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SSC CGL Pre

Solution

SCP-908574069-E

- BALAJI COLONY TIRUPATI CELL 9391794863
- DILSUKHNAGAR HYDERABAD CELL:9398611586
- OPP TO CLOCK TOWER VRC CENTRE NELLORE CELL:6301414541

SCP-908574069-E



General Intelligence and Reasoning

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1.
        Answer: (B)
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Logic: 1^{st} number × $(1^{st}$ number – $1) = 2^{nd}$ number $15 \times 14 = 210$

 $20 \times 19 = 380$

Similarly;

 $10 \times 9 = 90$

2. Answer: (D)

Logic: 1st number ÷ 2 = 2nd number; 1st number × 2 = 3rd number

 $(18, 9, 36) \Rightarrow 18 \div 2 = 9; 18 \times 2 = 36$ $(36, 18, 72) \Rightarrow 36 \div 2 = 18; 36 \times 2 = 72$

Similarly:

 $(32, 16, 64) \Rightarrow 32 \div 2 = 16; 32 \times 2 = 64$

3. Answer: (D)

1. $28 + 2 - 4 \times 1.5 \div 16 = 6$

After interchanging the signs and digits in (I), we get:

 $28 \div 2 - 16 \times 1.5 + 4 = 6$

 $14 - 16 \times 1.5 + 4 = 6$

14 - 24 + 4 = 6

18 - 24 = 6

 $-6 \neq 6$

II. $4 \times 6 - 144 + 16 \div 36 = 96$

After interchanging the signs and digits in (II), we get:

 $16 \times 6 - 144 \div 4 + 36 = 96$

 $16 \times 6 - 36 + 36 = 96$

96 - 36 + 36 = 96

96 = 96

Therefore, by interchanging the given two signs and numbers in the equations, only equation I will be incorrect.

4. Answer: (C)

In option 'A'; LNOQ,

L + 2 = N, N + 1 = 0, O + 2 = Q

In option 'B': CEFH,

C + 2 = E, E + 1 = F, F + 2 = H

In option 'C': YADF,

Y + 2 = A, A + 1 = B, B + 2 = D

In option 'D': VXYA,

V + 2 = X, X + 1 = Y, Y + 2 = A

So, 'YADF' is the letter cluster that is different.

5. Answer: (D)

Given equation:

128 a 4 b 16 c 52 d 32 e 12

Replacing the alphabets by mathematical operator, we have.

In option 'A',

 $128 \div 4 \times 16 = 52 \times 32 - 12$

LHS:

 $= 32 \times 16$

= 512

RHS:

= 1664 - 12

= 1652

LHS ≠ RHS

In option 'B',

 $128 \times 4 \div 16 = 52 + 32 - 12$

LHS:

= 32

RHS:

= 84 - 12

= 72

LHS ≠ RHS

In option 'C'

 $128 + 4 \times 16 = 52 - 32 \div 12$

LHS:

 $= 128 + 4 \times 16$

= 128 + 64

= 192

RHS:

 $= 52 - 32 \div 12$

As '32' is not completely divisible by '12'. So, LHS can never be equal to RHS.

In option 'D'.

 $128 \times 4 \div 16 = 52 - 32 + 12$

LHS:

 $= 128 \times 4 \div 16$

= 32

RHS: = 52 - 32 + 12

= 64 - 32

= 32

LHS = RHS

6. Answer: (B)

Given:

R CH RI_HES__C_ES

The logic followed here is as follows,

RICHES/RICHES/RICHES

So, 'I, E, S, C, R, I, H' when sequentially placed will complete the series.

The complete series is as follows:

RICHESRICHES

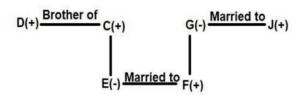
7. Answer: (C)

Given relation: D @ C # E & F \$ G & J

After decoding the given coded relation, we get:

D is the brother of C, C is the father of E, E is the wife of F, F is the son of G, G is the wife of J.

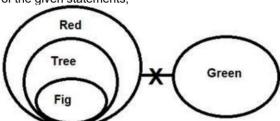
We get the following family tree:



So, E is the daughter-in-law of J.

Answer: (D) 8.

The following Venn diagram can be drawn on the basis of the given statements,



From the above diagram, conclusion I and conclusion

As all Fig are Tree and all Tree are Red, so, some Red are Fig. Thus, conclusion III follows.

So, all the conclusions follow.

9. Answer: (C)

The pattern in the series is that the first and third letters are incremented by 6 positions, and the second letter remains the same:

A + 6 = G, G + 6 = M, M + 6 = S, S + 6 = YN + 9 = W, W + 9 = F, F + 9 = O, O + 9 = XM + 13 = Z, Z + 13 = M, M + 13 = Z, Z + 13 = MSo, Next value is YXM

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10. Answer: (C)

In the above figure series, the shapes inside the figure is rotating 90° in clockwise direction. The shaded area is changing from one figure to another in this order -Pentagon, Circle and Rectangle.

So, the following figure will complete the figure series:



The figure given in option 'c' will complete the given figure.

