



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

Entrance Exam

Class: X

Time: 1 Hrs

Exam Mode: Online

MM: 100

**Test Paper - 1**

**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. In a certain code VILLA is coded as YKOND, then HOUSE will be coded in the same manner as

- (a) KQYTG (b) KQXUH  
(c) JPWTG (d) LRYVI

Ans: (b)

2. If 'POND' is written as 'RSTL'. HEAR may be written as

- (a) JKLZ (b) GHIZ  
(c) GHJ (d) JIGZ

Ans: (d)

**Directions (3 - 4):** Find one word which cannot be made from the letters of the given word.

3. ADULTERATION

- (a) RELATION (b) RATIO  
(c) RETURN (d) TOILET

Ans: (c)

4. RECREATION

- (a) ACTION (b) REFER  
(c) TORN (d) RATION

Ans: (b)

5. **Compete the given series.** 5, 9, 17, 29, 45...

- (a) 60 (b) 65  
(c) 70 (d) 68

Ans: (b)

6. **Compete the given series.** 3, 7, 15, 31...

- (a) 63 (b) 53  
(c) 43 (d) 73

Ans: (a)

7. How many 8s are there in the following number sequence which are immediately

followed by 5 but not immediately preceded by 3?

3 8 5 6 8 5 8 5 7 3 8 5 2 8 5 6 3 8 5 7 8 5 3 2 5 8 5

- (a) Five (b) Six  
(c) Seven (d) Four

Ans: (a)

8. Vidya is the wife of Gopi and Gopi is the brother of Akhil. Akhil is the uncle of Vijay. How is related to Vidya?

- (a) Son  
(b) Nephew  
(c) Brother - in - law  
(d) Brother

Ans: (c)

8. If Rahul says, "Ajay's mother is the only daughter of my mother", then how is Rahul related to Ajay?

- (a) Brother  
(b) Grandfather  
(c) Father

(d) Maternal Uncle

Ans: (d)

9. One morning after sunrise, Suresh was standing facing a pole. The shadow of Suresh fell exactly to his right. To which direction was he facing?

- (a) East (b) South  
(c) West (d) None of these

Ans: (b)

10. A boy rode his bicycle Northward, then turned left and rode 1 km and again turned left and rode 2 km. He found himself 1 km west of his starting point. How far did he ride northward initially?

- (a) 1 km (b) 2 km  
(c) 3 km (d) 5 km

Ans: (b)

11. Insert the missing letter or numerical value in following questions.

15	25	30
12	14	16
6	?	16

- (a) 60 (b) 16  
(c) 20 (d) 10

Ans: (c)

12. Choose the correct alternative.

**1 a, 4 b, 9 c, 16 d, 16 d, 25 e, ?**

- (a) 34 f (b) 35 f  
(c) f 36 (d) 36 f

Ans: (d)

13. Choose the odd one out of the following:

- (a) Rest (b) Test  
(c) Best (d) Guest

Ans: (d)

14. Rajesh move 12 m towards West. He turns South and moves 3 m. He again turns East and moves 8 m. How is far is he from his starting point?

- (a) 5 m (b) 7 m  
(c) 8 m (d) 9 m

Ans: (a)

15. If in a certain language KINDLE is coded as ELDNIK, how is EXOTIC coded in that code?

- (a) EOITC (b) EXOTLC  
(c) CITOXE (d) DOXITE

Ans: (c)

16. Some boys are sitting in a row. P is sitting fourteenth from the left and Q is seventh

from the right. If there are four boys between P and Q. How many boys are there in the rows?

- (a) 25 (b) 23  
(c) 21 (d) 19

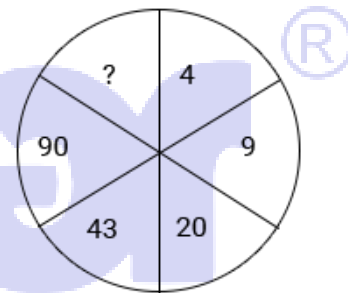
Ans: (a)

17. If 'ish lto inm' stand for 'neat and tidy', 'upr inm sen' stand for 'small but neat', 'hsm sen rso' stands for 'good but erratic', what would 'but' stands for?

