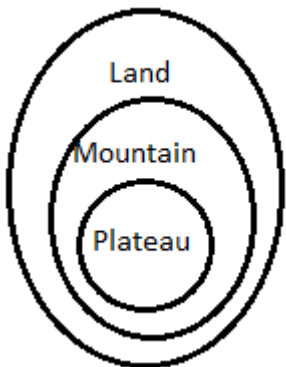
**Statements:**

- 1) All plateaus is mountain
- 2) All mountains is land

**Conclusions:**

- I. All land is plateau
- II. Some plateau is mountain
- a) Only conclusion II follows
- b) Only conclusion I follows
- c) Either conclusion I or II follows
- d) None of the conclusion follows

Answer: A)



- I. All land is plateau - False
- II. Some plateau is mountain - True

21. If the mathematical operators, '+' and 'x' are interchanged, what will be the value of the equation 9

$$\div 5 + 10 - 23 \times 2$$

- a) 3
- b) 2
- c) -3
- d) - 5

Answer: C)

$$9 \div 5 + 10 - 23 \times 2$$

When the mathematical operators, '+' and 'x' are interchanged:

$$\begin{aligned} &= 9 \div 5 \times 10 - 23 + 2 \\ &= 18 - 23 + 2 \\ &= 20 - 23 \\ &= -3 \end{aligned}$$

22. If H : Hydrogen, then K : \_\_\_\_\_

- a) Phosphorus
- b) Krypton
- c) Platinum
- d) Potassium

Answer: D)

H is the symbol of Hydrogen.

P is the symbol of Potassium.

23. If '+' represents 'x', '-' represents '÷', 'x' represents '+' and '÷' represents '-', then find the value of the following expression:

$$17 + 6 \times 13 \div 8$$

- a) 100
- b) 109
- c) 107
- d) 117

Answer: C)

+	-	x	÷
x	÷	+	-

$$\begin{aligned} &17 \times 6 + 13 - 8 \\ &= 102 + 5 \\ &= 107 \end{aligned}$$

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24. Unscramble the letters “DOMLAN” to form an English word and find the third letter from the left end of unscrambled word.

- a) N
- b) O
- c) M
- d) L

Answer: C)

Word will be – ALMOND

25. Find the missing alphanumeric term.

T25Y, W36V, Z49S, C64P, ?

- a) E81M
- b) F81M
- c) E81N
- d) F81N

Answer: B)

T + 3 = W; W + 3 = Z; Z + 3 = C; C + 3 = F

25, 36, 49, 64, **81**

Y – 3 = V; V – 3 = S; S – 3 = P; P – 3 = M

26. In a certain code, ‘fox’ is called ‘guava’, ‘guava’ is called ‘rat’, ‘rat’ is called ‘bat’, ‘bat’ is called ‘ball’ and ‘ball’ is called ‘brush’. In this language, which of the following is known as flying mammal?

- a) Fox
- b) Ball
- c) Rat
- d) Bat

Answer: B)

Flying mammal - Bat

Bat is called Ball.

27. Find the missing number from the below options.

12	7	95
14	?	132
16	9	175

- a) 8
- b) 12
- c) 14
- d) 16

Answer: A)

$$12^2 - 7^2 = 95$$

$$16^2 - 9^2 = 175$$

$$14^2 - ?^2 = 132$$

$$\Rightarrow 196 - 132 = ?^2$$

$$\Rightarrow 64 = ?^2$$

$$\Rightarrow ? = 8$$

28. Which letter in the word “HAEMOGLOBIN” occupies the same position as it rearranged in the order of English Alphabets.

- a) G
- b) L
- c) N
- d) None

Answer: D)

H A E M O G L O B I N

A B C D E F G H I J K

29. Find the odd one out.

- a) (213, 453, 240)

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b) (133, 179, 46)

c) (459, 876, 317)

d) (156, 444, 288)

Answer: C)

a)  $453 - 213 = 240$

b)  $179 - 133 = 46$

c)  $876 - 459 = 417 \neq 317$

d)  $444 - 156 = 288$

30. If H = 19, MAN = 53, then DEPTH = ?

a) 82

b) 78

c) 94

d) 68

Answer: A)

Letters are coded by the place value of their reverse letters.