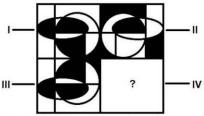
11. Answer: (D)

As group of Apple is called Bushel.

Similarly, among the given options, only 'Hair: Lock' follow the same logic. A collection of Hair is called Lock.

12. Answer: (B)

Given:



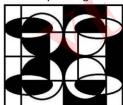
The logic followed here is as follows,

III is the mirror image of I. Similarly, IV is the mirror

Thus, the figure that will replace the question mark is as follows,



The complete figure is as follows,



13. Answer: (D)

The pattern followed here is:

 $12 \times 0.5 = 6 \neq 9$

 $6 \times 1.5 = 9$

 $9 \times 2.5 = 22.5$

 $22.5 \times 3.5 = 78.75$

 $78.75 \times 4.5 = 354.375$

So, '9' is the wrong term in the given series.

The complete series is:

12, 6, 9, 22.5, 78.75, 354.375

14. Answer: (A)

The logic followed here is as follows:

Alternately, replace each letter with its immediate succeeding letter and its immediately preceding letter as per English alphabetical order. The letters are then arranged as per English alphabetical order.

For 'SANITY',

S	Α	Ν	1	Т	Υ
Т	Z	0	Н	U	Х
Н	0	Т	J	Χ	Z

For 'INEDTO'

or intervio,					
I	Ν	Е	R	Т	S
J	М	F	Q	U	R
F	J	М	Q	R	U

So, 'INERTS' is coded as 'FJMQRU'.

15. Answer: (B)

The embedded figure is as follows:



16. Answer: (D)

The logic followed here is as follows:

Each number in the given triplets is square of three consecutive natural numbers.

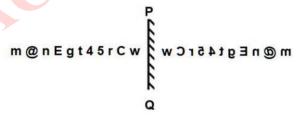
For $(24^2, 25^2, 26^2) = (576, 625, 676)$ For option 'a': $(16^2, 17^2, 18^2) = (256, 289, 324)$ For option 'b': $(21^2, 22^2, 23^2) = (441, 484, 529)$

For option 'c': $(8^2, 9^2, 10^2) = (64, 81, 100)$

For option 'd': (13², 14², 15²) = (169, 196, **225**)

17. Answer: (A)

The correct mirror image of the given combination is as follows:



18. Answer: (D)

The logic followed here is:

The immediate succeeding letter of the opposite letter is written as per the English Alphabetical order.

FOL	GER	IVI ,	
G	Ε	R	M
U	W	J	0
For '	CLA	P',	
C	L	Α	Р
Υ	Р	Α	L
For '	HELI	P',	-
Н	Ε	L	Р
Т	W	Р	L

'TWPL' is related to 'HELP' in the same way as, 'UWJO' is related to 'GERM' and 'YPAL' is related to 'CLAP' in the same way.

19. Answer: (D)

The logic followed here is as follows:

From the left end, the first letter is changed to 2nd preceding letter, the second letter is changed to 3rd preceding letter, the third letter is changed to 5th preceding letter and the fourth letter is changed to 7th preceding letter, as per the English alphabetical series.

In 'WORD: ULMW':

I WOILD. OLIVIV					
W	0	R	D		

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20000	-2	-3	-5	-7
3	U	L	М	W

So, 'WORD' is related to 'ULMW'.

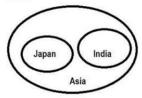
Similarly, in 'PLAY: ?':

Р	L	Α	Υ
- 2	-3	-5	-7
N	Ţ	٧	R

So, 'PLAY' is related to 'NIVR'.

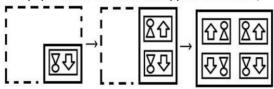
20. Answer: (A)

Both Japan and India are the countries in the continent Asia.



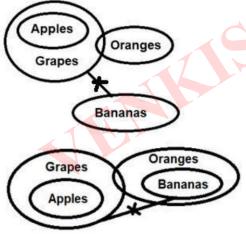
21. Answer: (B)

The paper when unfolded will appear as follows,



22. Answer: (D)

Following figures can be formed:



Conclusion:

- I. All Bananas can be Oranges: Follow (As, there is no direct relation between Bananas and Oranges. So, all possible conclusions follow.)
- II. Some Apples are not Bananas: Follow (As, all Apples are Grapes and no Grapes are Bananas. So, no Apples are Bananas.)
- III. Some Oranges are not Bananas: Follow (As, some Grapes are Oranges and no Grapes are Banana. So, those Oranges which are Grapes can never be Bananas.)

Therefore, all the conclusions follow.

23. Answer: (A)

Given word: 'TRUNCATING',

Word I: TURNING can be formed using the letters of the given word only once.

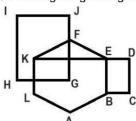
Word II: CARTING can be formed using the letters of the given word only once.

Word III: GRUNTING cannot be formed using the letters of the given word only once as there is only one 'G' in 'TRUNCATING'.

So, only word III cannot be formed using the letters of the word 'TRUNCATING' only once.

