



**Career Defence School, Ambala**  
**Scholarship Cum**  
**Admission Test**

Entrance Exam

Class: 7<sup>th</sup>

Time: 1 Hrs

Exam 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

## Reasoning

**Directions (1 - 2):** In each of the following questions, a letter-number series is given with one or more terms missing as shown by (?). Choose the missing term out of the given alternatives.

1. N5V, K7T, ?, E14P, B19N.

- (a) H9R
- (b) H10Q
- (c) H10R
- (d) I10R

2. 2, A, 9, B, 6, C, 13, D, ?

- (a) 9
- (b) 10
- (c) 12
- (d) 19

3. Arrange the following in a meaningful sequence:

- 1. Consultation      2. Illness
- 3. Doctor            4. Treatment
- 5. Recovery

- (a) 2, 3, 1, 4, 5
- (b) 2, 3, 4, 1, 5
- (c) 4, 3, 1, 2, 5
- (d) 5, 1, 4, 3, 2

4. Arrange the words given below in a meaningful sequence.

1. Nation

2. Village

3. City

4. District

5. State

- (a) 2, 3, 4, 5, 1
- (b) 2, 3, 4, 1, 5
- (c) 1, 3, 5, 4, 2
- (d) 1, 2, 3, 4, 5

5. In the word **EARTH** is written as **QPMZS** in coded form, how can be **HEART** be written in that code?

- (a) SQPZM
- (b) SQMPZ
- (c) SPQZM
- (d) SQPMZ

6. In a certain code **EXPLAINING** is written as **PXEALNIGNI**, how is '**PRODUCED**' written in that code?

- (a) ORPUDDEC
- (b) ROPUDECD
- (c) ORPUDECD
- (d) DORPDECU

7. If in a code language, **COULD** is written as **BNTKC** and **MARGIN** is written as **LZQFHM**, how will **MOULDING** be written in that code?

- (a) CHMFINTK
- (b) LNKTCHEMF

(c) LNTKCHMF

(d) NITKHCMF

8. If in a certain code language, 'oka peru' means 'fine cloth'; 'meta lisa' means 'clear water' and 'dona lisa peru' means 'fine clear weather', which word in that language means 'weather'?

(a) peru

(b) oka

(c) meta

(d) dona

9. 2A3B : 4C5D

(a) 4E5G : 6I7K

(b) 4L5M : 6P7Q

(c) 3P4Q : 5R6S

(d) 7P6Q : 5R4S

10. Fragile : Crack

(a) Irreducible : Reduce

(b) Pliable : Bend

(c) Cementry : Death

(d) Aerial : Air

11. Which of the following will be the last digit of the second highest number after the positions of the digits in each number is reversed?

(a) 1

(b) 2

(c) 4

(d) 7

12. In the following series is written in the reverse order, which number will be fourth to the right of the seventh number from the left?

7, 3, 9, 7, 0, 3, 8, 4, 6, 2, 1, 0, 5, 11, 13

(a) 5

(b) 11

(c) 9

(d) 0

13. If Atul finds that he is twelfth from the right in a line of boys and fourth from the left, how many boys should be added to the line such that there are 28 boys in the line?

(a) 12

(b) 13

(c) 14

(d) 20

14. Ajay left home for the bus stop 15 minutes earlier than usual. It takes 10 minutes to reach the stop. He reached the stop at 8.40 am. What time does he usually leave home for the bus stop?

(a) 8.30 am

(b) 8.45 pm

(c) 8.55 am

(d) None of these

15. If every second Saturday and all Sundays are holidays in a 30 days month beginning on

Saturday, then how many working days are there in that month?

- (a) 20
- (b) 21
- (c) 22
- (d) 23

16. In a telephone directory, which of the following names will appear at 3rd place?

- (a) Sajewat
- (b) Segwan
- (c) Sajevar
- (d) Sajewet

17. Which of the following names will appear in the middle if they are arranged alphabetically?

- (a) Parakashji
- (b) Prakashji
- (c) Parakashjee
- (d) Prakashje

18. If a meaningful word can be formed by rearrangement the letters USCALA, the first letter of the word so formed is the answer. If no such word can be formed, the answer is X.

- (a) C
- (b) S
- (c) A
- (d) L

19. Which one of the four interchanges in signs and numbers would make the given equation correct?

$$3 + 5 - 2 = 4$$

- (a) + and -, 2 and 3
- (b) + and -, 2 and 5
- (c) + and -, 3 and 5
- (d) None of these

20. Pointing to a man in photograph, a man said to a woman, "His mother is the only daughter of your father." How is the woman related to the man in the photograph?

