



# All India Civil Services Coaching Centre

(Under the aegis of Government of Tamil Nadu)

## Answer Key Explanation

### Test 6 – CSAT Paper II

Maximum Questions: 100

Maximum Marks: 200

1. **Ans. B**

**Exp:** The first sentence of the passage contrasts no first use with Pakistan and US policy, by virtue of this contrast it can be inferred only that Pakistan does not have a no first use policy, hence B is correct. If B is correct A and C are incorrect. D is incorrect because not all nuclear matters in Pakistan need to be driven by necessity, according to the information given in the passage.

2. **Ans. C**

**Exp:** Statement 1 is correct, because piety relates to the term pious mentioned in the statement 3 is correct, because non-reciprocity relates to the context in the passage where it is argued that no first use does not cover other NWS. Statements 2 and 4 are incorrect, because they can't be related to any term in the passage.

3. **Ans. D**

4. **Ans. B**

**Exp:** The passage states that The British Government in the 1940s bore no resemblance in absolutism with its form in the 18th century, the word absolutism can be related to tyranny; hence B is correct. A, C and D all are incorrect due to their invalidity with the argument in the passage.

5. **Ans. D**

**Exp:** A clear reading of the passage elucidates D as the correct answer.

6. **Ans. D**

**Exp:** The meaning of the term 'nudge' that emerges out of the passage would imply all

the options mentioned in the question as a form of 'nudge'; hence D is correct.

7. **Ans. C**

**Exp:** The first sentence of the passage mentions that nudges fully preserve freedom of choice and therefore cannot be coercive or obligatory, hence A and B are incorrect. It appears from the passage that a nudge is not using the tempting means to get to the desired end, so D is incorrect. We can best associate nudge with persuasion, from the given passage, hence C is correct.

8. **Ans. C**

**Exp:** Penal cannot be correct because it implies obedience and obligation under the fear of sanction by law, which cannot be the case with a nudge. Moral implies a distinction between good and bad; the examples given the passage do not correspond with such a category. There is no term of example which implies a constitutional application of nudge, things like a warning on the cigarette boxes and enrollment in pension plan suggest nudge to be most appropriately categorized under 'Social'; hence C is the correct answer.

9. **Ans. B**

**Exp:** Since each question can be answered in 4 ways. So, the total number of ways of answering 10 questions  
 $= 4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4$   
 $= 4^{10}$

10. **Ans. C**

**Exp:** Let the number of students in the three classes be  $2x$ ,  $3x$  and  $5x$

Now, according to the question  $2x+40 :$

$$3x+40 : 5x+40 = 4:5:7$$

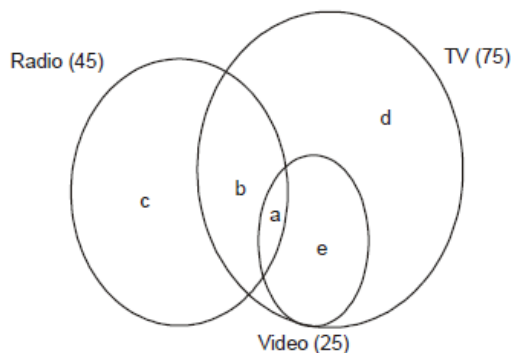
$$\frac{2x+40}{3x+40} = \frac{4}{5}$$

$$x = 20$$

$$\begin{aligned} \therefore \text{Total number of students} &= 2x+3x+5x = 10x \\ &= 10 \times 20 = 200 \end{aligned}$$

11. **Ans. C**

**Exp:**



**Sol:** Let R: Radio, T:TV, V:Video

$$c = 25 \Rightarrow a + b = (R \cap T) = 45 - 25 = 20$$

$$a = (R \cap T \cap V) = 10 \quad b = 10;$$

$$e = 25 - a = 15$$

$$\text{Only TV} = d = 75 - a - b - e = 40$$

12. **Ans. A**

**Exp:** From given options F is the only possibility.

13. **Ans. D**

**Exp:** If we look at the options D & G can sit together, C & F can sit together, B & D can sit together and E & A is the only option which is not possible.