- (a) inm (b) sen  
(c) upr (d) hsm

Ans: (b)

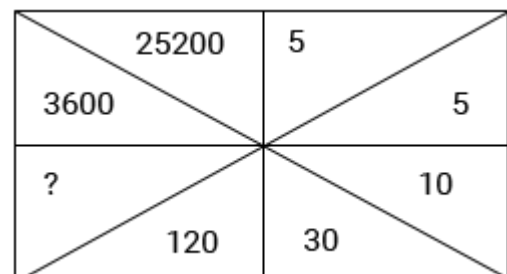
18. Insert the missing number in the given response.



- (a) 185 (b) 126  
(c) 239 (d) 145

Ans: (a)

19. Insert the missing number in the given response.



- (a) 350 (b) 320  
(c) 500 (d) 600

Ans: (d)

**Direction (21 – 24):**

(i) A, B, C, D, E and F are 6 members of a family.

(ii) One of them is doctor, one advocate, one engineer, two students and one housewife.

(iii) There are two couples in the family.

(iv) F is the father of E and is a doctor.

(v) A is a girl students and her husband is not an advocate.

(vi) B is the grandmother of D and is a housewife.

(vii) D is the sister of E.

(viii) C is the husband of B.

21. How is E related to B?

(a) Granddaughter

(b) Grandson

(c) Son/Son-in-law

(d) Grandson/Granddaughter

Ans: (d)

22. Which of the following is a couple?

(a) FB

(b) FA

(c) CF

(d) FD

Ans: (b)

23. How many ladies are there in the family?

(a) Three

(b) Two

(c) Four

(d) Three or Four

Ans: (c)

24. Who is the doctor?

(a) D

(b) E

(c) D or E

(d) F

Ans: (d)

25. Which of the following is definitely true?

(a) F is grandmother

(b) C is the father of a student

(c) B is the mother of a student

(d) F is the father of D

Ans: (d)

**Section – B (Mathematics)**

26. How many perfect squares lie between 120 and 300?

(a) 5

(b) 6

(c) 7

(d) 8

Ans: (c)

27. How many numbers less than 300 and 700 are divisible by 2, 3 and 7 together?

(a) 9

(b) 8

(c) 10

(d) 11

Ans: (a)

28. A father tells his son, "I was of your present age when you were born". If the father is 36 now, how old was the boy five years back?

(a) 13

(b) 15

(c) 17

(d) 20

Ans: (a)

29. The pair of linear equation  $kx + 2y = 5$  and  $3x + y = 1$  has unique solution if:

(a)  $k = 6$

(b)  $k \neq 6$

(c)  $k = 0$

(d)  $k$  has only value

Ans: (b)

30. What would be the C.I. obtained on an amount of Rs. 12000 at the rate of 9 p.c.p.a for 3 years?

(a) Rs.3840

(b) Rs. 354.34

(c) Rs. 3540

(d) Rs. 3640

Ans: (b)

31. A, B, C subscribe Rs. 50,000 for a business. A subscribes Rs. 4000 more than B and B Rs. 5000 more than C. Out of a total profit of Rs. 35,000, A receives:

(a) Rs. 8400

(b) Rs. 11900

(c) Rs. 13600

(d) Rs. 14700

Ans: (d)

32. A tradesman marks his goods at 20% above the cost price. He allows his customers a discount of 8% on marked price. Find out his profit %.

(a) 12%

(b) 10.4%

(c) 8.6%

(d) 8.2%

Ans: (b)

33. The difference between the simple interest on a certain sum at the rate of 10% per annum for 2 years and compound interest which is compounded every 6 months is Rs. 124.05. What is the principal sum?

(a) Rs. 10000

(b) Rs. 12000

(c) Rs. 6000

(d) Rs. 8000

Ans: (d)

34. A sum of Rs.6600 was taken as a loan. This is to be repaid in two equal annual installments. If the rate of interest be 20% compounded annually then the value of each installment is

(a) Rs. 4400

(b) Rs. 4320

(c) Rs. 2220

(d) Rs. 4420

Ans: (b)

35. Mohan bought 25 books for Rs.2, 000 and sold them at a profit equal to the selling price of 5 books. The selling price of 1 book is:

(a) Rs. 100

(b) Rs. 120

(c) Rs. 150

(d) Rs. 200

Ans: (a)

36. Ramesh and Suresh were getting the salary in the ratio 19 : 24. If the salary of each is increased by Rs. 7000, the new ratio becomes 9 : 11. What is Ramesh's present salary?