- (a) Sister
- (b) Mother
- (c) Wife
- (d) Daughter

21. B is daughter of the wife's of A's mother's only son. What is the relation between B and A?

- (a) Father and Daughter
- (b) Mother and Daughter
- (c) Niece and Aunt
- (d) Daughter-in-law and mother -in-law

22. P and Q are sisters. P is the mother of R. Q's daughter S is married to T. X is the husband of P. How is Q related to T?

- (a) Mother

- (b) Moth-in-law
- (c) Sister-in-law
- (d) None of these

23. One morning after sunrise, Vimal started to walk. During this walking he met Stephen who was coming from opposite direction. Vimal watch that the shadow of Stephen to the right of him (Vimal). To which direction Vimal was facing?

- (a) East
- (b) West
- (c) South
- (d) Data inadequate

24. Hemant in order to go to university started from his house in the east and came to a crossing. The road to the left ends in a theatre, straight ahead is the hospital. In which direction is the university?

- (a) North
- (b) South
- (c) East
- (d) West

25. One morning after sunrise Nivedita and Niharika were talking to each other face to face at Dalphin crossing. If Niharika's shadow was exactly to the right of Nivedita, Which direction Niharika was facing?

- (a) North

- (b) South
- (c) East
- (d) Data is inadequate

### Mathematics

26. A plane is flying at the height of 1750 m above the lake surface. At a particular point it is exactly above the fish swimming 180 m below the lake surface. What is the vertical distance between plane and fish?

- (a) 1390 m
- (b) 1930 m
- (c) 1670
- (d) 1690 m

27. For a non-zero integer 'a', which of the following is not defined?

- (a)  $0 \div a$
- (b)  $-1 \div a$
- (c)  $(-a) \div (-1)$
- (d)  $a \div 0$

28. A boy was asked to multiply a number by - 12. By mistake, he multiplied the number by 21 and got the answer which is 99 more than the correct answer. Find the number.

- (a) 5
- (b) 8
- (c) 3
- (d) 4

29. If  $\frac{4}{5}$  part of a land worth Rs. 2,16,000, then what is the value of  $\frac{1}{8}$  part of land?

- (a) Rs. 33,750
- (b) Rs. 2,70,000
- (c) Rs. 3,03,750
- (d) Rs. 2,36,250

30. Amit completed  $\frac{1}{3}$  of his work in 2 days. In how many days he will complete  $\frac{2}{5}$  of his work, if he works at the small speed?

- (a)  $2\frac{1}{5}$
- (b)  $2\frac{2}{5}$
- (c)  $3\frac{2}{5}$
- (d) 3

31. Simplify:  $\frac{3}{1 + \frac{\frac{2}{3}}{1 + \frac{2}{3} + \frac{(8/3)}{(1-2/3)}}}$

- (a)  $2\frac{25}{31}$
- (b)  $\frac{13}{15}$
- (c)  $\frac{10}{13}$
- (d)  $\frac{5}{13}$

32. A student was asked to divide a number by 4.2. But instead of dividing it, he multiplied it by 4.2 and got the answer as 13.44. What was the correct answer?

- (a) 0.76

(b) 0.51

(c) 0.61

(d) 0.46

33. Indu got Rs.5306.25 as her pocket allowance for 6 months. Her pocket allowance per month was \_\_\_\_\_.

- (a) Rs. 884.375
- (b) Rs. 284.475
- (c) Rs. 774.375
- (d) Rs. 894.375

34. A tailor has 81.9 m cloth and he has to make 13 equal pieces out of it. What will be the length of each piece?

- (a) 6 m
- (b) 4.44 m
- (c) 6.64 m
- (d) 6.30 m

35. Sum of two complementary angles is

- (a)  $90^\circ$
- (b)  $180^\circ$
- (c)  $270^\circ$
- (d)  $360^\circ$

36. If one angle is  $\frac{2}{3}$  of its complementary angle, then find the angles.

- (a)  $36^\circ$  and  $54^\circ$
- (b)  $27^\circ$  and  $54^\circ$

(c)  $9^\circ$  and  $81^\circ$

(d)  $70^\circ$  and  $20^\circ$

37. If two lines are cut by a transversal, then which angles are always equal?

(a) Alternate angles

(b) Corresponding angles

(c) Both A and B

(d) Neither A nor B

38. Which of the following statements is **INCORRECT**?

(a) A triangle must have at least two acute angles

(b) A triangle can have all its angle acute.

(c) A right-angled triangle can be equilateral

(d) Median divides a triangle in two equal parts.