14. **Ans. C**

**Exp:** E & G is the only possibility.

15. **Ans. B**

$$\begin{aligned} \text{Exp: We get for } k > 5, & 2.4 + 4 \times 2 + 1.2(k - 5) \\ &= 10.4 + 1.2(k - 5) \end{aligned}$$

16. **Ans. B**

17. **Ans. A**

18. **Ans. D**

19. **Ans. B**

**Exp:** The concept of the whole paragraph is based on music itself.

20. **Ans. D**

**Exp:** Question of application. And this was a basic ritual in almost every civilization.

21. **Ans. C**

22. **Ans. C**

23. **Ans. A**

**Exp:** Obsolete means no longer in existence and too old to be used in original form.

24. **Ans. D**

25. **Ans. D**

26. **Ans. C**

27. **Ans. B**

**Exp:** Passage mentions that, a parliamentary committee was formed to formulate a new Patent Act to make pharmaceuticals affordable to Indians. Hence statement 1 is incorrect. Patent Act allowed Indian pharma companies to produce and market cheaper versions of the latest drugs by re-engineering processes. Hence statement 2 is correct.

The 2005 amendment of Indian Patent Act, 1970, marked the end of an era for Indian pharmaceutical industry, an era of process patent only, of reverse engineering and of low cost generic drugs. Hence statement 3 is correct. In consonance with obligations under WTO, the government made IPR laws TRIPS (Trade Related aspects of Intellectual property Rights) compliant. Hence statement 4 is incorrect.

28. **Ans. B**

**Exp:** Passage mentions that tremendous reengineering skills of Indian Chemists laid the foundation of today's pharmaceutical industry. Hence statement 1 is incorrect. Passage mentions that Indian Patent Act 1970, by granting process patent protection only, allowed Indian pharma companies to

produce and market cheaper versions of the latest drugs by re-engineering processes. Hence both statement 2 and 3 are correct.

**29. Ans. C**

**Exp:** Passage mentions that in consonance with obligations under WTO, the government made IPR laws TRIPS (Trade Related aspects of Intellectual property Rights) compliant. And it marked the end of an era for Indian pharmaceutical industry, an era of process patent only, of reverse engineering and of low cost generic drugs. Hence both statement 1 and 2 are correct.

**30. Ans. A**

**Exp:** Passage mentions that Indian Patent Act 1970 allowed Indian pharma companies to produce and market cheaper versions of the latest drugs. The size of the Indian Pharmaceutical industry was over Rs. 65,000 Crore in 2006-07. Hence all statements are correct.

**31. Ans. C**

**Exp:** The main focus of passage is on Patent Act 1970 which allowed Indian Pharma companies to produce and market cheaper versions of the latest drugs. And amendment made in the Act in 2005 after India Joined the correct.

**32. Ans. A**

**Exp:** Let the present age of son = x  
 $\therefore$  Age of father at the time of son's birth = x  
 $\therefore 38 - x = x - 0$   
 $2x = 38$   
 $x = 19$   
 $\therefore$  Age of son five year back =  $19 - 5 = 14$  years.

**33. Ans. C**

**Exp:** If the total sum is the same, then the number of mangoes that must be sold to gain 20%  
 $= \frac{30}{120} \times 100 = 25$

**34. Ans. D**

**Exp:** Let the annual instalment be Rs. x, then

$$x + x + \frac{x \times 5 \times 1}{100} + x + \frac{x \times 5 \times 2}{100} + x + \frac{x \times 5 \times 3}{100}$$

$$= \text{Rs. } 12900$$

Solving it, we get  $x = 3000$ .

