

**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO**



**ENTRANCE EXAMINATION - IX**  
**DEFENCE CAREER ACADEMY,**  
**AURANGABAD.**

**As an ISO 9001 : 2008 - Certified**

**ENT : 2016**

**SR. NO.**

**TIME ALLOWED : 1.30 HOURS**

**TOTAL MARKS : 100**

**QUESTION - BOOKLET**

**GENERAL INSTRUCTIONS**

\* *Read instructions given below carefully for solving this question paper.*

1. This question paper has 90 questions. Each question carries 1 mark.
2. **Last** two descriptive questions are **compulsory**. They carry 5 marks each.
3. There is a separate answer-sheet to write the answers. Each question has four options. Options are ABCD out of the four any one of the options is the correct answer. Shade the correct answer in the answer-sheet.

**Example :** If the correct answer for Q. NO 6. is **B**, then record your answer as follows:

**Question No. 6**           
                                 **A   B   C   D**

4. Answer recorded in any other form will not be considered. Such answers will be marked 'zero'.

**Example :**                           
                                 **A   B   C   D**

5. Answer should be written using a pencil only. Blue or black ball pen or ink-pen will not be accessed.
6. Answers once marked cannot be changed or rewritten.
7. Any kind of cancellation or answers recorded marked in more than one circle will not be considered.
8. The exam has limited time, in case you are not able to solve a question, kindly solve the next question. If time permits you can try to solve the unsolved questions.
9. Essay must be written at the back portion of the Answer paper.
10. Result of this examination will be displayed on the Notice Board.
11. Do not write or mark anything on the question paper.

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**Q. 1 to 10 : Read the following passage carefully and answer the questions given at the end of it by choosing correct alternative answer.**

**PASSAGE - I**

The last half of my life was spent at one of the painful epochs of human history, during which the world seemed to be getting worse; where past victories which had seemed to be definitive have turned out to only temporary. When I was young, victorian optimism was taken for granted. It was thought that freedom and prosperity would spread gradually throughout the world through an orderly process, and it was hoped that cruelty, tyranny, and injustice would continually diminish. Hardly anyone was haunted by the fear of great wars. Hardly anyone thought of the nineteenth century as a brief interlude between past and future barbarism.

1. The author felt sad about the latter part of his life because
  - a) He was nistalgic about his childhood
  - b) The world had not become prosperous
  - c) The author had not won any further victories
  - d) The world was painfully disturbed during that period of time
2. The victories of the past
  - a) Brought permanent peace and prosperity
  - b) Ended cruelty, tyranny and injustice
  - c) Proved to be temporary events
  - d) Filled men with a sense of pessimism
3. The word 'definitive' used in the passage means :
  - a) Defined
  - b) Final
  - c) Temporary
  - d) Incomplete
4. During the Victorian age people believed that:
  - a) Strife would increase
  - b) There would be unlimited freedom
  - c) Wars would be fought on a bigger scale
  - d) Peace would prevail and happiness would engulf the whole world
5. "A brief interlude between past and future barbarism" can be interpreted as:
  - a) A short period of time between past and future acts of savagery
  - b) A short interlude between two great events
  - c) An interval between cruel wars
  - d) A dramatic performance during wars



**Instruction : Against each key word are given some suggested meanings. Choose the word or phrase which is nearest in meaning to the key word.**

16. Histrionic  
a) hypersensitive  
b) overdramatic  
c) historically important  
d) inactive
17. Fiasco  
a) festival  
b) failure  
c) ridiculous plan  
d) misfortune
18. Amoral  
a) loving  
b) immoral  
c) uninvolved  
d) highly ethical
19. Virile  
a) athletic  
b) pompous  
c) manly  
d) boastful
20. Ameliorate  
a) to appease  
b) to make excuses  
c) to humiliate  
d) to improve

**Instruction : Pick out the word opposite or nearly so in the meaning of the given words.**

21. Genuine  
a) rotten  
b) bogus  
c) unsound  
d) impure
22. Militant  
a) religious  
b) spiritual  
c) combative  
d) pacifist
23. Unruly  
a) curious  
b) obedient  
c) intelligent  
d) indifferent
24. Ruthless  
a) militant  
b) might  
c) majestic  
d) merciful
25. Erudite  
a) ignorant  
b) unknown  
c) illiterate  
d) unfamiliar

\* **Instruction : In the section 5 sentence are given. Each sentence has three parts. Read each sentence to find out whether there is an error. If you find and one of the parts (a, b, c), then the number of that part is your answer. If a sentence has no error, then your answer is 'd' which stands for "No error".**

