

# **Career Defence School, Ambala**

# Scholarship Cum

# **Admission Test**

Entrance Exam

Class: IX

Time: 3 Hrs

Mode: Online

MM: 100

## Sample Paper

### **General Instruction:**

- 1. The question paper consists of four Sections A, B, C, D.
- 2. All questions are compulsory.
- 3. There is no overall no choice.
- 4. All sub-questions under the main question carry equal marks.

5. Rough work, if required may be done on the last few pages of this question booklet, provided for the purpose.

For more details call at 74199-99228

#### Section - A (Reasoning)

1. Select the pair which is related in the same way as 'current' is related to 'Ampere'.

(a) Power : Energy

(b) Pressure : Time

(c) Force : Newton

(d) Mass : Metre

Ans: (c)

2. Shalini's mother is the only daughter of Surya's father. How Surya is related to Shalini?

(a) Brother

(b) Father

(c) Maternal - Uncle

(d) None of these

Ans: (c)

3. Find the missing number:

4, 9, 19, 34, 54, ?, 109

(a) 89	(b) 84
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(c) 74	(d) 79
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Ans: (c)

4. Complete the following series with correct options.

#### VROK?D

(b) I

(c) H	(d) J
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Ans: (c)

5. Find the odd man out of the following options.

(a) O P Q T U	(b) T U V Y Z
(c) C D E H I	(d) H I J N O
Ans: (a)	

6. After walking 6 km in a direction, I turned to the right and then walked 2 km. After then I turned to the left and walked 10 km. In the end, I was moving towards the North. I started my journey moving in which direction?

(a) North (b) South

(c) East (d) West

Ans: (b)

7. If SABOTAGE is coded as UADOVAIE, how will EMERGENCY be coded in the same manner?

(a) GMGRIEPCA	(b) GMGREPCA
(c) BNBQFDOBZ	(d) EOETGGNEY

Ans: (a)

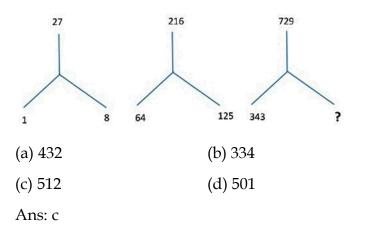
8. In a certain code language, (1) 'lo ni hie pun' stands for 'he is drinking coke', (2) 'hol ful gui pun' stands for 'she is eating food' and (3) 'ne ful ni lo' stands for 'drinking coke and food'. Which of the following words is the code for 'he'?

(a) hie	(b) lo
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(c) pun (d) ni

Ans: (c)

9. Insert the missing number in the given response.



10. Deepak ranks seventh from the top and twenty eight from the bottom in a class. How many students are there in the class?

(a) 37	(b) 36
(a) 2E	(1) 24

(c) 35 (d) 34

Ans: (d)

11. Which is the third number to the left of the number which is exactly in the middle of the following sequence of numbers?

 $1\,2\,3\,4\,5\,6\,7\,8\,9\,2\,4\,6\,8\,9\,7\,5\,3\,1\,9\,8\,7\,6\,5\,4\,3\,2\,1$ 

(a) 3	(b) 4
(c) 5	(d) 6

Ans: (c)

12. If M + N means 'M' is the brother of 'N', M – N means 'M' is the sister of 'N', M × N means 'M' is the mother of 'N' and M  $\div$  N means 'M' is father of 'N', then which of the following would mean 'E' is the Paternal Aunt of 'F'?

(a) $E - G \div F$	(b) $E + G \times F$
(c) $E \times F - G$	(d) $F \times G + E$

Ans: (c)

13. Find the missing number.

3, 15, 90, 6300, 5040, ?

(a) 35280	(b) 40320

(c) 45360	(d) 10080
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Ans: (c)

14. Which of the following does not match with the group?

(a) TPQQPT	(b) MGRRGM

(c) NCRNCR (d) BEFFEB

Ans: (c)

15. Rohan walks a distance of 3 km towards North, then turns to his left again and walks for 3 km. How far is he from the starting point?