(a) 55000

(b) 48000

(c) 38000

(d) 45000

Ans: (c)

37. A man's annual income has increased by Rs 5 lakhs but the tax on income that he has to pay has reduced from 12% to 10%. He now pays Rs 10,000 more income tax. What is his increased income (in Rs lakhs)?

(a) 20

(b) 25

(c) 15

(d) 10

Ans: (b)

38. A cricketer whose bowling average is 12 runs per wicket takes 5 wickets for 26 runs in the next innings and thereby decreases his average by 0.4. The number of wickets taken by him till the last match was

(a) 64

(b) 72

(c) 80

(d) 90

Ans: (d)

39. If 15% of 40 is greater than 25% of a number by 2, the number is?

(a) 16

(b) 24

(c) 20

(d) 32

Ans: (a)

40. If 20 men can build a wall 112 meters long in 6 days, what length of a similar wall can be built by 25 men in 3 days?

- (a) 140 meters (b) 44.8 meters  
(c) 70 meters (d) 105 meters

Ans: (c)

41. A cube of side 5 cm is painted on all its faces. If it is sliced into 1 cubic centimetre cubes, how many 1 cubic centimetre cubes will have exactly one of their faces painted?

- (a) 27 (b) 42  
(c) 54 (d) 142

Ans: (c)

42. A cylinder is circumscribed about a hemisphere and a cone is inscribed in the cylinder so as to have its vertex at the centre of one end and other end as its base. The volume of the cylinder, hemisphere and the cone are respectively in the ratio:

- (a) 2: 3: 2 (b) 3: 2: 1  
(c) 3: 1: 2 (d) 1: 2: 3

Ans: (b)

43. A metallic cone having base radius 2.1 cm and height 8.4 cm is melted and moulded into a sphere. The radius of the sphere is

- (a) 2.1 cm (b) 2.2 cm  
(c) 2.3 cm (d) 2.4 cm

44. Find the ratio of the areas of the in circle & circumcircle of a square.

- (a) 1 : 4 (b) 4 : 1  
(c) 1 : 2 (d) 2 : 1

Ans: (c)

45. In how many ways can a group of 5 men and 2 women be made out of a total of 7 men and 3 women?

- (a) 64 (b) 1  
(c) 126 (d) 63

46. The number of ways of arranging 11 dissimilar things, taken 4 at a time, will one particular things always occur?

- (a) 9600 (b) 4800  
(c) 2880 (d) 1440

Ans: (c)

47. A dice is thrown once .Find the probability of a composite number

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

Ans: (c)

48. The average weight of 3 person P, Q, R is 84 kg. Another person who is S joins the group and now the present average of the group becomes 80 kg. If another person T, whose weight is 3 kg more than that of S, replaces P then the average weight of Q, R, S, and T becomes 78 kg. Find the weight of P.

- (a) 70 kg (b) 72 kg  
(c) 79 kg (d) 78 kg

Ans: (c)

49. If we choose four numbers, the average of the first three will be 16 and that of last three is 15. If the last number is 18, the first number will be

- (a) 20 (b) 21  
(c) 23 (d) 25

Ans: (b)

50. The average of 50 members is 38. If the two numbers, 45 and 55 are discarded the average of the remaining numbers will become

- (a) 36 (b) 36.5

(c) 37

(d) 37.5

Ans: (d)

### Section: C (General Knowledge)

51. Which element is used in the synthesis of proteins?

(a) Hydrogen

(b) Oxygen

(c) Nitrogen

(d) Carbon dioxide

Ans: (c)

52. Blood consist of what fluid medium?

(a) Lymph

(b) Platelets

(c) Plasma

(d) All of these

Ans: (c)

53. The functional unit of environment is

(a) Ecosystem

(b) Nitrogen

(c) Carbon

(d) Oxygen

Ans: (a)

54. Which of the following is terrestrial ecosystem?

(a) A natural forest

(b) A lake

(c) A pond

(d) An aquarium

Ans: (a)

55. The number of atoms of oxygen present in

(a) 3

(b) 4

(c) 2

(d) 1

Ans: (a)

56. Which one of the following is acidic?

(a) Lemon juice

(b) Tomatoes

(c) Milk

(d) All of these

Ans: (d)

57. Which one of the following will turn red litmus blue?

(a) Vinegar

(b) Baking soda solution

(c) Lemon juice

(d) Soft drinks

Ans: (b)

58. The by product of soap is

(a) isoprene

(b) glycerol

(c) butane

(d) ethylene glycol

Ans: (b)

59. Covalent compounds

(a) have high melting and boiling point

(b) are mostly soluble in water

(c) are formed between atoms of metals and non-metals

(d) are formed by the sharing of electrons in the bonding atoms.