**35. Ans. A**

**Exp:**

3	20	63	144	275	?	...	I
	17	43	81	131	?	...	II
		26	38	50	?	...	III
			12	12			

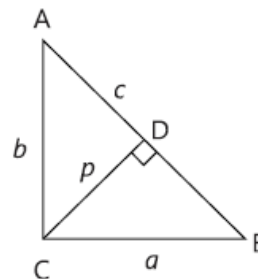
The figure against question mark in statement III is  $(50+12 = 62)$ .

Therefore, the figure in statement II is  $131 + 62 = 193$

And statement III is  $275 + 193 = 468$ .

**36. Ans. B**

**Exp:**



$BC = a, AB = b$

$\therefore AB = \sqrt{AC^2 + BC^2} = \sqrt{b^2 + a^2}$

Area of  $\Delta ABC$

$= \frac{1}{2} \times BC \times AC$

$= 1ab$

Again, area of  $\Delta ABC$

$= \frac{1}{2} \times AB \times CD$

$= \frac{1}{2} \times \sqrt{a^2 + b^2} \times p$

$$\therefore \frac{1}{2}ab = \frac{1}{2}\sqrt{a^2+b^2} \times p$$

$$\Rightarrow ab = \sqrt{a^2+b^2} \times p$$

On squaring both sides.

$$a^2b^2 = (a^2 + b^2)p^2$$

$$\Rightarrow \frac{1}{p^2} = \frac{a^2+b^2}{a^2b^2}$$

$$\Rightarrow \frac{1}{p^2} = \frac{a^2}{a^2b^2} + \frac{b^2}{a^2b^2}$$

$$\Rightarrow \frac{1}{p^2} = \frac{1}{b^2} + \frac{1}{a^2} = \frac{1}{a^2} + \frac{1}{b^2}$$

37. Ans. B

Exp:

By rule 1, option (a) is eliminated.

By rule 3, option (c) is eliminated.

By rule 3, option (d) is eliminated.

So, correct option is (b)

38. Ans. D

Exp: From the given directions, we find out that F and I don't work for the same factory.

39. Ans. C

Exp:

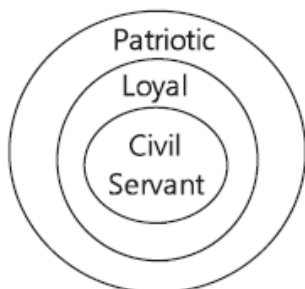
$$9 - 8 = 1; (1)^3 = 1$$

$$6 - 4 = 2; (2)^3 = 8$$

$$10 - 7 = 3; (3)^3 = 27$$

40. Ans. B

Exp:



conclusion (b) is not valid.

41. Ans. D

Exp: Ratio of the male Engineers and Designers to the same-occupation

females professionals =

$$\frac{18}{100} \times \frac{40}{100} + \frac{16}{100} \times \frac{65}{100} : \frac{18}{100} \times \frac{60}{100} + \frac{16}{100} \times \frac{35}{100}$$

$$= 1760 : 1640$$

$$= 44 : 41$$

42. Ans. B

Exp: Difference between the total no. of male engineers and total no. of female Doctors

$$= 10500 \left( \frac{40 \times 18}{10000} - \frac{21 \times 20}{10000} \right)$$

$$\frac{105}{10} (72 - 42) = 315$$

43. Ans. A

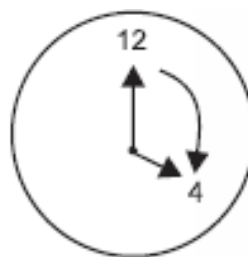
Exp: Ratio of the number of male architects to the number of male teachers

$$= 300 \times \frac{45}{100} = 135$$

$$= 11 : 5$$

44. Ans. D

Exp:



at 4 o'clock, min hand is ahead by hr hand with 20 div. and we need to create a difference of 30 div. So total 20 + 30 = 50 div.