(a) 1 km	(b) 2 km

(c) 3 km (d) 4 km

Ans: (c)

16. In a certain code FINGER is written as DGLECP, what will be the code for KIDNEY?

(a) IGBLCW	(b) IGCLBW
(c) IBCGLE	(d) IGBKCV

Ans: (d)

17. The position of the first and the sixth digits in the number '4529861537' are interchanged, similarly the position of the second and the seventh digits are interchanged and so on. Which of the following will be the SEVENTH digit from the left end after the rearrangement?

(a) 6	(b) 3
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(c) 4 (d) 8

Ans: (b)

18. Find the missing number

2 14	21 28	
3 21	28 35	
4 ?	35 ?	
(a) 35 and 29		(b) 28 and 42
(c) 21 and 22		(d) 49 and 28

Ans: (b)

19. B is in the East of A and North of C. If M is in the South of C, then in which direction of B is M?

(a) North (b) South

(c) South - East (d) None of these

Ans: (b)

20. Complete the analogy

6:42::5:?

(a) 40	(b) 30

(c) 35 (d) 45

Ans: (c)

21. Complete the series:

#### ab \_ cba \_ bcc \_ aabccb \_ \_ bccba

(a) abcac	(b) cccab
(c) cabaa	(d) abcab

Ans: (b)

22. Four out of the following numbers have some similarity and hence, they form a group. Find out the number which does not suit in the group.

(a) 58423	(b) 55623
(c) 51223	(d) 57223

Ans: (a)

23. Select the pair of words which are related in the same way as 'current' is related to 'Ampere'.

(a) Power : Energy	(b) Pressure : Time
(c) Force : Newton	(d) Mass : Metre

Ans: (a)

24. Ujjawal said to a man, pointing to a photo that "His mother is the wife of the son of my father. I have neither a brother nor a sister". On the basis of above whose photo was that?

(a) Cousin brother	(b) Nephew's
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(c) Son's (e	d) Uncle's
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Ans: (b)

25. Find the missing number

(a) 20	(b) 21
(c) 19	(d) 18

Ans: (d)

#### Section - B (Mathematics)

26. Which of the following angle can be constructed with the help of a ruler and a pair of compasses?

(b) 40°

(c) 37.5° (d) 47°

Ans: (c)

27. Which of the following can be the length of BC required to construct the triangle ABC such that AC = 7.4 cm and AB = 5 cm?

(c) 4.7 cm (d) None of these

Ans: (b)

28. What in the area of an equilateral triangle with side 2 cm?

(a) √6cm <sup>2</sup>	(b) √3cm <sup>2</sup>
(c) √8cm <sup>2</sup>	(d) 4cm <sup>2</sup>

Ans: (b)

29. The sides of a triangle are in the ratio of 3 :4: 5. If its perimeter is 36 cm, then what is its area?

(a) $32 \text{ cm}^2$	(b) 54 cm <sup>2</sup>
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(c)  $67 \text{ cm}^2$  (d)  $72\text{cm}^2$ 

Ans: (b)

30. Through which of the following points, the graph of y = -x passes?

(c) (-1, 1) (d) None of these

Ans: (c)

31. From the choices given below mark the coprime numbers

(a) 2, 3 (b) 2, 4

(c) 2, 6 (d)
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Ans: (a)

32. The number 1.101001000100001... is

(a) a natural number

(b) a whole number

(c) a rational number

(d) an irrational number

Ans: (d)

33. If the decimal representation of a number is non-terminating, non-repeating then the number is

(a) a natural number

(b) a rational number

(c) a whole number

(d) an irrational number

Ans: (d)

34. The square root of which number is rational

(b) 1.96

(c) 0.04 (d) 13

Ans: (b), (c)