24. Answer: (D)

On naming the given figure,



So, a minimum of 13 lines (AB, BE, EF, FK, KL, LA, BC, CD, DK, GJ, JI, IH, and HG) are required to form the figure.

25. Answer: (D)

The logic followed here is:

When '#' is given, then the half of the first number is divided by the second number.

When \$ is given, then add the 2 times of the first number with the second number to get the resultant number.

$$= [\{15 \times 2\} + 21]$$

$$= 30 + 21$$

$$= [\{196 \div 2\} \div 7]$$

$$= 98 \div 7$$

Similarly, in '25 \$ 54',

$$= [{25 \times 2} + 54]$$

$$= 50 + 54$$

So, the value of '196 # 7' and '25 \$ 54' is '14' and '104' respectively.

Quantitative Aptitude

26. Answer: (C)

Let, 'x' cm be the length of the third side of the given triangle.

'x' is the longest side of the given triangle

Or,
$$2 < x < 32$$
(i)

Also,
$$x > \sqrt{17^2 + 15^2}$$

Or,
$$x > \sqrt{289 + 225}$$

Or,
$$x > \sqrt{514}$$

Or, x > 22 (approx)(ii)

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From conditions (i) and (ii), we get, 22 < x < 32

27. Answer: (C)

As we know least number which is divisible by 'a', 'b', and 'c' is LCM of 'a', 'b', and 'c'

So, the number which is completely divisible by 14, 18, and 36 = LCM of 14, 18, and 36 = 252

So, 'X' = 252 + 1 = 253

Now.

$$(2X + 3) = (253 \times 2) + 3 = 506 + 3 = 509$$

28. Answer: (D)

Required percentage = (2400/3000) × 100 = 80%

29. Answer: (A)

$$\frac{1}{8} \times \left(\frac{24}{81} \times \frac{729}{72}\right) + \frac{24}{42}$$

$$= \frac{1}{8} \times 3 + \frac{24}{42}$$

$$= \frac{3}{8} + \frac{24}{42}$$

$$= \frac{3}{8} + \frac{4}{7}$$

$$= \frac{21 + 32}{56}$$

$$= \frac{53}{56}$$

30. Answer: (A)

We know that, area of sector of a circle = $\pi \times r^2 \times (\alpha/360)$, where 'r' is the radius of circle and ' α ' is angle subtended by the arc at the center.

So, required area = $(22/7) \times 6 \times 6 \times (60/360) = (22 \times 6)$ ÷ 7 ~ 18.85 cm²

31. Answer: (A)

For a number to be divisible by 11, the difference between the sum of the digits at odd places and the sum of the digits at even places should be a multiple of

In this case,

$$(5 + 7 + B) - (A + 2) = 11$$

12 + B - A - 2 = 11

B - A = 11 - 10 = 1

32. Answer: (C)

We know.

Simple interest = (Principal × Time × Rate)/100 ATQ:

Rate of interest per month = $(5/100) \times 100 = 5\%$ So, rate of interest for 6 months = $5 \times 6 = 30\%$

Required simple interest = 3,600 × 0.3 = ₹1,080

33. Answer: (A)

 $\begin{array}{l} (\sin\theta + 2\sin^3\theta) \div (3\cos\theta - 2\cos^3\theta) \\ = \sin\theta (1 + 2\sin^2\theta) \div \cos\theta \ (3 - 2\cos^2\theta) \\ = (\sin\theta/\cos\theta) \times \{(1 + 2\sin^2\theta) \div (3 - 2\cos^2\theta)\} \\ = \tan\theta \times [\{1 + 2 \times (1 - \cos^2\theta)\} \div (3 - 2\cos^2\theta)] \ (\text{Since}, \sin^2\theta + \cos^2\theta = 1) \\ = \tan\theta \times [\{1 + 2 - 2\cos^2\theta\} \div (3 - 2\cos^2\theta)\} \\ = \tan\theta \times \{(3 - 2\cos^2\theta) \div (3 - 2\cos^2\theta)\} \\ = \tan\theta \end{array}$

34. Answer: (D)

We know that,

$$(a + b)^3 = a^3 + b^3 + 3ab \times (a + b)$$

So,
$$8^3 = 152 + 3ab \times 8$$

Or, 512 - 152 = 24ab

Or, ab = (360/24) = 15

So, product of 'a' and 'b' is 15.

35. Answer: (C)

Let the speed of the train be 'x' m/s ATQ:

$$\frac{330 + 660}{x} = 11$$
Or, $\frac{990}{x} = 11$

Or, 11x = 990Or, x = 90

So, required time to cross the bridge = $\frac{330+570}{90} = \frac{900}{90} = 10$ seconds