$$\text{for } 50 \text{ div} = 50 \times \frac{12}{11} = \frac{600}{11} \text{ min.}$$

$$= 54 \frac{6}{11} \text{ min.}$$

**Required time = 4-54'-33"**

Alternate Solution:

Angle between hr and min hand of a clock is  
→

$$\Rightarrow \left| \frac{11M - 60H}{2} \right|^\circ = 180^\circ$$

$$\Rightarrow 11M - 60 \times 4 = 360$$

$$\Rightarrow 11M = 600$$

$$\Rightarrow M = \frac{600}{11} = 54\frac{6}{11} \text{ min.}$$

**45. Ans. C**

**Exp:** Total students who got distinction

$$= 300 \times \frac{45}{100} = 135$$

According to the question,

No. of girls who got distinction = 50 & no. of boys who got distinction = 85

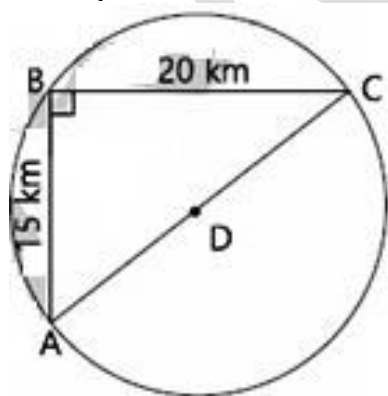
Now, 40% = 50

Therefore, 100% = 125 = total no. of girls

So, total no. of boys = 300 - 125 = 175

**46. Ans. C**

**Exp:**



$$AC = \sqrt{15^2 + 20^2} = \sqrt{25^2} = 25 \text{ km}$$

Total distance = AB + BC + circular path with radius AD

$$= 15 + 20 + 2\pi \times \frac{25}{2}$$

$$= 35 + 25\pi \text{ km}$$

**47. Ans. D**

**Exp:** Let the capacity of cistern = LCM of (4, 8, 12, 40) = 120 Liters

Efficiency of pipe P = 120 / 4

= 30 Liter/hr.

Efficiency of pipe Q = 120 / 8 = 15 Liter/hr.

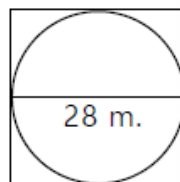
Efficiency of pipe R = 120 / 12 = 10 Liter/hr.

Efficiency of pipe S = 120 / 40 = 3 Liter/hr.

Now, by options, we can deduce that when pipes P, Q and S are open then they will take less time than others.

**48. Ans. D**

**Exp:**



Area of space left out

= Area of square - Area of circle

$$= (\text{side})^2 - \pi r^2$$

$$= (28)^2 - \frac{22}{7} \times (14)^2 = 168 \text{ m}^2$$

**49. Ans. A**

**Exp:** From the statements, we can deduce conclusions.

As per the given statements, only conclusion 1 logically follows.

**50. Ans. D**

**Exp:** From the statements, we can deduce conclusions.

As per the given statements, Neither conclusion 1 nor conclusion 2 follows logically,

**51. Ans. D**

**Exp:** From the statements, we can deduce conclusions.

As per the given statements, Neither conclusion 1 nor conclusion 2 follows logically.

**52. Ans. D**

**Exp:** Neither statement follows from the passage. Statement 1 is incorrect since the author is, doubtful whether the seaman will learn his lesson from the storm or not- “.... if he will hut learn the lesson ..,”Statement 2 directly contradicts the passage—’ ’ Sometimes he is unfortunate, the decks are clean, he has nothing to do.”

**53. Ans. D**

**Exp:** Neither statement follows from the passage.

Though the author gives a description of a whale sighting, it does not follow that whales are seen only in cairn seas. The second statement is also incorrect. While the author states that the whaleman “thoroughly dependent at all times for life, safety, and success, upon the arm of God” this does not mean that he survives by chance alone and not through his own efforts.