35. If the probability of winning a game is 0.3, then probability of losing it is

(	a)	0.6	(b	) 0.7

(c) 0.5 (d) None of these

Ans: (b)

36. If each observation of the data is increased by 5, then what happens to its mean?

(a) is increased by 4

(b) is increased by 5

(c) is decreased by 4

(d) is decreased by 5

Ans: (b)

37. What is the median of the data 78, 56, 22, 34, 45, 54, 39, 68, 54, 84?

(a) 54 (b) 53

(c) 55 (d) 51

Ans: (a)

38. The mean of five numbers is 30. If one number is excluded, their mean becomes 28. What is the excluded number?

(a) 38	(b) 35
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(c) 33 (d) 36

Ans: (a)

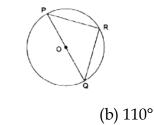
39. The angle subtended by the diameter of a semicircle is:

(a) 45°	(b) 180°
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(c) 90° (d) 60

Ans: (c)

40. In the figure, O is the centre of the circle and PR = QR. What is the measure of  $\angle PQR$ ?



(c) 75° (d) 45°

Ans: (d)

(a) 60°

41. Which point lies on x-axis?

- (a) (3, 2) (b) (-3, 2)
- (c) (2, 0) (d) (-1,-2)

Ans: (c)

42. Which point lies above x-axis?

- (a) (-1, 2) (b) (2, 0)
- (c) (-1,-5) (d) (0,-3)

Ans: (a)

43. Which of the following is an axiom? (a) Diagonals bisect each other (a) Theorems (b) Opposite sides are equal (b) Definitions (c) Opposite angles are equal The universal truth in all branches of (d) Opposite angles are bisected by the (c)diagonals Mathematics (d) Universal truth specific to geometry Ans: (d) Ans: (c) Section – C (General Knowledge) 44. Which of the following are boundaries of a 51. Which phylum of animals is also called flatworms? surface? (a) Lines (b) Curves (a) Porifera (b) Coelenterata (c) Surfaces (d) Points (c) Platyhelminthes (d) Nematoda Ans: (c) Ans: (b) 52. In which organism flame cells form the 45. If the supplement of an angle is 4 times of its compliment, find the angle. excretory system? (a) 60° (a) flatworms (b) earthworms (b) 50° (c) 80° (d) 100° (c) insects (d) crabs Ans: (a) Ans: (a) 46. The polynomial  $px^2 + qx + rx^4 + 5$  is of type 53. Nitrogen fixation can be done by (a) Industries (a) linear (b) quadratic (b) Rhizobium (c) cubic (d) Biquadratic Ans: (d) (c) Lightening 47. If value of 104 × 96 is (d) All of the above (a) 9984 (b) 9469 Ans: (d) 54. Animal cell lacking nuclei would also lack (c) 10234 (d) 11324 in Ans: (a) (a) Ribosome 48. A quadrilateral with only one pair of opposite sides parallel is called: (b) Lysosome (c) Endoplasmic reticulum (a) Trapezium (b) Square (d) Rhombus (d) Chromosome (c) Rectangle Ans: (d) Ans: (a) 55. Pasturage is related to 49. Which of the following is not true for a

(a) Cattle

parallelogram?