Ans: (d)

60. When a magnesium ribbon is burnt in air, the ash formed is

(a) black

(b) white



(c) yellow

(d) pink

Ans: (b)

61. Which of the following metals is present in the anode mud during the electrolytic refining of copper?

(a) Sodium

(b) Aluminium

(c) Gold

(d) Iron

Ans: (d)

62. What is the rate of flow of electric charges called?

(a) Electric potential

(b) electric conductance

(c) Electric current

(d) none of these

Ans: (c)

63. A fuse wire is inserted in a?

(a) Live wire

(b) In the neutral wire

(c) In the earth wire

(d) May be connected in any line.

Ans: (a)

64. Which of the following Railway Line has been dedicated to Nation by Prime Minister Narendra Modi

(a) Srinagar to Leh

(b) Jammu to Uri

(c) Jammu to Srinagar

(d) Udhampur to Katra

Ans: (d)

65. Who among the following rulers held a religious assembly at Prayag every five years?

(a) Ashoka

(b) Kanishka

(c) Harshavardhana

(d) Chandragupta Vikramaditya

Ans: (c)

66. Buddhism & Jainism were totally against

(a) Good old rituals

(b) Supremacy of Brahmins

(c) The caste system

(d) The Vedas

Ans: (a)

67. The first Indian ruler to organize Haj pilgrimage at the expense of the state was :

(a) Alauddin Khilji

(b) Feroz Tughlaq

(c) Akbar

(d) Aurangzeb

Ans: (a)

68. Which of the following forts was not built by Akbar?

(a) Gwalior Fort

(b) Lahore Fort

(c) Allahabad Fort

(d) Agra Fort

Ans: (a)

69. Sher Shah's real name was:

(a) Hemu

(b) Faizi

(c) Bahadur



(d) Farid

Ans: (d)

70. Which country is called the 'Sugar Bowl of the World'?

(a) Cuba

(b) India

(c) Burma

(d) Norway

Ans: (a)

71. Which of the following is an event in the Winter Olympics?

(a) Biathlon

(b) Triathlon

(c) Pentathlon

(d) Decathlon

Ans: (a)

72. The Dal Lake in \_\_\_\_\_ is well - known for its famed houseboats, known as Shikaras.

(a) Himachal Pradesh

(b) Jammu and Kashmir

(c) Uttar Pradesh

(d) Haryana

Ans: (b)

73. Which one of the following states is the largest producer of coffee?

(a) Karnataka

(b) Kerala

(c) Assam

(d) Arunachal Pradesh

Ans: (a)

74. How many members were from Chief Commissioner Provinces?

(a) 4

(b) 5

(c) 2

(d) 6

75. How many members is presently in Rajya Sabha?

(a) 545

(b) 250

(c) 345

(d) 245

Ans: (b)

### Section: D (General English)

**Directions (76 - 78):** In the question below, out of the four alternatives, choose the one which can be substituted for the given words/sentence.

76. Extreme old age when a man behaves like a fool

(a) Imbecility

(b) Senility

(c) Dotage

(d) Superannuation

Ans: (c)

77. That which cannot be corrected

(a) Unintelligible

(b) Indelible

(c) Illegible

(d) Incurable

Ans: (d)

78. The study of ancient societies

(a) Anthropology

(b) Archaeology

(c) History

(d) Ethnology

Ans: (b)

**Directions (79 - 80):** In these questions, a part of the sentence is bold which may need improvement. Alternatives are given at, (a), (b) and (c) below, one of which may be better option. In case no improvement is required, your answer is (d)

79. The workers are **hell bent at getting** what is due to them.

- (a) hell bent on getting
- (b) hell bent for getting
- (c) hell bent upon getting
- (d) No improvement

Ans: (c)

80. When it was feared that the serfs might go too far and gain their freedom from serfdom, the protestant leaders joined the princes **at crushing** them.

