

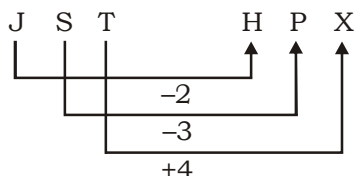
SSC CGL 2024 | SPECIAL MOCK TEST – 19 : SOLUTIONS

A-GENERAL INTELLIGENCE & REASONING

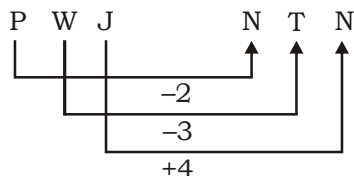
1. (c) As, $(13 - 2)^3 = 1331$
Similarly, $(17 - 2)^3 = 3375$

2. (a)
7, 16, 41, 94, 251, **568**
+9 +25 +53 +157 +317
 $9 \times 3 - 2$ $25 \times 2 + 3$ $53 \times 3 - 2$ $157 \times 2 + 3$

3. (a) As,



Similarly,



4. (b) $16 - 18 \times 216 \div 432 + 40 = 20$
Interchanging \times and \div ,
 $16 - 18 \div 216 \times 432 + 40 = 20$

$$16 - \frac{18}{216} \times 432 + 40 = 20$$

$$16 - 36 + 40 = 20$$

$$56 - 36 = 20$$

$$20 = 20$$

5. (c) (45 D 9) B 5 A 8 B (7 A 3 C 6)
C (28 D (4 D 4))

Putting the signs,

$$(45 \div 9) \times 5 + 8 \times (7 + 3 - 6) - (28 \div (4 \div 4))$$

$$= 5 \times 5 + 8 \times 4 - 28$$

$$= 25 + 32 - 28$$

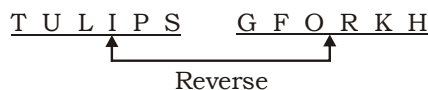
$$= 57 - 28 = 29$$

6. (a)

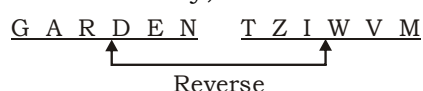
7. (a) 1. Serenity, 4. Sericulture, 5. Serotonin, 2. Serpent, 3. Serviceable

8. (d)

9. (d) As,

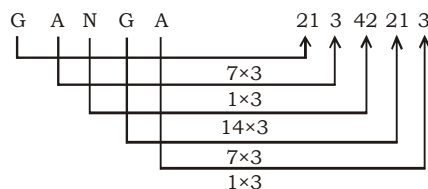


Similarly,

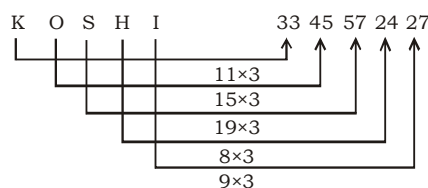


10. (d)

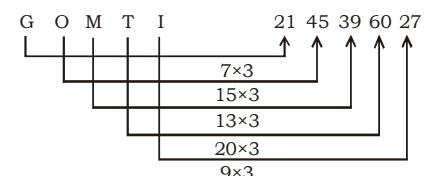
11. (b) As,



And,



Similarly,



Hence, J is the father of R.

17. (b)

18. (3) $\$ < @ - \&$
 $\% - \#$

19. (c)

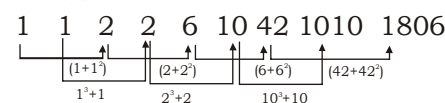
are you ready $\rightarrow 5$ (4) (1)

we are going $\rightarrow 2$ 6 (1)

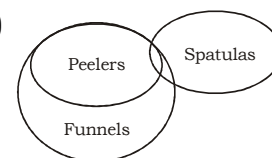
she is ready \rightarrow (4) 9 8

Hence, 'you' is coded as 5.

20. (c)



21. (b)



I. False II. True

Hence, only conclusion II follows.