36. Answer: (D)

Number of male employees in company 'A' = 250 - 90 = 160

Number of male employees in company 'D' = 320 - 180 = 140

Required sum = 160 + 140 = 300

37. Answer: (D)

$$(1 + \cot A - \csc A)(1 + \tan A + \sec A) - 1$$

$$= \left(1 + \frac{\cos A}{\sin A} - \frac{1}{\sin A}\right) \left(1 + \frac{\sin A}{\cos A} + \frac{1}{\cos A}\right) - 1$$

$$= \left(\frac{\sin A + \cos A - 1}{\sin A}\right) \left(\frac{\cos A + \sin A + 1}{\cos A}\right) - 1$$
Since we know, $(a^2 - b^2) = (a + b)(a + b)$

$$= \left(\frac{\sin A + \cos A - 1}{\sin A}\right) \left(\frac{\cos A + \sin A + 1}{\cos A}\right) - 1$$

$$= \frac{(\sin A + \cos A)^2 - 1^2}{\sin A \cos A}$$

$$= \frac{\sin^2 A + \cos^2 A + 2\sin A\cos A - 1}{\sin A\cos A} - 1$$

$$= \frac{1 + 2\sin A\cos A}{\sin A\cos A} - 1$$

$$= \frac{2\sin A\cos A}{\sin A\cos A} - 1$$

$$= \frac{2\sin A\cos A}{\sin A\cos A} - 1$$

$$= \frac{1}{\sin A\cos A} - 1$$

$$= \frac{1}{\sin A\cos A} - 1$$

38. Answer: (D)

Marked price of the item = $1.6 \times 24000 = ₹38,400$ Selling price of the item for paying by cash = $0.9 \times (8/9) \times 38400 = ₹30,720$

Required percentage = [(30720 - 24000) /24000] × 100 = 28%

Alternate Answer

Let the cost price of the item be ₹100x

Therefore, marked price of the item = 1.6 × 100x = ₹160x

Therefore, selling price of the item = 0.9 × (8/9) × 160x = ₹128x

Required percentage = $\{(128x - 100x)/100x\} \times 100$ = 28%

39. Answer: (C)

Let the efficiency of 'Y' be 'a' units/day. So, efficiency of 'X' = $3 \times a = '3a'$ units/day So, total work = $(a + 3a) \times 16 = '64a'$ units So, time taken by 'X' alone to complete the work = $(64a/3a) = 21\frac{1}{3}$ days

40. Answer: (C)

Number of LED bulbs sold by seller 'C' = 2600 × 0.42 = 1092

Number of CFL bulbs sold by seller 'D' = 1865×0.6 = 1119

So, required difference = 1119 - 1092 = 27

41. Answer: (B)

We know that if x + y + z = 0, then

 $x^3 + y^3 + z^3 = 3xyz$

We have given, $8a^3 + 27b^3 + 64c^3 = 72abc$ Or, $(2a)^3 + (3b)^3 + (4c)^3 = 3 \times 2a \times 3b \times 4c$

So, 2a + 3b + 4c = 0

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Or, 2a + 3b = -4c

42. Answer: (B)

Let the quantity of mixture 'A' and 'B' mixed be '45x' litres and '54x' litres

Quantity of chocolate in the new mixture = $(45x \times$

$$\left(\frac{5}{9}\right) + \left(54x \times \frac{7}{9}\right) = 25x + 42x = '67x'$$
 litres

Required percentage of chocolate in new mixture = $\frac{67x}{(45x+54x)} \times 100 = \frac{67x}{99x} \times 10 \sim 68\%$

43. Answer: (A)

Let the cost price of rice be ₹'x' per gm So, cost price of 780 grams of rice = ₹'780x' And, selling price of 780 grams of rice = ₹'936x' So, required profit percentage = $\frac{936x-780x}{780x} \times 100 =$

 $\frac{156x}{700x} \times 100 = 20\%$

Alternate Answer

Ratio of cost price to that of selling price of 780 grams of rice = 780:936 = 5:6

Required profit percentage = $[{(6 - 5)/5} \times 100] = 20\%$

44. Answer: (C)

> Let the rate at which sum was invested be 'r%' p.a. We know that;

Simple interest = (principal × time × rate) ÷ 100

 $1200 = 6000 \times 5 \times (r/100)$ Or, $r = (1200 \times 100) \div (6000 \times 5)$

So, r = 4

So, the rate at which sum was invested is 4%.

45. Answer: (D)

> Distance covered by 'A' = 1,200 metres Distance covered by 'B' = 1200 - 48 = 1,152 metres Since, both 'A' and 'B' takes same time to finish the race.

So, the time is constant, which means,

So, the ratio of speed of 'A' to that of 'B' = (Distance covered by 'A') :(Distance covered by 'B') = 1200:1152

So, the speed of 'A' = $(25/24) \times 6 = 6.25$ m/s

46. Answer: (D)

Let, the height of the trapezium = Side of the cube = 'a'

ATQ,

 $(1/2) \times a \times (15 + 19) = 136$ Or, $(1/2) \times a \times 34 = 136$

Or, $17 \times a = 136$

Or, a = 8

Lateral surface area of the cube = $4 \times a^2 = 4 \times 8^2 = 4 \times 8^2$ $64 = 256 \text{ cm}^2$

47. Answer: (A)

> Let, the total work be LCM of [12, 20] = 60 units Efficiency of 'A' = (60/20) = 3 units/day Sum of efficiencies of 'A' and 'C' = (60/12) = 5 units/day

So, the efficiency of 'C' = 5 - 3 = 2 units/day Efficiency of 'B' = 1.5 × 2 = 3 units/day

Let, 'A' and 'B' worked together for 'x' days.