26. My answer (a) / is different (b) / than yours. (c) / No error (d).
27. The chairman welcomed (a) / all the guests and (b) / gave an outline of the activities performing by the company. (c) / No error (d).
28. Why did people (a) / so much annoyed even at little provocation (b) / is a matter of investigation (c) / No error (d)
29. The success of our efforts depend upon the (a) / number of people who (b) / actually use the new methods. (c) / No error (d)
30. You should inform (a) / your superiors about all those events which is (b) / directly related to your work. (c) / No error (d)
31. Value of  $-\sqrt{25}$   
a) 5  
b) -5  
c)  $\pm 5$   
d)  $-\sqrt{5}$

32. The non - terminating recurring form of the number 0.0002 is  
 a)  $2.0\bar{0}$                       b)  $0.2\bar{0}$                       c)  $0.0002\bar{0}$                       d)  $0.0002\bar{0}$
33. Area of a parallelogram = .....  
 a) Sum of parallel sides  $\times$  height                      b) base  $\times$  height  
 c) side<sup>2</sup>                      d) height  $\times$  height
34.  $(a+b)^3 = [a^3 + b^3 + 3ab(a+b)]$   
 a) True                      b) False                      c) a & b both                      d) None of these
35. Area of triangle = .....  
 a) base  $\times$  height                      b)  $2$  base  $\times$  height  
 c)  $\frac{1}{2} \times$  base  $\times$  height                      d) base  $+ \frac{1}{2}$  height
36.  $\sqrt[3]{1} = ?$   
 a) 0                      b) 3                      c)  $3 \times 1$                       d) 1
37. Area of a trapezium = .....  
 a)  $\frac{1}{2} \times$  base  $\times$  height  
 b)  $\frac{1}{2} \times$  sum of lengths of parallel sides  $\times$  height  
 c)  $\frac{1}{2} \times$  product of lengths of parallel sides  $\times$  height  
 d)  $\frac{1}{2} \times$  product of lengths of parallel sides  $+$  height
38. Area of the circle = .....  
 a)  $2 \pi r$                       b)  $\pi r^2$                       c)  $2 \pi r^2$                       d)  $2 \pi^2 r$
39.  $(a + b)^2 = \dots\dots\dots + 2ab + b^2$   
 a)  $(ab)^2$                       b)  $a^2$                       c)  $2a^2b$                       d)  $b^2$
40.  $(a-b)^2 = a^2 - 2ab + \dots\dots$   
 a)  $b^2$                       b)  $a^2$                       c)  $ab$                       d)  $ab^2$
41.  $(a + b + c)^2 = \dots\dots\dots$   
 a)  $a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$                       b)  $a + b + c + 2ab^2 + 2bc^2 + 2ca^2$   
 c)  $a^2 + b^2 + c + 2ab + 2bc + 2ca$                       d)  $a^2 + b^2 + c^2 + 2ab^2 + 2bc^2 + 2ca^2$
42.  $[(4)^2]^3 = ?$   
 a)  $4^5$                       b)  $4^6$                       c)  $4^1$                       d)  $4^{-1}$
43.  $(a + b)^3 = \dots\dots\dots$   
 a)  $a^3 + b^3 + 2ab(a + b)$                       b)  $a^3 + b^3 + 3ab(a + b)$   
 c)  $a^2 + b^2 + 3ab(a + b)$                       d)  $a^3 + b^3 + 3ab(a + b)^2$

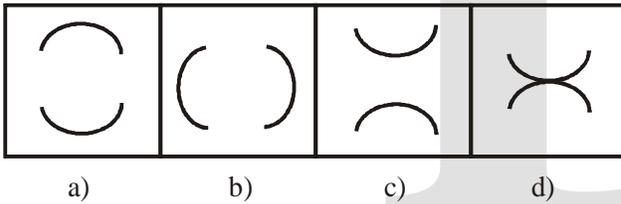
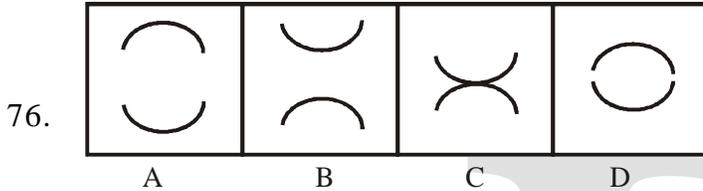