(b) Fishery

(c) Apiculture	(d) Sericulture	61. What do we get by th	e product of mass and	
Ans: (c)		velocity? (a) Force (b) Inertia		
56. Larynx is called		(c) Momentum	(d) Newton	
(a) Voice box			(d) Newton	
(b) Music box		Ans: (c)		
(c) Respiratory organ		62. In the context of France what was "Tithe".		
(d) None of these		(a) Religious Tax (b) Water Tax (c) Salt Tax		
Ans: (d)				
57. The disease caused du	e to worm is			
(a) Tetanus	(b) Rabies	(d) Tobacco Tax		
(c) Sleeping sickness		Ans: (a)		
(d) Filariasis		63. Which Revolution gave the ideas of Liberty, Freedom and Equality to the world?		
<ul> <li>Ans: (d)</li> <li>58. Loud sound can travel a larger distance, due to</li> <li>(a) Higher amplitude</li> <li>(b)Higher energy</li> <li>(c) High frequency</li> <li>(d) High speed</li> <li>Ans: (b)</li> <li>59. The energy possessed by an oscillating pendulum of a clock is</li> </ul>		(a) The American Revolution		
		(b) The French Revolution		
		(c) The Russian Revolution		
		(d) None of these		
		Ans: (b)		
		64. Which one of the following Indian states does not share its boundary with Pakistan?		
		(a) Jammu and Kashmir		
		(b) Rajasthan		
		(c) Gujarat		
(a) kinetic energy		(d) Haryana		
(b) potential energy		Ans: (d)		
(c) restoring energy		65. Which one of the	following is not an	
(d) mechanical energy		activity of primary sector?		
Ans: (d) 60. How much time will be required to perform 520 J of work at the rate of 20 W?		(a) Transport		
		(b) Mining		
(a) 24 s	(b) 16 s	(c) Forestry		
(c) 20 s	(d) 26 s	(d) Animal Husbandry		
Ans: (d)		Ans: (a)		

66. On which of the following does the quality of population not depend?

(a) Literacy Rate

(b) Income

(c) Health Status

(d) Skill Formation

Ans: (b)

67. High yields with combustions of HYV (High Yielding Varieties) seeds, irrigation, chemical fertilizers, pesticides etc. refers to

(a) Modern cropping

(b) Mixed cropping

(c) Multiple cropping

(d) Mega cropping

Ans: (a)

68. How many members did the Constituent Assembly of India have?

(a) 199

(b) 299

(c) 399

(d) 279

Ans: (b)

69. Which one of the following UN Secretary Generals, said that the "US was on Iraq was not legal?"

(a) Kofi Annam

(b) B. Buturash Ghali

(c) U Thant

(d) Ban Ki Moon

Ans: (a)

70. How many permanent members are there in the Security Council?

(a) 5

(d) 15

Ans: (a)

(c) 10

71. The neighbouring countries that share their boundaries with India are

(a) Pakistan and Afghanistan

(b) Myanmar and Bangladesh

(c) China and Nepal

(d) All of above

Ans: (d)

72. Which one of the following group was not benefitted by the French Revolution?

(a) Peasants

(b) Workers

(c) Nobility

(d) Agricultural Labourers

Ans: (c)

73. What did the red cap worn by Sans Culottes in France symbolize?

(a) Brotherhood

(b) Danger

(c) Anger

(d) Liberty

Ans: (d)

74. Which one of the following activities is associated with the primary sector?

(a) Manufacturing

(b) Education

(c) Agriculture

(d) Transport

Ans: (c)

75. Which one among the following is the most labour absorbing sector?

(a) Agriculture

(b) Fisheries

(c) Poultry farming

(d) Mining

Ans: (a)

### Section - D (English)

**Directions (76 – 77):** choose the most appropriate option to fill in the blanks.

76. Although I was \_\_\_\_\_\_ of his plans, I encouraged him, because there was no one else who was willing to help.

(a) sceptical

(b) remorseful

(c) fearful

(d) excited

Ans: (a)

2. You have no business to \_\_\_\_\_ pain on a weak and poor person.

(a) inflict

(b) put

(c) direct

(d) force

Ans: (a)

**Direction (78 – 82):** Read the passage and then answer the questions based on it. You are required to select your answers based on the content of the passage and opinion of the author only