 $(3+3) \times x + (2+3) \times 6 = 60$

Or, $6 \times x = 60 - 30 = 30$

So, x = 5

So, the number of days for which 'A' has worked = x = 5 days

48. Answer: (B)

We know that if two chords of a circle intersect externally, then the product of the lengths of the segments are equal

 $PA \times PB = PC \times PD$

Or, $(x + 4) \times 4 = 16 \times 3$

Or, 4x + 16 = 48

Or, 4x = 32Or, x = 8

49. Answer: (B)

 $(\sin^4 60^\circ + \cos^4 45^\circ) + (\tan^4 45^\circ + \cot^4 45^\circ)$

$$= \left[\left(\frac{\sqrt{3}}{2} \right)^4 + \left(\frac{1}{\sqrt{2}} \right)^4 \right] + \left[1^4 + 1^4 \right]$$

$$= \left[\frac{9}{16} + \frac{1}{4} \right] + 2$$

$$= \frac{9+4+32}{4}$$

 $=\frac{45}{16}$

50. Answer: (D)

Let the lowest score of the player be 'x'

So, his highest score = 'x' + 162

ATQ:

 $(35 \times 42) - (x + x + 162) = 33 \times 38$

Or, 1470 - 2x - 162 = 1254

Or, 2x = 1470 - 162 - 1254

Or, 2x = 54

Or, x = 27

So, his lowest score = 27 run

Therefore, his highest score = 27 + 162 = 189 runs

General Awareness

51. Answer: (C)

> Mollem National Park is located in Sanguem taluk in Goa close to the border with Karnataka. This park also has several temples dating back to the Kadamba Dynasty.

52. Answer: (A)

The parathyroid gland secretes parathyroid hormone (PTH), a polypeptide, in response to low calcium levels detected in the blood. Parathyroid hormone is secreted by the parathyroid glands and is the most important regulator of blood calcium levels.

PTH is made by 4 tiny parathyroid glands in your neck. PTH circulates in your blood and is needed to control the level of calcium in your blood.

53. Answer: (B)

Raziyyat-Ud-Dunya Wa Ud-Din popularly known as Razia Sultana was a ruler of the Delhi Sultanate in the northern part of the Indian subcontinent. She was the first female Muslim ruler of the subcontinent and the only female Muslim ruler of Delhi.

· Razia Sultana ruled the court of Delhi from the end of 1236 to 1240.

Razia was born to the Delhi Sultan Shamsuddin Iltutmish, a Turkic slave (mamluk) of his predecessor Qutb al-Din Aibak.

· Razia's mother - Turkan Khatun was a daughter of Qutb al-Din Aibak and the chief wife of Iltutmish.

54. Answer: (A)

Indian Constitution came into existence on November 26, 1949. The Constituent Assembly of India drafted it, with the consideration of features included in the Constitutions of the other countries and also from the Government of India Act 1935.

The Constitution was adopted on November 26, 1949. It came into force on January 26, 1950.

Name of Countries	Borrowed Features of the Constitution
Britain	Parliamentary government
	Rule of Law

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Ĭ	Legislative procedure		
	Single citizenship		
	Cabinet system		
France	Concept of "Republic"		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ideals of Liberty, Equality, and Fraternity(contained in the		
	Preamble		
Ireland	Directive Principles of State Policy		
	Method of Election of the president		
	Members nomination to the Rajya Sabha by the President		
United States	Impeachment of the president		
of America	Functions of president and vice- president		
	Removal of Supreme Court and		
	High court judges		
	Fundamental Rights		

55. Answer: (B)

Money laundering is the process of illegally concealing the origin of money, obtained from illicit activities such as drug trafficking, corruption, embezzlement or gambling, by converting it into a legitimate source.

56. Answer: (A)

'Skyu' is a wholesome traditional soup-based dish of Ladakh. It is made with barley or wheat dough kneaded into thumb-sized flatten balls. It can be served along with Momos and is mostly enjoyed during the winters.

Hence, Option A is the correct answer.

57. Answer: (B)

Telangana shares boundaries with 4 States:

- · Chhattisgarh,
- · Maharashtra,
- · Karnataka and
- · Andhra Pradesh.

58. Answer: (B)

The goal of Jain life is to obtain spiritual freedom.

In Jainism the three jewels (also referred to as ratnatraya) are understood as samyagdarshana ("right faith"), samyagjnana ("right knowledge"), and samyakcharitra ("right conduct").

These three Jewels are more of a prescription or a road to kevala.

59. Answer: (B)

Stomata are small pores found on the surfaces of plant leaves, stems, and other organs that allow for gas exchange between the plant and its environment.

The main function of stomata is to regulate the intake of carbon dioxide (CO₂) for photosynthesis and the release of oxygen (O2) and water vapor (H₂O) that are produced during photosynthesis and respiration.