H ↔ 21

M ↔ 14

A ↔ 26

N ↔ 13

MAN =  $14 + 26 + 13 = 53$

D ↔ 23

E ↔ 22

P ↔ 11

T ↔ 7

H ↔ 19

DEPTH =  $23 + 22 + 11 + 7 + 19 = 82$

### Mathematics

1. The perimeter of one face of cube is 20 cm.

Its volume will be–

a)  $125 \text{ cm}^3$

b)  $225 \text{ cm}^3$

c)  $300 \text{ cm}^3$

d)  $525 \text{ cm}^3$

Answer: A

$4a = 20$

So,  $a = 5$

Volume =  $a^3 = 125 \text{ cm}^3$

2. A farmer travelled a distance of 61 km in 9 hrs. He travelled partly on foot at the rate of 4 kmph and partly on bicycle at 9 kmph. The distance travelled on foot is:

a) 11 km

b) 10 km

c) 12 km

d) 16 km

Answer: D

Let, distance travelled on foot =  $x$  km.

Then, distance travelled by bicycle =  $61 - x$

Then,

$$x/4 + (61-x)/9 = 9$$

$$x/4 - x/9 + 61/9 = 81/9$$

$$5x/36 = 20/9$$

$$x = 16 \text{ km}$$

3. What smallest value must be added to 508, so that the resultant is a perfect square?

a) 4

b) 9



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c) 18

d) 21

Answer: D

The square of 23 is 529

∴ the value added to make 508 a perfect square =  
529 - 508 = 21

4. In a  $\triangle ABC$ , the internal angle bisector of  $\angle B$  and external angle bisector of  $\angle C$  meet at P. If  $\angle BAC = 70^\circ$ , find  $\angle BPC$

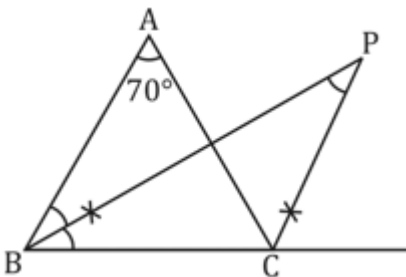
a)  $35^\circ$

b)  $40^\circ$

c)  $45^\circ$

d)  $20^\circ$

Answer: A



$$\angle BPC = \frac{1}{2}\angle BAC = 35^\circ$$

5. The ratio of the volume of a cube to that of a sphere, which will fit exactly inside the cube is

a) 15 : 14

b) 7 : 5

c) 11 : 13

d) 21 : 11

Answer: D

$$a = 2r$$

$$\frac{a}{r} = 2$$

$$\frac{\text{Volume of cube}}{\text{Volume of sphere}} = \frac{a^3}{4\pi r^3}$$

$$= \frac{(3 \times 7 \times 8)}{(4 \times 22)}$$

$$= 21 : 11$$

6. The area of three faces of cuboid is  $144 \text{ cm}^2$ ,  $289 \text{ cm}^2$ ,  $324 \text{ cm}^2$ . Find the volume of cuboid.

a)  $6772 \text{ cm}^3$

b)  $3562 \text{ cm}^3$

c)  $4472 \text{ cm}^3$

d)  $3672 \text{ cm}^3$

Answer: D

$$V = \sqrt{(289 \times 324 \times 144)}$$

$$V = 17 \times 18 \times 12$$

$$V = 3672 \text{ cm}^3$$

7. If  $a : b = 4 : 5$ , then  $(2a + 3b) : (3a + 2b)$  is equal to:

a) 9 : 10

b) 22 : 23

c) 23 : 22

d) 10 : 9

Answer: C

$$= a : b = 4 : 5$$

$$\text{Suppose } a = 4x \text{ and } b = 5x$$

$$= (2a + 3b) : (3a + 2b)$$

$$= (2 \times 4x + 3 \times 5x) : (3 \times 4x + 2 \times 5x)$$

$$= (8x + 15x) : (12x + 10x)$$

$$= 23 : 22$$

8. A tangent is drawn to a circle of radius 6 cm from point situated at a distance of 10cm from the centre of the circle. The length of the tangent will be

a) 5 cm

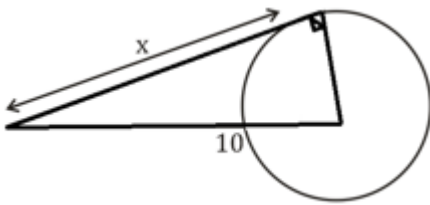
b) 4 cm

c) 7 cm

d) 8 cm

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Answer: D



By Pythagoras' theorem -

$$x^2 = 10^2 - 6^2$$

So,  $x = 8$  cm

9. After giving two successive discounts of 20% and 25% a cycle is sold for Rs. 4200. What is the marked price (in Rs) of the cycle?