22. (b)



23. (b) E Reverse V +5 A +5 F
C Reverse X +4 B +6 H
K Reverse P +5 U +5 Z
T Reverse G +5 L +5 Q

24. (c) $C \xrightarrow{-3} Z \xrightarrow{-3} W \xrightarrow{-3} T \xrightarrow{-3} Q$

$$A \xrightarrow{+4} E \xrightarrow{+4} I \xrightarrow{+4} M \xrightarrow{+4} Q$$

$$L \xrightarrow{-5} G \xrightarrow{-5} B \xrightarrow{-5} W \xrightarrow{-5} R$$

$$I \xrightarrow{+6} O \xrightarrow{+6} U \xrightarrow{+6} A \xrightarrow{+6} G$$

25. (a) D G E F



12. (c)

13. (c) From 1st and 3rd dice we have,

$$2 < \begin{matrix} 3 - 1 \\ 5 - 6 \end{matrix}$$

14. (c) In the first column,

$$13 \times (16 \div 4) = 52$$

In the second column,

$$15 \times (24 \div 4) = 90$$

In the first column,

$$23 \times (36 \div 4) = 207$$

15. (d) Let two numbers be x and y.
ATQ,

$$x + y = 6 \quad \dots\dots(i)$$

$$x - y = 5 \quad \dots\dots(ii)$$

$$2x = 11$$

$$x = \frac{11}{2}$$

Putting the value of x in equation (i),

$$\frac{11}{2} + y = 6$$

$$y = 6 - \frac{11}{2} = \frac{1}{2}$$

$$\text{Required ratio} = \frac{11}{2} : \frac{1}{2} = 11 : 1$$

16. (c)