- (a) into crushing
- (b) in crushing
- (c) without crushing
- (d) No improvement

Ans: (b)

**Directions (81 - 83):** In these questions, choose the word opposite in meaning to the given word.

81. ENORMOUS

- (a) Soft
- (b) Average
- (c) Tiny
- (d) Weak

Ans: (c)

82. COMMISSIONED

- (a) Started

(b) Closed

(c) Finished

(d) Terminated

Ans: (d)

83. ARTIFICIAL

- (a) Red
- (b) Natural
- (c) Truthful
- (d) Solid

Ans: (b)

**Direction (84 - 86):** You have nineteen brief passages with 3 questions following each passage. Read the passage carefully and choose the best answer to each question out of the four alternatives.

#### Passage <sup>®</sup>

But I did not want to shoot the elephant. I watched him beating his bunch of grass against his knees, with the preoccupied grandmotherly air that elephants have. It seemed to me that it would be murder to shoot him. I had never shot an elephant and never wanted to. (Somehow it always seems worse to kill large animal.) Besides, there was the beast's owner to be considered. But I had got to act quickly. I turned to some experienced-looking Burmans who had been there when we arrived, and asked them how the elephants had been behaving. They all said the same thing; he took no notice of you if you left him alone, but he might charge if you went too close to him.

**84.** The phrase 'Preoccupied grandmotherly air' signifies

- (a) being totally unconcerned
- (b) pretending to be very busy
- (c) a very superior attitude

(d) calm, dignified and affectionate disposition

Ans: (d)

85. From the passage it appears that the author was

- (a) an inexperienced hunter
- (b) kind and considerate
- (c) possessed with fear
- (d) a worried man

Ans: (b)

**Direction (86 - 90):** In the following the questions choose the word which best expresses the meaning of the given word.

86. CORPULENT

- (a) Lean
- (b) Gaunt
- (c) Emaciated
- (d) Obese

Ans: (d)

87. BRIEF

- (a) Limited
- (b) Small
- (c) Little
- (d) Short

Ans: (d)

88. EMBEZZLE

- (a) Misappropriate
- (b) Balance
- (c) Remunerate
- (d) Clear

Ans: (a)

89. VENT

(a) Opening

(b) Stodge

(c) End

(d) Past tense of go

Ans: (a)

90. AUGUST

- (a) Common
- (b) Ridiculous
- (c) Dignified
- (d) Petty

Ans: (c)

**Direction (91 - 95):** Pick out the most effective word(s) from the given words to fill in the blank to make the sentence meaningfully complete.

91. Fate smiles \_\_\_\_\_ those who untiringly grapple with stark realities of life.

- (a) with
- (b) over
- (c) on
- (d) round

Ans: (c)

92. The miser gazed \_\_\_\_\_ at the pile of gold coins in front of him.

- (a) avidly
- (b) admiringly
- (c) thoughtfully
- (d) earnestly

Ans: (a)

93. Catching the earlier train will give us the \_\_\_\_\_ to do some shopping.

- (a) chance
- (b) luck

- (c) possibility
- (d) occasion

Ans: (a)

94. I saw a \_\_\_\_\_ of cows in the field.

- (a) group
- (b) herd
- (c) swarm
- (d) flock

Ans: (b)

95. The grapes are now ..... enough to be picked.

- (a) ready
- (b) mature
- (c) ripe
- (d) advanced

Ans: (c)

**Direction (96 - 100):** Today most businessmen are very worried. To begin with, they are not used to competition. In the past they sold whatever \_\_\_\_ (1) \_\_\_\_ produced at whatever prices they chose. But \_\_\_\_ (2) \_\_\_\_ increasing competition, customers began to \_\_\_\_ (3) \_\_\_\_ and choose. Imports suddenly became \_\_\_\_ (4) \_\_\_\_ available and that too at cheaper \_\_\_\_ (5) \_\_\_\_.

- 96. (a) it
- (b) he
- (c) they
- (d) we

Ans: (c)

- 97. (a) with
- (b) by
- (c) after
- (d) from

Ans: (a)

- 98. (a) buy
- (b) take
- (c) pick
- (d) want

Ans: (c)

99. (a) hardly

- (b) easily
- (c) frequently
- (d) conveniently

Ans: (b)

- 100. (a) costs
- (b) returns
- (c) dividend
- (d) prices

Ans: (d)