- a) 7200
- b) 7000
- c) 6500
- d) 6200

Answer: B

Successive discount of  $x\%$  and  $y\%$  =  $x + y - \frac{xy}{100}$

Successive discount of 20% and 25% =  $20 + 25 - 20 \times \frac{25}{100} = 45 - 5 = 40\%$

Discount% = 40%

= 60% of MP = 4200

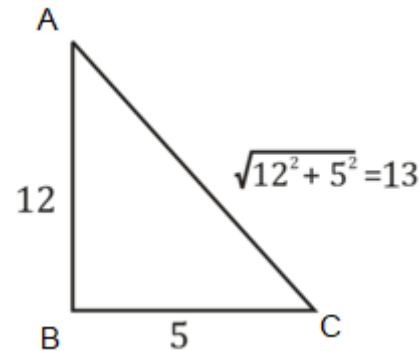
$\therefore$  MP = Rs. 7000

10. A ship after sailing 12 km towards south from a particular place covered 5 km more towards east.

Then distance of the ship from that place is-

- a) 13 km
- b) 11 km
- c) 18 km
- d) 15 km

Answer: A



Distance of the ship from that place =  $\sqrt{(12^2 + 5^2)} = 13$  km

11. If in 13 years fixed sum doubles at simple interest, what will be the interest rate per year? (Correct to two decimal places)

- a) 7.69%
- b) 8.69%
- c) 7.92%
- d) 7.29%

Answer: A

Let P = x

= A = 2x

SI = 2x - x = x

Time = 13 years

As we know,

SI =  $\frac{Prt}{100}$

=  $x = \frac{(x \times r \times 13)}{100}$

=  $r = \frac{100}{13}$

=  $r = 7.69\%$

12. A number of two digits is equal to six times of sum of its digits. Find the number.

- a) 45
- b) 54
- c) 64

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d) 26

Answer: B

Let no. be  $10x + y$

$$10x + y = 6(x + y)$$

$$10x + y = 6x + 6y$$

$$4x = 5y$$

$$x/y = 5/4$$

So, that number = 54

13. In certain years, sum of money doubles itself at  $6\frac{1}{4}\%$  simple interest per annum, then the required time will be:

- a)  $10\frac{2}{3}$  years
- b) 8 years
- c) 16 years
- d)  $12\frac{1}{2}$  years

Answer: C

$$r = 6\frac{1}{4}\% = \frac{25}{4}\%$$

$$SI = \frac{Prt}{100}$$

$$P = P \times \frac{25}{4} \times \frac{t}{100}$$

$$t = 16 \text{ years}$$

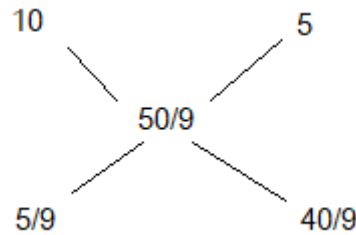
14. Amit travelled a distance of 50 km in 9 hours. He travelled partly on foot at 5 km/h and partly by bicycle at 10 km/h. The distance travelled on the bicycle is:

- a) 11 km
- b) 13 km
- c) 10 km
- d) 12 km

Answer: C

$$\text{Average speed} = \frac{50}{9} \text{ km/hr}$$

Using allegation method



Time ratio to cover distance by bicycle to that of foot  
 $= 5/9 : 40/9 = 1 : 8$

Now,  $(1 + 8)$  units = 9 hours

= 1 unit = 1 hour

Hence, time taken by bicycle = 1 hour

Distance covered by bicycle =  $10 \times 1 = 10$  km

15. If  $\sin\theta + \sin^2\theta = 1$ , then find the value of  $\cos^2\theta + \cos^4\theta$ .

- a) 1
- b)  $\cos^2\theta / \sin\theta$
- c)  $\sin\theta\cos\theta$
- d)  $\sin\theta / \cos^2\theta$