39. If AD is the median of  $\triangle ABC$ , then which of the following is definitely true?

(a)  $BD = DC$

(b)  $BD > DC$

(c)  $BD < DC$

(d)  $AB = AC$

40. If the exterior angle of a triangle is  $145^\circ$  and its interior opposite angles are equal, and then find the measure of each interior opposite angle.

(a)  $90^\circ$

(b)  $120^\circ$

(c)  $72.5^\circ$

(d)  $145^\circ$

41. Which of the following is in the standard form?

(a)  $\frac{-12}{15}$

(b)  $\frac{-125}{-225}$

(c)  $\frac{80}{-162}$

(d)  $\frac{147}{416}$

42. If the ratio of areas of two squares is 256 : 324, then find the ratio of their perimeters.

(a) 16 : 19

(b) 8 : 9

(c) 9 : 8

(d) 19 : 16

43. The perimeters of five squares are 28 cm, 40 cm, 52 cm, 72 cm and 96 cm. Find the area of the square, which is equal to the sum of areas of five squares.

(a)  $1218 \text{ cm}^2$

(b)  $72 \text{ cm}^2$

(c)  $64 \text{ cm}^2$

(d)  $82 \text{ cm}^2$

44. If the length and breadth of a rectangular plot be increased by 30% and 20%

respectively, then what is the increased percentage in its area?

- (a) 56%
- (b) 16%
- (c) 30%
- (d) 20%

45. Sona spent Rs.  $10x$  on entertainment, Rs.  $5x$  on food, Rs.  $3x$  on fare and left with Rs. 15. What was the sum of money she had at first? Express your answer in terms of  $x$ .

- (a) Rs.  $(18x - 15)$
- (b) Rs.  $(18x + 15)$
- (c) Rs.  $(15x + 18)$
- (d) Rs.  $(15 - 18x)$

46. Sonali bought 15 erasers and 10 pens. Each eraser cost Rs.  $x$  and each pen cost Rs. 5. How much did she pay altogether? Write an expression in terms of  $x$ .

- (a) Rs.  $(15x + 50)$
- (b) Rs.  $(15x - 50)$
- (c) Rs.  $(50 - 15x)$
- (d) Rs.  $(12x + 30)$

47. Priya's monthly salary is Rs. 12,000. She gives Rs. 500 to her sister Neha, Rs.  $2y$  to her mother and Rs. 120 to each of her three kids. She spends Rs.  $3y$  on shopping and saves the rest. How much does Priya save in the month? Express your answer in terms of  $y$ .

(a) Rs.  $(12650 + 5y)$  (b) Rs.  $(11140 - 5y)$

(c) Rs.  $(11615 - 5y)$  (d) Rs.  $(11200 + 5y)$

48. Express 510 as product of powers of prime factors.

- (a)  $17 \times 3 \times 10$
- (b)  $2 \times 3 \times 5 \times 17$
- (c)  $6 \times 5 \times 17$
- (d)  $15 \times 2 \times 17$

49. Which of the following options is correct?

- (a)  $2.8 \times 10^{14} < 0.28 \times 10^{13}$
- (b)  $1.5 \times 10^{14} < 2.7 \times 10^{12}$
- (c)  $9 \times 10^8 < 8 \times 10^9$
- (d)  $1.5 \times 10^{13} < 2.5 \times 10^{12}$

50. Which of the following is expressed as a product of prime factors of  $1728 \times 169$  in exponential form?

- (a)  $2^6 \times 3^3 \times 13^2$
- (b)  $4^3 \times 3^3 \times 13^2$
- (c)  $12^3 \times 13^2$
- (d)  $12^2 \times 13^3$

### General Knowledge

51. Which of the following process of heat transfer does not require medium?

- (a) Conduction
- (b) Convection
- (c) Radiation



(d) Both (b) & (c)

52. Which of the following is incorrect for thermal Radiations:-

(a) these are cm waves travelling with velocity  $3 \times 10^8 \text{ m/s}$

(b) they can travel through vacuum

(c) they cannot be reflected or reflected

(d) thermal radiations given out by a body can travel in all directions

53. Which of the following statement is/are wrong?

(a) Normally, solids expand on melting

(b) Normally, a liquid contracts on freezing

(c) There is no effect on volume during cooling or heating a gas

(d) All of the above

54. Choose the correct statement:-

(i) Two thin woolen blankets keep our body warmer than a single equally thick woolen blanket

(ii) Mud houses with thatched roofs keep warm in summer and cool in winter as compared to concrete houses

(a) Only (i)

(b) Only (ii)

(c) Both (i) and (ii)

(d) None of these

55. Three bodies A, B and C are thrown simultaneously with the same speed from the top of a building. A is thrown vertically upward, B horizontally and C vertically downward. All three on reaching the ground.