26. (c)
27. (d) It was founded by Mahatma Gandhi in the year 1932. It was established in Delhi. It is also known as All India Anti-Untouchability League. The main objective of the association was to combat untouchability./इसकी स्थापना महात्मा गांधी ने वर्ष 1932 में की थी। इसकी स्थापना दिल्ली में हुई थी। इसे अखिल भारतीय अस्पृश्यता विरोधी लीग के नाम से भी जाना जाता है। संघ का मुख्य उद्देश्य अस्पृश्यता का मुकाबला करना था।
28. (b) The term was coined by Professor Rajkrishna in the year 1978. During this period the average GDP growth was around 3.5% while the per capita income grew at a meagre 1.3%./यह शब्द प्रोफेसर राजकृष्ण द्वारा वर्ष 1978 में गढ़ा गया था। इस अवधि के दौरान सकल घरेलू उत्पाद की औसत वृद्धि लगभग 3.5% थी जबकि प्रतिव्यक्ति आय में 1.3% की मामूली वृद्धि हुई।
29. (c) Aurangzeb did not like music, so in 1668 he banned all forms of music or dance in his kingdom. Aurangzeb believed that music and dance were against the Islamic teachings he followed./औरंगजेब को संगीत पसंद नहीं था, इसलिए 1668 में उसने अपने राज्य में सभी प्रकार के संगीत या नृत्य पर प्रतिबंध लगा दिया। औरंगजेब का मानना था कि संगीत और नृत्य इस्लामी शिक्षा के खिलाफ है, जिसका उसने पालन किया।
30. (a)
31. (c) For a wave, the wavelength divided by the time period equals the wave velocity./एक तरंग के लिए, तरंगदैर्घ्य को समय अवधि से विभाजित करके तरंग वेग के बराबर होता है।
32. (a) It was established in 1957 as Asia's highest honour and premier award. This award is given to individuals who display exceptional spirit of service to the people of Asia, regardless of their background./इसे वर्ष 1957 में एशिया के सर्वोच्च सम्मान तथा प्रमुख पुरस्कार के रूप में स्थापित किया गया। यह पुरस्कार उन व्यक्तियों को प्रदान किया जाता है जो अपनी पृष्ठभूमि की परवाह किये बिना एशिया के लोगों की सेवा में असाधारण भावना प्रदर्शित करते हैं।
33. (b)
34. (d)
35. (a) Black gram crop is grown to increase the fertility of the land. Sunai, Dhaicha, Lobia, Moong, Cluster etc. crops are suitable for this method./भूमि की उर्वरता बढ़ाने के लिए उड़द की फसल उगायी जाती है। सनई, दूँचा, लोबिया, मूंग, ग्वार आदि फसलें इस विधि के लिए उपयुक्त होती हैं।
36. (a) If we add impurities to a solution, the boiling point of the solution increases. This happens because the presence of impurities reduces the number of water molecules available to evaporate during boiling./यदि हम किसी घोल में अशुद्धियाँ मिलाते हैं तो घोल का क्वथनांक बढ़ जाता है। ऐसा इसलिए होता है क्योंकि अशुद्धियों के उपस्थिति से उबलने के दौरान वाष्पीकृत होने के लिए उपलब्ध पानी के अणुओं की संख्या कम हो जाती है।
37. (c)
38. (d) If the budget is not passed by the Lok Sabha, the Prime Minister and his cabinet will have to resign. Similarly, the interim budget will also be presented in both the houses by the Finance Minister on February 1, put to vote and then sent for the President's approval./यदि बजट लोकसभा द्वारा पारित नहीं होता है, तो प्रधानमंत्री और उनके मंत्रिमंडल को इस्तीफा देना होगा। इसी तरह, अंतरिम बजट भी 1 फरवरी को वित्त मंत्री द्वारा दोनों सदनों में पेश किया जाएगा, मतदान के लिए रखा जाएगा और फिर राष्ट्रपति की मंजूरी के लिए भेजा जाएगा।
39. (c)
40. (b) It is headed by the CJI and comprises four other senior-most judges of the court. The collegium system was adopted in 1993./इसकी अध्यक्षता CJI करते हैं और इसमें अदालत के चार अन्य वरिष्ठतम न्यायाधीश शामिल होते हैं। कोलेजियम व्यवस्था सन 1993 में अपनाया गया था।
41. (a)
42. (a)
43. (d)
44. (c) Guru Nanak is the founder of Sikhism. Guru Nanak was born on 15 April 1469 in Rai Bhoi Di Talwandi (present Nankana Sahib) in Pakistan./गुरुनानक सिख धर्म के संस्थापक हैं। गुरु नानक का जन्म 15 अप्रैल 1469 को पाकिस्तान के राई भोई दी तलवंडी (वर्तमान ननकाना साहिब) में हुआ था।
45. (d) Mahendragiri is the highest peak of the Eastern Ghats. Kanchenjunga is the third highest mountain in the world, located on the border of Sikkim and Nepal. Anaimudi is the second highest peak in South India after Doddabetta. महेंद्रगिरि पूर्वी घाट की सबसे ऊँची चोटी है।
- कंचनजंगा विश्व का तीसरा सबसे ऊँचा पहाड़ है, जो सिक्किम और नेपाल की सीमा पर स्थित है।
 - अनाइमुडी दक्षिण भारत में दोड़ावेट्टा के बाद दूसरी सबसे ऊँची चोटी है।
46. (c)
47. (a)
48. (b)
49. (d) Abdul Karim Khan and Abdul Wahid Khan were the founders of the Kirana Gharana of Indian classical music./अब्दुल करीम खान और अब्दुल वाहिद खान भारतीय शास्त्रीय संगीत के किराना घराने के संस्थापक थे।
50. (b)

51. (a) $55 = 5 \times 11$

Divisibility rule of 5 : If the last digit of a number is either 0 or 5, the number is divisible by 5.

Divisibility rule of 11 : The difference of the sum of alternate digits of a number is either 0 or divisible by 11.
 $185625 = (1 + 5 + 2) - (8 + 6 + 5)$
 $= (8) - (19)$
 $= -11$ which is divisible by 11.

52. (b) L.C.M = 1800

Let the numbers be $3x$, $4x$ and $5x$
 L.C.M ($3x$, $4x$, $5x$) = $60x$
 ATQ, $60x = 1800 \Rightarrow x = 30$
 \therefore Second number = $4x = 120$

53. (b) As the sum doubles itself,
 $S.I = 2P - P = P$

$$\text{ATQ, } S.I = \frac{P \times R \times T}{100}$$

$$\Rightarrow P = \frac{P \times 8 \times T}{100}$$

$$\Rightarrow T = 12.5 \text{ years.}$$

54. (c) $S.I = \frac{P \times R \times T}{100} = 0.16P$

Compound interest

$$= P \left(1 + \frac{8}{100} \right)^2 - P$$

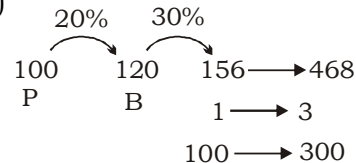
$$= 1.1664 P - P = 0.1664 P$$

ATQ,

$$0.1664 P - 0.16 P = 16.80$$

$$\Rightarrow P = \frac{16.80}{0.0064} = 2625$$

55. (a)