Answer: A

$$\sin\theta = 1 - \sin^2\theta = \cos^2\theta$$

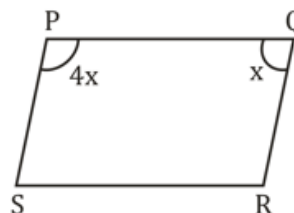
$$\text{Now, } \cos^2\theta + \cos^4\theta = \cos^2\theta + (\cos^2\theta)^2$$

$$= \cos^2\theta + \sin^2\theta = 1$$

16. In a parallelogram PQRS,  $\angle P$  is four times of  $\angle Q$ , then the measure of  $\angle R$  is:

- a)  $150^\circ$
- b)  $144^\circ$
- c)  $136^\circ$
- d)  $122^\circ$

Answer: B



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$$4x+x= 180^\circ$$

$$x = 36^\circ$$

$$\text{So, } 4x = 36 \times 4 = 144^\circ$$

17. Find how much  $(6x + 4y)$  exceeds  $(3x + 7y)$

a)  $3(x + y)$

b)  $5x$

c)  $3(x - y)$

d)  $4y$

Answer: C

$$\text{Required value} = (6x+4y) - (3x+7y)$$

$$= 3(x - y)$$

18. The marked price of an item is 25% above its cost price. A shopkeeper sells it, allowing a discount of  $x\%$  on the marked price. If he incurs a loss of 8%, then the value of  $x$  is:

a) 26.4%

b) 26.8%

c) 25.6%

d) 25.2%

Answer: A

Let CP of the article be Rs. 100

$$\text{MP of the article} = 100 \times (125/100) = \text{Rs. } 125$$

$$\text{SP of the article} = 100 \times (92/100) = \text{Rs. } 92$$

$$\text{Discount} = 125 - 92 = 33$$

$$\text{Discount percentage} = 33/125 \times 100 = 26.4\%$$

19. If  $x + 1/x = 10$ , then  $x^3 + 1/x^3$  is equal to:

a) 970

b) 1030

c) 1000

d) 1100

Answer: A

$$x + 1/x = 10$$

Cube both side

$$x^3 - 1/x^3 + 3(x - 1/x) = 1000$$

$$x^3 - 1/x^3 = 970$$

20. In a  $\triangle ABC$ ,  $AB$  &  $AC$  are extended to  $P$  &  $Q$  respectively.  $OB$  &  $OC$  are the angle bisectors of  $\angle PBC$  &  $\angle QCB$  respectively. If  $\angle BOC = 50^\circ$ . Find  $\angle BAC$

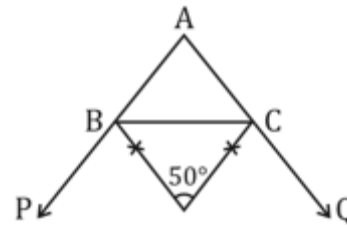
a)  $65^\circ$

b)  $25^\circ$

c)  $100^\circ$

d)  $80^\circ$

Answer: D



$$\angle BOC = 90 - 1/2 \angle BAC$$

$$50 = 90 - 1/2 \angle BAC$$

$$\angle BAC = 80^\circ$$

21. If  $x = 332$ ,  $y = 333$ ,  $z = 335$ , then the value of

$$x^3 + y^3 - z^3 - 3xyz$$
 is

a) 10,000

b) 8,000

c) 9,000

d) 7,000

Answer: D

We have

$$x^3 + y^3 - z^3 - 3xyz = (x + y + z) \times \frac{1}{2} [(x - y)^2 + (y - z)^2 + (z - x)^2]$$

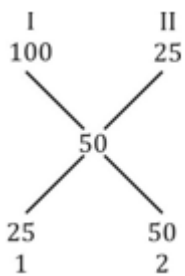
$$= \frac{1}{2} (1000) [1+4+9] = 7000$$

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22. How many litres of pure glycerine must be added to 20 litre of a mixture, which is 25% glycerine to make a mixture that will be 50% glycerine.

- a) 10 litres
- b) 15 litres
- c) 25 litres
- d) 20 litres

Answer: A



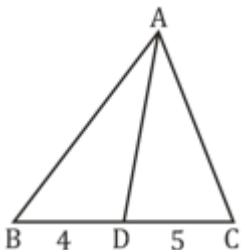
2 units → 20 litre

1 unit → 10 litre

23. In  $\triangle ABC$ , a line through A cuts the side BC at D such that  $BD : DC = 4 : 5$ . If the area of  $\triangle ABD = 60 \text{ cm}^2$  then the area of  $\triangle ADC$  is

- a)  $75 \text{ cm}^2$
- b)  $90 \text{ cm}^2$
- c)  $80 \text{ cm}^2$
- d)  $50 \text{ cm}^2$

Answer: A



Area of  $\triangle ADC = \frac{5}{4} \times 60 = 75 \text{ cm}^2$

24. Sudha saves 15% of her income. If her expenditure increases by 20% and savings increase

by 60%, then by what percent has her income increased?