### Passage

We should preserve Nature to preserve life and beauty. A beautiful landscape, full of green vegetation, will not just attract our attention but will fill us with infinite satisfaction. Unfortunately, because of modernization, much of nature is now yielding to towns, roads and industrial areas. In a few places some natural reserves are now being carved out to avert the danger of destroying nature completely. Man will perish without nature, so modern man should continue this struggle to save plants, which give us oxygen. Moreover, Nature is essential to man's health. 78. What does 'Nature' in the passage mean? (a) Countryside covered with plants and trees (b) Physical power that created the world (c) Inherent things that determine character (d) Practical study of plants and animals Ans: (a) 79. Which one of the following is the correct statement? According to the passage (a) beauty is only skin-deep (b) everything is beautiful in its natural state (c) there is beauty in Nature (d) Nature is a moray teacher Ans: (c) 80. What does the writer suggest? (a) We should not modernize, so that Nature can be preserved (b) While modernizing we should be careful not to destroy Nature completely (c) All Nature has been destroyed by modern living (d) Carving out Natural reserves will hamper the growth of industries Ans: (b) 81. What does 'struggle' in the passage mean? (a) Man's struggle to exist in the world (b) Man's struggle to save Nature (c) Man's struggle to catch up with modern trends (d) Man's struggle to conserve oxygen Ans: (b) 82. Why a beautiful landscape 'will fill us with infinite satisfaction'? (a) We love beauty (b) It is full of green vegetation (c) It will ensure our future existence

(d) It will show our command over Nature

Ans: (c)

Directions (83 - 85): In questions given below out of four alternatives choose the one which be substituted for given can the word/sentence. 83. A place where bees are kept in called (a) An apiary (b) A mole (c) A hive (d) A sanctuary Ans: (a) 84. A religious discourse (a) Preach (b) Stanza (c) Sanctorum (d) Sermon Ans: (d) 85. Parts of a country behind the coast or a river's banks (a) Isthmus (b) Archipelago (c) Hinterland (d) Swamps Ans: (c) Direction (86 – 89): Select the word or group of words that is most similar in meaning to the words in capital letters. 86. PALPABLE (a) Trembling (b) Weak (c) Obvious (d) Foolish Ans: (c) 87. USURP (a) To climb upon (b) to yield (c) To seize power or position illegally (d) To demand unlawfully high interest on a loan Ans: (c) 88. GLEAN (a) To groom (b) To gather bit by bit

(c) To discover (d) To polish Ans: (b) 89. TACTILE (a) Considerate (b) Strong (c) Sharp (d) Pertaining to the organs of touch Ans: (d) Direction (90 - 93): Select the word or group of words that is most opposite in meaning to the words in capital letters. 90. OUTLANDISH (a) Modern (b) Moderate (c) Disrespectful (d) Coward Ans: (a) 91. ABSOLVE (a) To remember someone fondly (b) To imitate someone (c) To pretend (d) To declare someone guilty Ans: (d) 92. DEFERENTIAL (a) Discount (b) Disrespectful (c) Preconception (d) Acute Ans: (b)93. FELICITOUS (a) Unfriendly (b) Uneasy (c) Unheard of (d) Inappropriate Ans: (d) 94. I cannot get along with a man who plays fast and loose. (a) behaves in an unreliable and insincere way (b) has a loose tongue (c) lives a life of ease and luxury

(d) does not know how to behave himself

Ans: (a) 95. There is no love lost between two neighbours. (a) close friendship (b) cool indifference (c) intense dislike (d) a love hate relationship Ans: (c) 96. Why do you wish to tread on the toes? (a) To give offence to them (b) To follow them grudgingly (c) To treat them indifferently (d) To be kicked by them Ans: (a) Direction (97 – 98): Choose the correct spelling of the given word: 97. (a) Forefiet (b) Forefeit

Ans: (d)

- (c) Forfeit
- (d) Forfiet

Ans: (c)

- 98. (a) Comemorate
- (b) Commemmorate
- (c) Momemmorate

(d) Commemorate

Ans: (d)

- 99. (a) Excessive
- (b) Exccessive
- (c) Exxcesive
- (d) Excesive

Ans: (a)

100. (a) Indipensable

- (b) Indipenseble
- (c) Indispansible

(d) Indispensable