56. (b) MP = ₹ 2200

$$SP = 2200 \times \frac{92}{100} = ₹ 2024$$

57. (d) $P : Q = 4_{\times 10} : 5_{\times 10}$

Let,

$$10\% \left(\frac{40 : 50}{44 : 60} \right) 20\%$$

$$16 - 480$$

$$10 - 30 \times 10 = 300$$

$$58. (b) \Rightarrow x + 3(y + x - 2) - (x + y)$$

$$\Rightarrow x + 3y + 3x - 6 - x - y$$

$$\Rightarrow 3x + 2y - 6$$

$$59. (a) k + \frac{1}{k} = 3$$

Cubing both sides -

$$k^3 + \frac{1}{k^3} = 27 - 3 \times 3 = 18$$

$$60. (d) a^2 + b^2 + c^2 - ab - bc - ca$$

$$= \frac{1}{2} [(a-b)^2 + (b-c)^2 + (c-a)^2]$$

$$= \frac{1}{2} [(101-102)^2 + (102-103)^2 + (103-101)^2]$$

$$= \frac{1}{2} [1 + 1 + 2^2] = \frac{1}{2} \times 6 = 3$$

$$61. (a) \frac{2x}{5} + \frac{3x}{10} - \frac{3x}{5} = 479$$

$$\Rightarrow \frac{4x}{10} + \frac{3x}{10} - \frac{6x}{10} = 479$$

$$\Rightarrow \frac{7x}{10} - \frac{6x}{10} = 479$$

$$\Rightarrow x = 4790$$

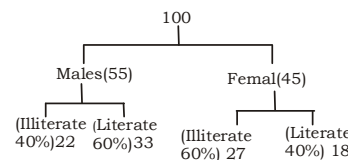
62. (c) By the help of options,
 let the number be 9.
 According to the question

$$\Rightarrow 9 + \left(9 \times \frac{1}{3} \right) = 12$$

63. (c) Pass marks = $390 + 65$
 $= 455$
 $35\% \equiv 455$

$$\Rightarrow 100\% \equiv \frac{455}{35} \times 100 = 1300$$

64. (a) Total voters are 100



Required percentage

$$= \left[\frac{(33 - 27)}{27} \right] \times 100 = 22 \frac{2}{9} \%$$

65. (b) Speed = $\frac{\text{Distance}}{\text{time}}$

$$\text{ATQ, } \frac{D}{30} - \frac{D}{60} = 1$$

$$\Rightarrow \frac{2D - D}{60} = 1$$

$$\Rightarrow D = 60 \text{ km}$$

66. (c) $\tan A = \frac{2.4}{0.7}$

According to the pythagoras theorem,

$$P^2 + B^2 = H^2$$

$$(2.4)^2 + (0.7)^2 = H^2$$

$$H^2 = 6.25$$

$$H = 2.5$$

$$\text{Now, } 50 \cos A + 24 \cot A$$

$$\Rightarrow \left[50 \times \left(\frac{0.7}{2.5} \right) + 24 \times \left(\frac{0.7}{2.4} \right) \right] = 21$$

67. (a) $\frac{\cos^4 \theta - \sin^4 \theta}{\sin^2 \theta}$

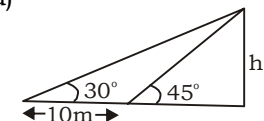
$$\Rightarrow \frac{(\cos^2 \theta - \sin^2 \theta)(\cos^2 \theta + \sin^2 \theta)}{\sin^2 \theta}$$

$$\Rightarrow \frac{(\cos^2 \theta - \sin^2 \theta)(1)}{\sin^2 \theta}$$

$$\Rightarrow \frac{\cos^2 \theta}{\sin^2 \theta} - 1$$

$$\Rightarrow \cot^2 \theta - 1$$

68. (d)



In the above triangle, the angles are 90° , 60° , 30° .