**54. Ans. A**

**Exp:** Only statement 1 follows from the passage– “There are few things in this world that fill me with such wonder as the fact that man can kill a whale.”

Statement 2 is incorrect. The author only states that the whaleman is dependent on God, not that God always protects him.

**55. Ans. C**

**Exp:**To be completely divisible by 72, the number should also be divisible by 9.

So, Make the sum of the digits divisible by 9,

We get \* = 6.

**Solutions (56–58) :**

	Horti.	Phys.	Journ.	Ind.	Adv.
<b>A (Tea)</b>	✓	X	X	X	X
<b>B (Coffee)</b>	X	X	X	✓	X
<b>C (Tea)</b>	X	✓	X	X	X
<b>D (Coffee)</b>	X	X	✓	X	X
<b>E (Tea)</b>	X	X	X	X	✓

**56. Ans. B**

**Exp:** B is an Industrialist.

**57. Ans. D**

**Exp:** None of the option groups include a person who likes tea but is not an Advocate.

**58. Ans. B**

**Exp:** B is the person who likes coffee but is not the Journalist.

**59. Ans. D**

**Exp:** As per the table, Group discussion and Motivation are the first & last lectures.

**60. Ans. C**

**Exp:** As per the table, there are 3 Lectures – Leadership, Decision Making, Assessment Centre.

**61. Ans. D**

**Exp:** As per the table,

On Thursday, Leadership lecture will be organized.

**62. Ans. C**

**Exp:** As per the table,

On Tuesday, there is no lecture.

63. **Ans. D**

**Exp:** As per the table,

We can say that all statements are required.

64. **Ans. B**

**Exp:**

$$\text{Distance traveled in 1 revolution} = \frac{440}{1000} m$$

$$\text{Circumference} = \pi \times d = \frac{44000}{1000} cm$$

$$d = \frac{44000}{1000} \times \frac{7}{22} = 14 cm$$

65. **Ans. C**

**Exp:** Let a two digit number be  $(10x + y)$

And reversing number be  $(10y + x)$

$$\begin{aligned} \text{Required sum} &= 10x + y + 10y + x = 11x + 11y \\ &= 11(x+y) \end{aligned}$$

Hence it is divisible by 11.

Similarly,

Let a two digit number be  $(10x + y)$

And reversing number be  $(10y + x)$

$$\begin{aligned} \therefore \text{Required difference} &= 10x + y - 10y - x = 9x \\ &- 9y \\ &= 9(x-y) \end{aligned}$$

Hence it is divisible by 9.

Thus, both statements are correct.

66. **Ans. D**

**Exp:** The key term to solve this question is 'simultaneously', which rules out all the options, just because both hyper centralization and endless fragmentation are happening simultaneously, does not also mean that there is a causal relation between them, necessarily, hence option A and C are incorrect. B is incorrect because the term simultaneously rules out historical precedence of one the phenomenon.

67. **Ans. B**

**Exp:** A is incorrect because the term necessary does not correlate with the passage. C is incorrect because social media can be one of the many means of creating belief in shared identities. D is incorrect because the emergence of self-contained communities cannot imply the rise of communism (which is an altogether different concept). B is the correct answer social media is responsible for the endless fragmentation phenomenon; however, it would be incorrect to say that it is exclusively responsible for such a phenomenon.

68. **Ans. B**

**Exp:** Disagreement draws its validity from the expression 'growing lack of consensus..', hence B is correct. A and C are not mentioned in the passage directly or indirectly. Social media is cited as a means for the emergence of self-contained communities, not as a reason; hence D is incorrect.

69. **Ans. B**

**Exp:** The tone of the author clearly suggests a mild impatience with the rich for not fully appreciating the problematic conditions that the poor have to live in. A, C and D are incorrect because they are not appropriately supported by the tone of the passage.