(a) have equal velocities

(b) have equal vertical displacement

(c) take equal time to reach the ground

(d) Both (a) and (b)

56. Two major sheep-rearing countries of the world are

(a) Australia and India

(b) South America and Asia

(c) Australia and New Zealand

(d) None of them

57. Match the following with the correct answers.

(A) Scouring (i) Yields silk

(B) Mulberry leaves (ii) Cleaning sheared skin

(C) Sheep (iii) Food of silk worm

(D) Cocoon (iv) Wool yielding  
Animal

(a) A-(ii), B-(iii), C-(iv), D-(i)

(b) A-(i), B-(ii), C-(iii), D-(iv)

(c) A-(iv), B-(iii), C-(ii), D-(i)

(d) A-(ii), B-(i), C-(ii), D-(iv)

58. To protect tooth decay we are advised to brush our teeth regularly. The nature of the tooth paste commonly used is

- (a) Acidic
- (b) neutral
- (c) Basic
- (d) corrosive

59. Antacids made of magnesium hydroxide and aluminum hydroxide, are used for

- (a) Relieving acidity in the stomach
- (b) For preparing bleaching powder
- (c) Both (a) & (b)
- (d) None of these

60. Chemical changes are \_\_\_\_\_.

- (a) temporary, reversible and a new substance is produced
- (b) always accompanied by exchange of light
- (c) permanent, irreversible and a new substance is produced
- (c) never accompanied by exchange of light and heat energy

61. In Indian history, the medieval period counts from

- (a) Eighth century to tenth century
- (b) Eighth century to fourteenth century
- (c) Eighth century to sixteenth century

(d) Eighth century to eighteenth century

62. The early medieval period in India is marked by the rise of

- (a) European powers
- (b) Small states in India
- (c) Sultanate period
- (d) All of the above

63. If you live in ..... India your caste identity is something that you probably learned or experienced at very young age.

- (a) Urban
- (b) North
- (c) Rural
- (d) South

64. It is the day to day atmospheric condition of the atmosphere like temperature, pressure and humidity

- (a) Weather
- (b) Climate
- (c) Ecosystem
- (d) Biosphere

65. Under Ala-ud-din Khalji, land revenue in the doab was raised to

- (a) One-tenth of the total produce
- (b) One-third of the total produce
- (c) One-half of the total produce
- (d) One-fourth of the total produce

66. The ..... tribal group which controlled large parts of the Brahmaputra valley

- (a) Gonds
- (b) Santhal
- (c) Ahoms
- (d) Banjaras

67. The caste system in India had become very rigid during .....

- (a) Ancient times
- (b) During modern times
- (c) Medieval age
- (d) Age of British rule

68. Those advertisements which promote family planning fall into the category of:

- (a) Commercial Advertisements
- (b) Social Advertisements
- (c) Political Advertisements
- (d) Cultural Advertisements

69. Gender bias or Gender inequality means:

- (a) Biological difference between the boy and the girl.
- (b) Differences of race
- (c) Unjust discrimination against girls
- (d) Some one of the male gender

70. Land and sea breezes have a ..... influence on the temperature of the coastal areas

- (a) extreme
- (b) moderating
- (c) (a) and (b) both
- (d) None of the above

71. The ..... of the Ganga-Brahmaputra Delta is a good example of mangrove trees.

- (a) Pine
- (b) Sundari tree
- (c) Oak
- (d) Willow

72. The ..... highway network in India connects the four metropolitan cities- Delhi, Mumbai, Kolkata and Chennai.

- (a) Golden Quadrilateral
- (b) Golden Triangle
- (c) Golden Rhombus
- (d) Golden Pentagon

73. During digestion of food into simple soluble compounds is called

- (a) Amino acids
- (b) Fatty acids and glycerol
- (c) Sugar
- (d) Glucose

74. Absorption of water takes place mainly in

- (a) Small intestine
- (b) Large intestine
- (c) Stomach
- (d) None of the above

75. The end products of aerobic respiration are

- (a) Only carbon dioxide
- (b) Carbon dioxide and water
- (c) Carbon dioxide, water and energy
- (d) Energy and carbon dioxide