- a) 24
- b) 30
- c) 35
- d) 26

Answer: D

Let income of Sudha be  $200x$

Saving of Sudha =  $200x \times [15/100] = 30x$

Expenditure of Sudha =  $200x - 30x = 170x$

New Expenditure of Sudha =  $170x \times [6/5] = 204x$

New Savings of Sudha =  $30x \times [8/5] = 48x$

New income of Sudha =  $204x + 48x = 252x$

New income increased by =  $252x - 200x = 52x$

$\therefore$  Required percentage =  $[52x/200x] \times 100 = 26\%$

25. HCF of two numbers is 16 and their difference is also 16. The numbers are

- a) 70 and 86
- b) 64 and 80
- c) 42 and 62
- d) 46 and 78

Answer: B

Let two numbers be  $16x$  and  $16y$ .

According to question,

$$16x - 16y = 16$$

$$x - y = 1$$

Only in option b  $x$  and  $y$  will be 5 and 4 and satisfies the question.

26. A pipe can fill a tank in ' $x$ ' hours and another can empty it in ' $y$ ' hours. They can together fill it in how many hours ( $y > x$ )

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a)  $xy/(y - x)$

b)  $(y - x)/xy$

c)  $x-y$

d)  $y-x$

Answer: A

Both pipe fill the tank together in 1 hour =  $1/x - 1/y = (y - x)/xy$

Time taken by both pipe to fill the tank together =  $xy/(y - x)$

27. What must be subtracted from each term of the ratio 5 : 6, So that the ratio becomes 4 : 5?

a) 4

b) 2

c) 1

d) 3

Answer: C

$$(5 - x)/(6 - x) = 4/5$$

$$x = 1$$

28. Compute  $5776 \div 16 - 19$

a) 354

b) 342

c) 352

d) 344

Answer: B

$$5776 \div 16 - 19$$

$$= 361 - 19 = 342$$

29. Find  $\sqrt{5\sqrt{5\sqrt{5\sqrt{5\sqrt{5}}}}} = ?$

a)  $5^{(31/32)}$

b)  $5^{(63/65)}$

c)  $5^{(24/25)}$

d)  $5^{(33/31)}$

Answer: A

$$\sqrt{5\sqrt{5\sqrt{5\sqrt{5\sqrt{5}}}}} = (5)^{\frac{2^n-1}{2^n}} = (5)^{\frac{31}{32}}$$

30. A tangent AB at a point A of a circle of radius 12 cm meets a line thru centre O at a point B so that OB = 20 cm. Find the length of tangent AB?

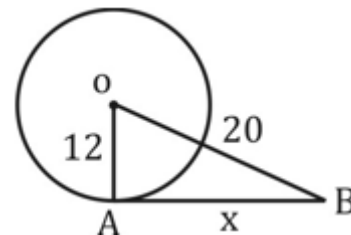
a) 15 cm

b) 16 cm

c) 17 cm

d) 18 cm

Answer: B



$$AB = \sqrt{20^2 - 12^2}$$

$$= \sqrt{256}$$

$$AB = 16 \text{ cm}$$

**General Knowledge**

1) Jama Masjid was completed in which year?

a) 1656

b) 1651

c) 1662

d) 1659

Answer: A

Jama Masjid is a mosque located at Tahseenganj area of Lucknow. The construction of this mosque was started in the year 1839 A.D. by King

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Mohammad Ali Shah Bahadur. It was completed in 1656.

**2) Project Tiger was implemented in which year?**

- a) 1971
- b) 1977
- c) 1975
- d) 1973

**Answer: D**

"Project Tiger", a major wildlife-conservation initiative of Govt. of India, was launched in the year 1973 to save the Indian tiger from extinction. Similipal Tiger Reserve was one of the nine reserves chosen in the country to implement the project.

**3) Who among the following got a Nobel Prize two times in Physics till 2020?**

- a) Hendrik Antoon Lorentz
- b) William Bradford Shockley
- c) Max Born
- d) John Bardeen

**Answer: D**

John Bardeen is the only Nobel Laureate who has been awarded the Nobel Prize in Physics twice, in 1956 and 1972.