70. **Ans. D**

**Exp:** The passage does not make any explicit or implicit mention of job, wealth or formal economy; hence A, B and C are incorrect. A reading of the passage suggests to us that the poor seem to be devoid of decisions taken on their behalf which could make it easier for them to navigate through their problems, hence navigability provided by a system is the most appropriate inference from the given options, as the main idea of the passage.

71. **Ans. B**

**Exp:** 'providing the poor with the luxury that we all have, which is that a lot of decisions are taken for us.' this line in the passage

corresponds most appropriately with B; hence it is the correct answer. Money and Responsibility are terms which are present in the passage but do not associate with luxury; hence A and C are incorrect. The community does not figure anywhere in the passage; hence D is incorrect.

**72. Ans. B**

**Exp:** Time taken by train to cross bridge

$$= \frac{\text{Length of train} + \text{length of bridge}}{\text{Speed of train}}$$

$$21 = \frac{130 + \text{Length of bridge}}{90 \times \frac{5}{18}}$$

∴ Length of the bridge = 525 – 130 = 395 m

**73. Ans. B**

**Exp:**

$$A = P \left(1 + \frac{r}{100}\right)^t$$

$$4x = x \left(1 + \frac{r}{100}\right)^t$$

$$2x = x \left(1 + \frac{r}{100}\right)^{10}$$

$$4 = \left(1 + \frac{r}{100}\right)^t \dots \text{I}$$

$$2 = \left(1 + \frac{r}{100}\right)^{10} \dots \text{II}$$

Comparing equation I and II, if we square equation we get

$$(2)^2 = \left[\left(1 + \frac{r}{100}\right)^{10}\right]^2 = 4 = \left(1 + \frac{r}{100}\right)^{20}$$

Thus, required answer = 20 years.

**74. Ans. C**

**Exp:** HCF of 21, 42 and 56 is 7

$$\therefore \text{Number of rows} = \frac{21}{7} + \frac{42}{7} + \frac{56}{7}$$

$$= 3 + 6 + 8$$

$$= 17$$

**75. Ans. C**

**Exp:** C is correct because the mention of the term explicit in the sentence is followed by the expression 'on the contrary' in the second sentence, the contrary of explicit is implicit, Inferred is not that same thing as implicit thus A is incorrect. Extra-legal and subordinate cannot be attributed from the passage. Hence B and D are incorrect.

**76. Ans. A**

**Exp:** The term mentioned in the passage, which is important in answering this question is insofar as, which directly corresponds with the term only those, hence the correct answer is A.

**77. Ans. C**

**Exp:** Free Speech absolutism would mean that a person has an unhindered right to free speech. As the facts in the passage suggest, the U.S. is more of a speech absolutist than Europe; hence C is correct. If C is correct, then B is incorrect. D cannot be correct because we don't have enough information on tolerance. A is incorrect because it is a misreading of the passage.

**78. Ans. C**

**Exp:** Opprobrium literally means harsh criticism or censure. Legal Penalty would be wrong because it is stated that it is moral in nature, felicitation is reverse to the tone of the passage, a mob outrage is perceived as too strong within the given context.

**79. Ans. D**

**Exp:** A is incorrect because there is no evidence in the passage to suggest neutrality or the lack of it, in the American Press. B is incorrect again because of the lack of evidence in the passage to support its claim. C is incorrect due to the same. D is correct because the term even as used in the passage suggests some inclination towards American interest before that of USSR.

**80. Ans. C**

**Exp:** A Satirical state of mind would contain less condemning and more jocular terms to express disagreement, A is incorrect. A Challenging state of mind would have an offer or proposition to compete or prove one's claims in a scriptable manner since these expressions are absent, B is incorrect.

Bitterly disappointed also does not reflect the state of mind of the author because of the choice of words do reflect bitterness but not a disappointment. Outraged is the



correct answer - as is reflected from expressions like - 'impudent', 'men dead to all shame' etc, this C is the correct answer.

AICSCC