The length of the shadow is

$$\sqrt{3} \times h$$

$$\text{ATQ, } h \sqrt{3} = h + 10$$

$$\Rightarrow h = \frac{10}{\sqrt{3} - 1} = 5(\sqrt{3} + 1)$$

69. (c) According to the question,

$$\angle ROS + \angle RPS = 180^\circ$$

$$\angle ROS + 25^\circ = 180^\circ$$

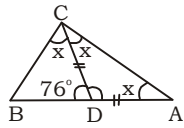
$$\angle ROS = 180^\circ - 25^\circ = 155^\circ$$

70. (a) From the properties of the circle,

$$AL \times LB = CL \times LD$$

$$8 \times 3 = x \times 6 \Rightarrow x = 4 \text{ cm}$$

71. (b)



According to the question,

$$2x = 76^\circ$$

$$x = 38^\circ$$

Now, in triangle CBD,

$$\angle BCD + \angle CDB + \angle CBD = 180^\circ$$

$$\angle BCD + 76^\circ + \angle CBD = 180^\circ$$

$$\angle CBD = 180^\circ - 76^\circ - 38^\circ$$

$$\angle CBD = 66^\circ$$

72. (a) Sum of interior angles

$$= (n - 2) \times 180^\circ$$

$$\text{ATQ, } 2700 = (n - 2) \times 180$$

$$\Rightarrow (n - 2) = 15 \Rightarrow n = 17$$

Number of diagonals

$$= \frac{n(n-3)}{2} = \frac{17(17-3)}{2} = \frac{17 \times 14}{2}$$

$$= 119$$

73. (d) Kite shape = Shape of Rhombus

Area of Rhombus

$$= \frac{1}{2} (d_1 \times d_2) = \frac{1}{2} \times 22 \times 6$$

$$= 66 \text{ cm}^2$$

74. (b) Circumference of the base of the cylinder = 28π

$$\text{ATQ, } 2\pi r = 28\pi$$

$$\Rightarrow r = 14 \text{ cm}$$

$$\text{C.S.A of cylinder} = 2\pi rh$$

$$= 2 \times 14 \times 17 \times \pi$$

$$= 476\pi \text{ cm}^2$$

$$75. (c) \begin{array}{l} \frac{2}{1} A + \frac{1}{1} B \text{ --- } 20 \\ \frac{1}{1} B + \frac{1}{1} C \text{ --- } 30 \end{array} \begin{array}{l} 3 \\ 2 \end{array} \begin{array}{l} 60 \\ 60 \end{array}$$

B's efficiency = 1 unit/day

Total work is completed in 60 days.

D-ENGLISH COMPREHENSION

76. (b) **Their** (उनका) is a possessive pronoun is used to show ownership. The sentence refers to something belonging to them.

77. (a) **Unkempt** (बिखरा हुआ) means messy and untidy, especially referring to a person's appearance.

up and doing (सक्रिय या काम में लगे हुए) means actively engaged.

proud and useless (घमंडी और बेकार) doesn't relate to being untidy.

violent and rigorous (हिंसक और कठोर) refers to aggression.

78. (c) **Contagion** (संक्रमण) means the transmission of a disease through contact.

Other options:

Fatal (जानलेवा) means causing death.

Infected (संक्रमित) describes someone who has already caught a disease.

Malleable (लचीला) means easily shaped or influenced.

79. (c) **Quintessence** (सबसे अच्छा उदाहरण) means the perfect example or embodiment of something.

Other options:

insignificant appearance (महत्वहीन दिखावट) is the opposite of what "quintessence" means.

apparent display (साफ दिखना) implies something visible but not necessarily perfect.

volatile aspect (अस्थिर चीज) means an unpredictable or unstable characteristic.

80. (d) **Put forth** (सामने रखना) means to express or propose something. While, **conceal** (रोकना), means to hide or keep something secret.

Other options:

Stop (रोकना) means to prevent, opposite of "put forth."

Against (विरुद्ध) is unrelated to the meaning.

Apply (लागू करना) means to put something into use

81. (d) **Have a bee in your bonnet** (किसी बात को लेकर बहुत ज्यादा परेशान या जुनूनी होना) means being obsessed with an idea or constantly worrying about something.

82. (d) The phrase "**put on**" should be "**put off**."

Put on (पहनना) is incorrect here. The correct term should be **put off** (टालना), which means to postpone.