**4) Sambhar lake is situated in which of the following Indian state?**

- a) Himachal Pradesh
- b) Rajasthan
- c) Uttarakhand

d) Odisha

**Answer: B**

Sambhar Salt Lake is India's largest inland salt lake. It is found in the city of Jaipur, state Rajasthan. Hence, the city is also known as Salt Lake City.

**5) The Government of India passed an act in which year that enabled the Hindu widows to remarry?**

- a) 1865
- b) 1867
- c) 1856
- d) 1869

**Answer: C**

The Hindu Widows' Remarriage Act was enacted on 26 July 1856 that legalised the remarriage of Hindu widows in all jurisdictions of India under East India Company rule.

**6) The Environment Protection Act was enacted in which year?**

- a) 1986
- b) 1988
- c) 1981
- d) 1985

**Answer: A**

The Environment Protection Act was enacted in 1986 with the objective of providing for the protection and improvement of the environment.

**7) Taxol is found in which of the following tree?**

- a) Black Ash Tree

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- b) Gray Birch Tree
- c) American Chestnut Tree
- d) Pacific yew tree

**Answer: D**

Taxol is the most well-known natural-source cancer drug in the United States. It is derived from the bark of the Pacific yew tree and is used in the treatment of breast, lung, and ovarian cancer.

**8) Which of the following is a noble gas?**

- a) Xenon
- b) Magnesium
- c) Iron
- d) Aluminium

**Answer: A**

Xenon is a chemical element with the symbol Xe and atomic number 54. It is a colorless, dense, odorless noble gas found in Earth's atmosphere in trace amounts.

**9) Sushil Kumar is associated with which sports?**

- a) Badminton
- b) Wrestling
- c) Table-Tennis
- d) Hockey

**Answer: B**

Sushil Kumar Solanki is an Indian freestyle wrestler. In July 2009, he received the Rajiv Gandhi Khel Ratna -India's highest honour for sportspersons.

**10) Which one of the following is the lowest point in India?**

- a) Kuttanad
- b) Nanda Devi
- c) K2
- d) Kangchenjunga

**Answer: A**

Kuttanad is the lowest point of India, lying at an elevation of 2.2 m below the sea level. It is situated in the state of Kerala, in the Alappuzha and Kottayam districts.

**11) "India After Gandhi" book is written by whom?**

- a) Shiv Khera
- b) Advaita Kala
- c) Vikram Balagopal
- d) Ramchandra Guha

**Answer: D**

"India After Gandhi" book is authored by Ramchandra Guha. Book tells the full story – the pain and the struggle, the humiliations and the glories of the world's largest and least likely democracy.

**12) Who among the following received the 'Nine Dots Prize' 2019?**

- a) Annie Zaidi
- b) Jhumpa Lahiri
- c) Anita Desai
- d) Arundhati Roy

**Answer: A**



## RRB NTPC Memory Based Model Paper Based on Jan 06 Exam

Indian writer Annie Zaidi was announced as the 2019 winner of the \$100,000 Nine Dots Prize, a prestigious book prize created to award innovative thinking that addresses contemporary issues around the world.

### 13) Who is the Father of White Revolution in India?

- a) Nirpakh Tutej
- b) Verghese Kurien
- c) M.S. Swaminathan
- d) Vishal Tewari

**Answer: B**

Verghese Kurien is known as the "Father of the White Revolution" in India. His Operation Flood made dairy farming India's largest self-sustaining industry and the largest rural employment sector providing a third of all rural income.

### 14) How many nuclear reactors are there in India till November,2020?

- a) 22
- b) 20
- c) 25
- d) 32

**Answer: A**

India has 22 nuclear reactors in operation in 7 nuclear power plants, with a total installed capacity of 6,780 MW.

### 15) How many people can the President of India nominate to the Lok Sabha?

- a) Zero
- b) Three
- c) Two
- d) Five

**Answer: A**

The One Hundred and Fourth Amendment of the Constitution of India, 2019 abolished the practice of nominating two members of the Anglo-Indian community by the President of India under the recommendation of the Prime Minister of India.

### 16) Reserve Bank of India was established in which year?

- a) April 1, 1935
- b) April 15, 1945
- c) April 30, 1949
- d) April 24, 1941

**Answer: A**

The Reserve Bank of India was established on April 1, 1935 in accordance with the provisions of the Reserve Bank of India Act, 1934.