### English

**Directions (76 – 78): Read the sentences and choose the correct alternative.**

76. We are very excited about going on a field trip!

- (a) Optative
- (b) Declarative
- (c) Interrogative
- (d) Exclamatory

77. May you attain the maximum height in your life!

- (a) Exclamatory
- (b) Interrogative
- (c) Optative
- (d) None

78. Go get my screwdriver out of the workshop for me.

- (a) Imperative
- (b) Declarative
- (c) Exclamatory
- (d) Optative

**Directions (79 – 81): Tick the right option to identify what kinds of Nouns the words in bold are.**

79. The friends promised to stay together in **sickness and death**.

- (a) Both Common
- (b) Both Collective
- (c) Both Abstract
- (d) Both Proper

80. Dresses are made of **cotton, wool and silk**.

- (a) All Collective
- (b) All Common
- (c) All Abstract
- (d) All Material

81. The school **Committee** has selected him as secretary by unanimous vote.

- (a) Proper Noun
- (b) Common
- (c) Abstract
- (d) Collective

**Directions (82 – 84): Fill in the blanks with suitable adjectives from the options.**

82. The Math paper was very \_\_\_\_\_.

- (a) simplified
- (b) correct
- (c) tough
- (d) tougher

83. Most of the South Indians are \_\_\_\_\_ in their domestic expenditure.

- (a) economic
- (b) economics
- (c) economical
- (d) most economic

84. My father is very \_\_\_\_\_ about my joining in the Banking.

- (a) enthusiasm
- (b) enthusiastic
- (c) enthusing
- (d) enthuse

**Directions (85 – 87): Fill in the blanks with the correct tense form of the verbs in the brackets.**

85. My school \_\_\_\_\_ (hold) a food-and-fun fair next month to raise money for the school building-fund.

- (a) holds
- (b) will hold
- (c) is holding
- (d) was hold

86. We \_\_\_\_\_ (go) shopping last weekend. There \_\_\_\_\_ (be) a great crowd at the shopping center. Most of the people \_\_\_\_\_(do) their New Year's shopping.

- (a) gone, was, were doing
- (b) went, were, were doing
- (c) went, is, was doing
- (d) went, was, were doing

87. That child \_\_\_\_\_ always \_\_\_\_\_ (ask) questions. Sometimes he \_\_\_\_\_ (ask) such complicated questions that I \_\_\_\_\_ (become) puzzled, too.

- (a) asked, asked, became
- (b) is, asking, asks, become
- (c) will, ask, has been asking, become
- (d) asked, asking, became

**Directions (88 – 90): In the questions below, the sentences have been given in Active/Passive voice. From the given alternatives, choose the one which best expresses the given sentence in Passive/Active voice.**

88. Who is creating this mess?

- (a) Who has been created this mess?
- (b) By whom has this mess been created?
- (c) By whom this mess is being created?
- (d) By whom is this mess being created?

89. Priyanka has written these notes.

- (a) These notes are written by Priyanka.
- (b) These notes has been written by Priyanka.
- (c) These notes have been written by Priyanka.
- (d) These notes had been written by Priyanka.

90. Do you imitate others?

- (a) Are others being imitated by you?
- (b) Are others imitated by you?
- (c) Have others being imitated by you?
- (d) Were others being imitated by you?

**Directions (91 - 93): In questions given below out of four alternatives, choose the one which can be substituted for the given sentence.**

91. One who introduces performing artists on the stage programmes.

- (a) curator
- (b) choreographer
- (c) host
- (d) compere

92. A place to rest or a sleeping room in a college or public institution.

- (a) dormitory
- (b) cloakroom
- (c) crèche
- (d) elysium

93. A person considering himself to be superior in culture and intellect.

- (a) highbrow
- (b) honorary
- (c) pessimist
- (d) connoisseur

**Directions (94 - 96): Pick out the nearest correct meaning or synonym of the words given below.**

94. CORDON

- (a) Pile of logs
- (b) Jeavy cloak
- (c) Line of people placed as guard
- (d) None of these

95. RECTIFY

- (a) To command
- (b) To correct
- (c) To destroy
- (d) To build

96. REVOKE

- (a) Repudiate
- (b) Repeal
- (c) Impute
- (d) Force

**Directions (97 - 100): Choose the right meaning of the idioms in bold letters.**

97. Whenever we went out to dinner, I had to **foot the bill**.

- (a) beyond control
- (b) pay for it
- (c) finds favour with
- (d) lower than expectation

98. You have **hit the nail on the head**.

- (a) said/done the right thing
- (b) ran away fast
- (c) scolded him for
- (d) to inflict severe punishment

99. When the politician raised hate slogans, the crowd got **out of hand**.

- (a) pay for it
- (b) beyond control
- (c) finds favour with
- (d) ran away

100. She is **in the good books** of the teacher.

- (a) said/done the right thing
- (b) finds favour with
- (c) ran away fast
- (d) good relations

### Answer Key

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