83. (c) The correct spelling is **quarantine** (पृथक करना), which refers to isolating someone to prevent the spread of disease.

84. (a) **Judas kiss** (धोखा देने वाली दोस्ती या विश्वासघात) refers to an act that appears friendly but is actually deceitful.

85. (d) **Palpable** (स्पष्ट रूप से महसूस होने वाला) means something that can be easily perceived or detected.

Other options:

Indistinguishable (अलग न किया जा सकने वाला) means not able to be identified separately.

Imperceptible (अगम्य) means not easily noticed.

Insensible (बेहोश या असंवेदनशील) means without awareness or feeling.

86. (a) As the sentence uses the present tense ("can perform"), it should be **"he is old now."**

87. (d) The correct sentence should be: "The Prime Minister **addressed** (संबोधित करना) the nation asking for the **address** (पता) of the traitors."

88. (d) The correct phrase should be "on the basis of" instead of "on the section".

"on the basis of" means that the selection was made according to a certain criterion or standard.

89. (a) **Verbatim** (ज्यों का त्यों) means using exactly the same words as originally stated.

Other options:

Duplication (नकल करना) means copying.

Repetition (दोहराव) means saying something again.

Recurrence (पुनरावृत्ति) means something happening repeatedly.

90. (d) Don't drop the catch.

"An imperative sentence does not normally have a subject. It is used to express a command or request.

"Active Voice Structure: Subject (implied "you") + should/should not + verb (V1)" In instructional sentences, the subject is often understood as "you," and we give direct commands using the imperative mood.

91. (c) **Active Voice Structure:**

Why + do/does + Subject + base verb (V₁) + Object?

• Why + do + you (subject) + spend (V₁) + so much money (object)?

Passive Voice Structure:

Why + is/are + Object + Past Participle (V₃) + by + Subject?

• Why + is + so much money (object) + spent (V₃) + by you (subject)?

92. (a) The correct spelling is **Aesthetic** (सौंदर्य से संबंधित).

93. (a) **Vicinity** (आसपास का क्षेत्र) means a nearby area. While **Remote** (दूर का), means far away.

Other options:

Natural (स्वाभाविक) is unrelated.

Adjacent (सटा हुआ) means next to.

Proximity (निकटता) means closeness

94. (a) **Roy came to the city last week.**

The correct structure for past events uses the simple past tense (v₂) .

Other options:

Roy has come to the city last week : "has come" should not be used with a specific time like "last week."

Roy come to the city last week : "come" should be "came."

Roy had come to the city last week : "had come" is used for past perfect.

95. (d) **"anything with chemicals"** means **any food item that contains chemicals**, maintains the negative construction properly:

Children should not be given (नहीं देना चाहिए) any food that contains chemicals.

ANSWER KEY

1. (c)	21. (b)	41. (a)	61. (a)	81. (d)
2. (a)	22. (b)	42. (a)	62. (c)	82. (d)
3. (a)	23. (b)	43. (d)	63. (c)	83. (c)
4. (b)	24. (c)	44. (c)	64. (a)	84. (a)
5. (c)	25. (a)	45. (d)	65. (b)	85. (d)
6. (a)	26. (c)	46. (c)	66. (c)	86. (a)
7. (a)	27. (d)	47. (a)	67. (a)	87. (d)
8. (d)	28. (b)	48. (b)	68. (d)	88. (d)
9. (d)	29. (c)	49. (d)	69. (c)	89. (a)
10. (d)	30. (a)	50. (b)	70. (a)	90. (d)
11. (b)	31. (c)	51. (a)	71. (b)	91. (c)
12. (c)	32. (a)	52. (b)	72. (a)	92. (a)
13. (c)	33. (b)	53. (b)	73. (d)	93. (a)
14. (c)	34. (d)	54. (c)	74. (b)	94. (a)
15. (d)	35. (a)	55. (a)	75. (c)	95. (d)
16. (c)	36. (a)	56. (b)	76. (b)	96. (c)
17. (b)	37. (c)	57. (b)	77. (a)	97. (b)
18. (c)	38. (d)	58. (b)	78. (c)	98. (b)
19. (c)	39. (c)	59. (a)	79. (c)	99. (d)
20. (c)	40. (b)	60. (d)	80. (d)	100. (b)