### 17) Which city topped in Swachh Survekshan 2020 awards?

- a) Indore
- b) Lucknow
- c) Pune
- d) Mumbai

**Answer: A**

Indore in Madhya Pradesh retained its position as the cleanest city in India for the fourth consecutive

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year, according to the Swachh Survekshan 2020.

Gujarat's Surat bagged the second spot, Maharashtra's Navi Mumbai ranked third.

**18) Who among the following invented the Bluetooth?**

- a) David P. Anderson
- b) Charles Bachman
- c) Jaap Haartsen
- d) David A. Bader

**Answer: C**

Bluetooth is a wireless technology standard used for exchanging data between fixed and mobile devices over short distances. Jacobus Cornelis Haartsen is a Dutch electrical engineer, inventor and entrepreneur best known for his role in producing the specification for Bluetooth.

**19) What is the full form of ISP?**

- a) Internet Service Provider
- b) Intel Service Program
- c) Internet Service Programmer
- d) Initial Source Provider

**Answer: A**

An Internet service provider (ISP) is an organization that provides services for accessing, using, or participating in the Internet. Internet service providers can be organized in various forms, such as commercial, community-owned, non-profit, or otherwise privately owned.

**20) Name the latest high courts added in India?**

- a) Telangana High Court
- b) Andhra Pradesh High Court
- c) Kerala High Court
- d) Both a and b

**Answer: D**

The newest High Courts are the Telangana Court and Andhra Pradesh High Court, both established in the year 2019.

**21) Fatehpur Sikri was founded as the capital of Mughal Empire by whom?**

- a) Akbar
- b) Humayun
- c) Aurangzeb
- d) Shah Jahan

**Answer: A**

Fatehpur Sikri is a town in the Agra District of Uttar Pradesh, India. The city itself was founded as the capital of Mughal Empire in 1571 by Emperor Akbar. The city came to be known as Fatehpur Sikri, the "City of Victory", after Akbar's victorious Gujarat campaign in 1573.

**22) Godavari river originates from which of the following place?**

- a) Chemayungdung
- b) Rathong Glacier
- c) Mahabaleshwar
- d) Trimbakeshwar

**Answer: D**

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The Godavari is India's second longest river after the Ganga. It rises from Trimbakeshwar in the Nashik district of Maharashtra about 80 km from the Arabian Sea at an elevation of 1,067 m.

**23) Sanchi Stupa was constructed by whom?**

- a) Chandragupta Maurya
- b) Ashoka
- c) Raja Raja Chola I
- d) Akbar

**Answer: B**

Sanchi Stupa is a Buddhist complex, famous for its Great Stupa, on a hilltop at Sanchi Town in Raisen District of the State of Madhya Pradesh, India. It was commissioned by King Ashoka in the 2nd century BCE.

**24) When did the Indian Hockey team win the Gold medal last time in the Olympics?**

- a) 1980
- b) 1982
- c) 1985
- d) 1988

**Answer: A**

On July 29, 1980, India won the last of its eight Olympic gold medals in field hockey.

**25) Who among the following is the inventor of JAVA language?**

- a) John Vincent Atanasoff
- b) Anthony James Barr

c) Kurt Bollacker

d) James Gosling

**Answer: D**

Java is a computer programming language developed by James Gosling in the early 1990s.

**26) RBI Act was passed in which year?**

- a) 1934
- b) 1935
- c) 1949
- d) 1930

**Answer: A**

Reserve Bank of India Act, 1934 is the legislative act under the Reserve Bank of India was formed. This act along with the Companies Act, which was amended in 1936, were meant to provide a framework for the supervision of banking firms in India.

**27) How many UNESCO world heritage sites are there in the world till June 2020?**

- a) 1,121
- b) 1,115
- c) 1,176
- d) 1,125

**Answer: A**

As of June 2020, a total of 1,121 World Heritage Sites (869 cultural, 213 natural, and 39 mixed properties) exist across 167 countries.

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28) The World Elephant Day is observed

on\_\_\_\_\_.

- a) 17<sup>th</sup> May
- b) 12<sup>th</sup> August
- c) 11<sup>th</sup> April
- d) 30<sup>th</sup> January

**Answer: B**

World Elephant Day is an international annual event on August 12, dedicated to the preservation and protection of the world's elephants.

29) All India Muslim league was founded in which year?