60. Answer: (B)

The term biological diversity was first time used by Raymond F. Dasmann in 1968 in his book "A Different kind of Country".

The contracted form of Biological Diversity is biodiversity which was coined by **W.G. Rosen** in 1985.

61. Answer: (B)

93rd Constitutional Amendment grants admission rights to those hailing from weaker sections of society into private education institutes.

93rd Amendment Act of 2005 has the Provision for the advancement of any socially and educationally backward classes of citizens. In order to give effect to this provision, the Centre enacted the Central Educational Institutions (Reservation in Admission) Act, 2006, providing a quota of 27% for candidates belonging to Other Backward Classes in all central higher educational institutions including the Indian Institute of Technology (IITs) and the Indian Institute of Management (IIMs). In April 2008, the Supreme Court upheld the validity of both, the Amendment Act and the OBC quota Act. But the Court directed the central government to exclude the 'creamy layer' among the OBCs while implementing the law.

62. Answer: (C)

Union Minister for Environment, Forest, and Climate Change **Bhupender Yadav** has launched a mobile application named **'Meri LiFE'** in New Delhi to activate youth action for climate change.

The app is inspired by the concept of LiFE, envisioned at COP 26, which emphasizes mindful and deliberate utilization instead of mindless and wasteful consumption of natural resources.

The users will be guided to participate in a series of LiFE related tasks under the following **5 themes**, namely- Save Energy, Save Water, Reduce Single Use Plastic, Adopt Sustainable Food Systems, and Adopt Healthy Lifestyle.

Mission LiFE:

The Prime Minister Narendra Modi launched 'Mission LiFE' on 20 October 2022 at Kevadia, Gujarat. The mission focuses on bringing about behaviour changes in individuals through simple and easy-to-do actions.

The Ministry of Environment, Forest and Climate Change is the nodal ministry for national-level coordination and implementation of Mission LiFE.

Answer: (A)

63.

Mughal Emperor **Balban** patronised the Persian artist called **Bihzad** who made some illustrations of the Mughal family tree. Bihzad introduced greater naturalism to Persian painting, particularly in the depiction of more individualised figures and the use of realistic gestures and expressions.

64. Answer: (D)

Third Five-Year Plan (1961-1966):

The Third Five-Year Plan focussed on agriculture & enhancement in the production of wheat. The states were entrusted with additional development responsibilities.

Panchayat elections were introduced to bring democracy to the grassroots level. The target growth rate was 5.6% and the actual growth rate only achieved 2.4%.

65. Answer: (A)

Propane is a three-carbon alkane gas (C_3H_8) . It is stored under pressure inside a tank as a colorless, odorless liquid. As pressure is released, the liquid propane vaporizes and turns into gas that is used in combustion.

Propane is **heavier than air**. It tends to sink and accumulate in low-lying areas, which makes propane leaks potentially hazardous.

66. Answer: (B)

Demand-pull inflation occurs when the total demand for goods and services exceeds the total supply, leading to rising prices.

Rising interest rates typically have a contractionary effect on the economy. When interest rates increase, borrowing becomes more expensive, leading to

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reduced consumer spending and investment. As a result, it is unlikely to cause demand-pull inflation.

Expansionary policies, such as increased government spending or lower taxes, boost aggregate demand. When aggregate demand exceeds supply, it can lead to demand-pull inflation.

When consumers have increased purchasing power, they buy more goods and services. This surge in demand can outstrip supply, resulting in inflation.

67. Answer: (B)

Hatti Habba, also known as Hori Habba, is a bull-taming rural sport held in the state of **Karnataka**. It takes place mainly in districts such as Shivamogga, Haveri, Uttara Kannada, and other regions in Karnataka after the Diwali festival.

During Hatti Habba, trained and decorated draught cattle and bulls are made to run through huge cheering crowds. The goal is to subdue the cattle and snatch away prizes such as copra, cash, and gift items tied to them. The winning bull, which doesn't lose the copra garland strapped around its neck and reaches the goal post without being touched by anyone, receives awards, including gold, copper water containers, and bikes.

68. Answer: (C)

Banawali is an archaeological site belonging to Indus Valley Civilization period in **Haryana**, India and is located about 120 km northeast of **Kalibangan** and 16 km from Fatehabad.

Banawali, which is earlier called Vanavali, is on the left banks of dried-up **Sarasvati River**. Compared to Kalibangan, which was a town established in the lower middle valley of dried up Sarasvathi River, Banawali was built over the upper middle valley of Sarasvathi River.

69. Answer: (D)

Damodar River is known as a biological desert on account of its pollutants.

Damodar River flows across the Indian states of Jharkhand and West Bengal. It rises in the Palamau hills of Chota Nagpur at an elevation of about 609.75 m. It is considered a bio-desert river.

70. Answer: (C)

The Gommateshwara statue is dedicated to the Jain figure Bahubali. It was built around 983 A.D. and is one of the largest free-standing statues in the world. Shravanabelagola is a city located in the state of Karnataka.

The **statue** of **Gommateshvara Bahubali** at Shravanabelagola is one of the most important tirthas in Jainism, but the last tirthankara of Jainism was Mahavir Swami.

71. Answer: (A)

The Reserve Bank of India (RBI) had changed its accounting year from July-June to **April-March**. While the RBI accounts will now be aligned with the central government accounts.

72. Answer: (C)

Konkani writer **Damodar Mauzo** has been conferred with the **57**th **Jnanpith Award**, India's highest literary honour.

- · He is a native of Goa state.
- · He is the second Goan to receive the award, after Ravindra Kelekar in 2008.
- · He was awarded Sahitya Akademi Award in 1983 for his novel 'Karmelin'.

 \cdot He is notable for his novels, such as Karmelin, and Tsunami Simon, and short stories, such as Teresa's Man and Other Stories from Goa.

Jnanpith Award:

It is the oldest and the highest Indian literary award presented annually by the Bharatiya Jnanpith to an author for their "outstanding contribution towards literature". It was instituted in 1961. The award is bestowed only on Indian writers writing in Indian languages included in the Eighth Schedule to the Constitution of India and English, with no posthumous conferral.

The first recipient of the award was the Malayalam writer G. Sankara Kurup (1965).

Bengali novelist Ashapoorna Devi became the first woman to win the award in 1976.

73. Answer: (D)

Booker Prize winner Arundhati Roy has been awarded the 2024 PEN Pinter Literary Prize for her courageous writing. This honor comes shortly after the Lieutenant Governor of Delhi sanctioned her prosecution under the Unlawful Activities (Prevention) Act. The award ceremony will be held in October in London. Previous winners include Salman Rushdie and Margaret Atwood. The PEN Pinter Award, established in 2009, recognizes exceptional English-language writers from the UK, Ireland, or the Commonwealth.

74. Answer: (C)

The first IDF Regional Dairy Conference Asia Pacific-2024 held at Kochi from June 26-28, 2024, at the Grand Hyatt, Bolgatty. The conference themed "Farmer Centric Innovations in Dairying" is organized by the Indian National Committee of the International Dairy Federation. Key figures include the Secretary of Animal Husbandry & Dairying and the National Dairy Development Board. Leaders and experts will address global dairy sector issues. The event features 22 exhibition pavilions and 17 startups showcasing dairy farms, processing equipment, and related technologies.

75. Answer: (A)

Prime Minister Narendra Modi has launched the 'Pradhan Mantri Suryodaya Yojana' (PSY) under which one crore households will get rooftop solar across the nation.

The scheme aims to equip one crore **poor to middle-class households** with rooftop solar panels in a bit to provide electricity from solar energy.

PSY will reduce their electricity bills and offer additional income for surplus electricity generation.

PSY will also support the Grid Connected Solar Rooftop Programme (2014).

The national campaign will also be started to mobilize residential segment consumers to adopt rooftop solar in large numbers.

English Language

76. Answer: (C)

The act of giving one's authority or work to another person is called DELEGATING. Thus, C is the right answer.

Relegate - assign an inferior rank or position to. Denigrate - strongly criticise. Amalgamate - combine or unite to form one organisation or structure.

77. Answer: (A)

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The correct term for a group of wolves is a "pack." Therefore, the sentence should read: "As lions are to pride, so are wolves to pack." Thus, A is the right answer.

HERD is used to cows or elephants. SCHOOL is used for fish. FLOCK is used to sheep.

78. Answer: (A)

We need a plural verb to agree with the plural subject PARENTS. ENCOURAGE (promote) will fit here contextually as the sentence talks about how some parents actively promote their children's participation in street clashes. Thus, A is the right answer.

Despise - strongly dislike. Summon - send for. Retain - keep intact.

79. Answer: (A)

"Accomodate" is incorrectly spelled. It should be replaced with "Accommodate", which means to provide lodging or space for someone, or to fit in with the wishes or needs of. Thus, A is the right answer.

Bureaucracy - a system of government in which most of the important decisions are made by state officials rather than by elected representatives.

Embarrassment - a feeling of self-consciousness, shame, or awkwardness.

Occasion - a particular event, or the time at which it takes place.

80. Answer: (A)

In A, replace the second form verb GREW with GROWN as the present perfect tense construction HAS + VERB will take the past participle form of the verb. Thus, A is the right answer.

81. Answer: (D)

The error is in segment D. The present perfect tense construction HAS + VERB will take the past participle form of the verb EATEN instead of the second form ATE. Thus, D is the right answer.

82. Answer: (A)

A person who eats too much is called a GLUTTON. Thus, A is the right answer.

Altruist - an unselfish person who cares for the welfare of others. Novice - an inexperienced person. Eccentric - a person who has strange habits.

83. Answer: (B)

QSPR is the correct sequence. Q introduces the topic - achieving work-life balance. S follows by explaining what achieving work-life balance entails. P provides additional information on how people struggle to find the right balance and R concludes by telling us why. Thus, B is the right answer.

84. Answer: (B)

FALL BACK ON (depend on) will fit here contextually as the sentence tells us how he had to depend on savings to support his family after losing his job. Thus, B is the right answer.