- a) 1906
- b) 1910
- c) 1902
- d) 1905

**Answer: A**

The All-India Muslim League was a political party established in 1906 in British India. Its strong advocacy for the establishment of a separate Muslim-majority nation-state, Pakistan, successfully led to the partition of India in 1947 by the British Empire.

30) Which Article of the Constitution states about the Union Budget or Annual Financial Statement?

- a) Article 122
- b) Article 111
- c) Article 101
- d) Article 112

**Answer: D**

Under the Article 112 of the Constitution, the Government of India requires to present a statement of estimated receipts and expenditure in respect of every financial year in the Parliament. The receipts and disbursements are shown under three parts in which government accounts are kept. It also distinguishes the expenditure on revenue account from the expenditure on other accounts. This document is called the Annual Financial Statement.

31) Hepatitis B is caused due to\_\_\_\_\_.

- a) virus
- b) protozoa
- c) bacteria
- d) fungi

**Answer: A**

Hepatitis B infection is caused by the hepatitis B virus (HBV). The virus is passed from person to person through blood, semen or other body fluids. It does not spread by sneezing or coughing.

32) When was the Revolt of 1857 suppressed?

- a) 1858
- b) 1861
- c) 1866
- d) 1863

**Answer: A**

The Revolt of 1857 lasted for more than a year. It was suppressed by the middle of 1858. On July 8,

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1858, fourteen months after the outbreak at Meerut, peace was finally proclaimed by Lord Canning.

**33) What is the other name of Vitamin B9?**

- a) Folic acid
- b) thiamine
- c) cyanocobalamin
- d) riboflavin

**Answer: A**

Vitamin B9, also called folate or folic acid, is one of 8 B vitamins. All B vitamins help the body convert food (carbohydrates) into fuel (glucose), which is used to produce energy.

**34) When did Niti Ayog started Women Transforming India Awards?**

- a) 2015
- b) 2018
- c) 2019
- d) 2016

**Answer: D**

Women Transforming India (WTI) Awards is one of the flagship events of NITI Aayog, launched in 2016 as an online contest. It is organized in partnership with United Nations.

**35) The Nabakalebara festival is celebrated in which state?**

- a) Tamil Nadu
- b) Kerala
- c) Odisha

d) Andhra Pradesh

**Answer: C**

The Nabakalebara festival is an ancient ritual that is observed in most of the Jaganath temples in Odisha. It marks the demise and rebirth of lord Jagannath at Puri.

**36) Aligarh Muslim University is founded by whom?**

- a) Syed Ahmad Khan
- b) Rukmini Devi Arundale
- c) Rabindranath Tagore
- d) Madan Mohan Malaviya

**Answer: A**

Aligarh Muslim University is a premier central university in Aligarh, India, which was originally established by Sir Syed Ahmad Khan as the Muhammadan Anglo-Oriental College in 1875. Muhammadan Anglo-Oriental College became Aligarh Muslim University in 1920, following the Aligarh Muslim University Act.

**37) How many languages are there in the 8th Schedule?**

- a) 25
- b) 31
- c) 22
- d) 28

**Answer: C**

The Eighth Schedule to the Constitution of India lists the official languages of the Republic of India. As per Articles 344(1) and 351 of the Indian Constitution,

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the eighth schedule includes the recognition of the following 22 languages.

**38) How many default sheets are there in MS Excel?**

- a) Five
- b) Two
- c) One
- d) Three

**Answer: D**

When you open an Excel workbook, there are three sheets by default, and the default name on the tabs are Sheet1, Sheet2, and Sheet3.

**39) Which state has the highest per capita income in India?**

- a) Goa
- b) Rajasthan
- c) Maharashtra
- d) Tamil Nadu

**Answer: A**

Goa has the highest per capita income in India followed by the Delhi and Sikkim. On the other hand, Bihar has the lowest per capita income.

**40) Who among the following personalities has been nick-named as 'Frontier Gandhi'?**

- a) Khan Saheb
- b) Maulana Azad
- c) Liaquat Ali Khan
- d) Khan Abdul Ghaffar Khan

**Answer: D**

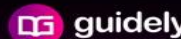
Khan Abdul Ghaffar Khan was an independence activist and a spiritual leader nicknamed as "Frontier Gandhi" due to his political activities and close association with the Indian leader, Mahatma Gandhi. He was a devout Muslim with an unwavering faith in the compatibility of Islam and nonviolence.



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