Fall out with - have an argument with. Fall off from - to become detached and drop to the ground. Fall in with - meet someone by chance and become involved with them.

85. Answer: (B)

COME FORTH (to step forward) will fit here contextually as the sentence tells us how the judge asked for the witness to step forward for questioning. Thus, B is the right answer.

Come back - return. Come across - find by chance. Come after - chase.

86. Answer: (B)

We need an adverb that can modify the verb USED. OFTEN (frequently) will fit here contextually as the sentence tells us how animal byproducts are often used in pet food. Thus, B is the right answer.

Quick - fast. Politely - well-mannered. Meanly - cruelly.

87. Answer: (B)

We need an adjective to modify the noun COST. The sentence tells us how animal byproducts are used in pet food as they cost less. LOW (decreased) will fit here contextually. Thus, B is the right answer.

Easy - simple. Silly - lacking sense. Savage - fierce.

88. Answer: (C)

We need a noun to be modified by the adjective ENVIRONMENTAL. IMPACT (consequence) will fit here contextually as the sentence talks about how environmental consequences of using animal byproducts in pet food. Thus, C is the right answer. Deceit - act of manipulating someone. Yield - output. Quarrel - argument; fight.

89. Answer: (A)

We need a past participle verb to fit in the IS + VERB passive voice construction. LIMITED (narrow) will fit here as the sentence tells us how published research on the environmental impact of pet food is less. Thus, A is the right answer.

Ceased - stopped. Prolonged - extended. Assisted - aided; helped.

90. Answer: (B)

We need a noun to be modified by the adjective QUESTIONABLE. The sentence talks about how the findings of the studies are not reliable. RESULTS (findings) will fit here contextually. Thus, B is the right answer.

Flaws - weaknesses. Brisk (adj.) - quick. Remarks - comments.

91. Answer: (B)

Option B is the right answer.

The sentence is in direct speech and in simple future tense. To convert this sentence to the indirect speech, follow these rules:

- I. Remove the comma and the inverted commas.
- II. The subject (THE DUKE) will begin the sentence followed by SAID.
- III. Put THAT between the reporting and reported speeches.

IV. The simple present tense verb EXPECT will change to the past tense EXPECTED.

V. HERE changes to THERE.

VI. The first person pronoun I will change to the third person pronoun HE.

92. Answer: (C)

The sentence is in direct speech and in the indicative mood. To convert this sentence to indirect speech, follow these rules:

- I. Remove the comma and the inverted commas.
- II. Begin the indirect speech sentence with the reporting speech clause SHE SAID EXCITEDLY.
- III. Put THAT between the reporting and reported speeches.
- IV. Change the modal verb CAN'T to COULDN'T to reflect past tense.
- V. The first person pronoun I will change to the third person SHE.

Thus, C is the right answer.



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93. Answer: (A)

(a) is the correct answer. The sentence is in the passive voice. The rules to change the passive voice to active voice are as follows:

I. The subject clause will become the object clause. Here, the subject THE OLD BUILDING will become the object, and the object THE CONSTRUCTION CREW will become the subject and begin the sentence.

II. Replace WAS DEMOLISHED with DEMOLISHED to agree with the past tense of the original sentence. III. Remove the conjunction BY before THE CONSTRUCTION CREW.

94. Answer: (D)

RIGID means unable to be changed or adapted. FLEXIBLE (able to be changed according to the situation) has the opposite meaning of the given word. Thus, D is the right answer.

Inevitable - unavoidable.

Precise - accurate.

Complacent - self-satisfied.

95. Answer: (C)

CUTTING-EDGE means at the forefront of technological development; innovative or pioneering. ADVANCED is a synonym, and it means far on or ahead in development or progress. Hence, C is the correct answer.

Obsolete - no longer produced or used; out of date.

Ancient - belonging to the very distant past.

Humble - having or showing a modest or low estimate of one's own importance.

96. Answer: (C)

The phrase "Hit the nail on the head" means to make a correct assessment or guess.

BALLA

Example: When John said the problem was due to faulty wiring, he really hit the nail on the head. Thus, C is the correct answer.

97. Answer: (A)

The idiom ANKLE BITER means a small child. Thus, A is the right answer.

None of the other options correctly conveys the meaning of the idiom.

98. Answer: (C)

The word PROFICIENT means skilled or good at something. The word ADEPT means skilled or expert and is the most appropriate synonym of the given word. Thus, C is the right answer.

Frigid - freezing cold. Upset - unhappy; sad. Dense thick.

99. Answer: (A)

TUMULTUOUS (adjective) means making a loud, confused noise; uproarious. Example: The tumultuous crowd surged forward, shouting and pushing. TRANQUIL (calm) is its antonym. Thus, A is the right answer

Futile - pointless. Disorderly - untidy. Fragile - weak.

100. Answer: (A)

To convert the sentence from active to passive voice: I. The subject clause SHE becomes the object clause HER, and the object clause THE WALLS becomes the subject clause.

II. The verb "paints" changes to "are painted" to maintain the present tense.

III. The subject "her" is moved after "by" to indicate the doer of the action in passive voice.

Thus, A is correct.





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