59.  $(-38988)y^2 \div (-114)$   
 a)  $-342y^2$                       b)  $-343y^2$                       c)  $342y^3$                       d)  $\pm 342y^3$
60. How many litres of water will flow through a tap in two and half hours, if 25 ml water flows through it in one second?  
 a) 450                              b) 4500                              c) 225                              d) 3750
61. Biodiversity is important for the ..... of living things.  
 a) existence                      b) decomposition                      c) protection                      d) growth
62. The newton is the unit of .....  
 a) Velocity                      b) Pressure                      c) Mass                      d) Force
63. .... is natural fibre.  
 a) Nylon                      b) Rayon                      c) Cotton                      d) Polythene
64. .... metal exist in the liquid state.  
 a) Zinc                      b) Silver                      c) Bromine                      d) Mercury
65. .... is least polluting fuel for vehicle  
 a) CNG                      b) Petrol                      c) Diesel                      d) Coat
66. Dead vegetation Convert into coal by .....  
 a) Sublimation                      b) Decomposition                      c) Carbonisation                      d) Vapourisation
67. The process of ..... ensure continuity of life on the earth  
 a) photosynthesis                      b) Reproduction  
 c) Respiration                      d) excretion
68. The unit of loudness of sound is .....  
 a) Joule                      b) Erg                      c) Decibel (dB)                      d) Newton
69. .... is a good conductor.  
 a) Wood                      b) Rubber                      c) Plastic                      d) Copper
70. Plants take ..... from the soil.  
 a) Mineral                      b)  $CO_2$                       c) Sunlight                      d)  $O_2$
71. Malaria caused by .....  
 a) Virus                      b) protozoa                      c) Bacteria                      d) Fungi
72. .... is a nitrogen fixing algae.  
 a) Yeast                      b) Volvox                      c) Nostoc                      d) Rhizobium
73. .... is a main component of coal.  
 a) Nitrogen                      b) Oxygen                      c) Hydrogen                      d) Carbon
74. .... is a synthetic fibre.  
 a) Cotton                      b) Wool                      c) Silk                      d) Polyester

75. .... metal is constituent of haemoglobin.

- a) Potassium                      b) Zinc                      c) Sodium                      d) Iron

**Direction :** Each of the following problems, contains four Problem Figures marked A,B,C, and D and five Answer Figures marked (a), (b), (c), (d). Select a figure from amongst the Answer Figure which will continue the same series as given in the Problem figures.



77. 2, 12, 36, 80, ?

- a) 240                      b) 81                      c) 150                      d) 100

**Direction :** In the following series, which letters should replace the blank space or question mark?

78. ba?abaa?b?aa

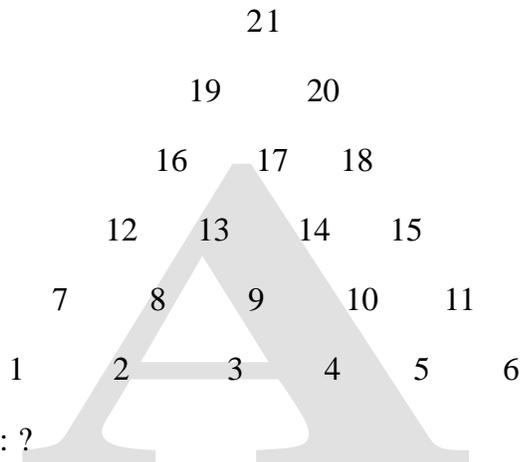
- a) bab                      b) aaa                      c) bbb                      d) baa

**Direction :** In each of the following letter series, some of the letters are missing which are given in that order as one of the alternatives below it. Choose the correct alternative.

79. b \_ b \_ bb \_ \_ bbb \_ bb \_ b

- a) bbbba                      b) bbaaab                      c) ababab                      d) aabaab

**Direction :** Study the pyramid given below and answer questions upon it:



80. 2, 13, 4 : 10, 11 :: 1, 12, 3 : ?

- a) 4, 5                      b) 5, 6                      c) 9, 10                      d) 8, 9

**Direction : In the following question find the correct alternative to replace the question mark:**

81. **Question figures :**

**Answer figures :**

a)                      b)                      c)                      d)

82. Anuj started walking positioning his back towards the sun. After sometime, he turned left, then turned right and then towards the left again. In which direction is he going now?

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

83. It was Monday on the first day of the year 1998. What day was on 8th January 1998?

- a) Tuesday                      b) Wednesday                      c) Thursday                      d) Monday

**Direction : Qs. 84 and 85 : In a month, a sports competition started on the first Tuesday and ended on the fourth Tuesday, the 25th. Based on this data, answer the questions below :**

84. When did the sports competition begin ?

- a) 5                      b) 3                      c) 2                      d) 4

85. What was the day on the 13th?

- a) Thursday                      b) Saturday                      c) Wednesday                      d) Friday

**Direction : Identify the wrong term in the given series:**

86. (69-96) (48-84) (37-73) (26-63)

- a) (37-73)                      b) (69-96)                      c) (26 - 63)                      d) (15-51)

**Direction : If the above alphabets are arranged in an ascending or descending order, which will be the middle ?**

87 . B, D, G, K, P, V, ?

- a) Z                      b) A                      c) B                      d) C

**Direction : Find the missing term in the series :**

88. LLLKKK, LLKKKL, LLKKLL, ?

- a) LLLKKK                      b) KKKLLL                      c) KKLLKL                      d) KLLLKK

**Direction : Knowledge of blood relations.**

89. A family has a man, his wife, their four sons and their wives. The family of every son also has 3 sons and one daughter. Find out the total number of male members in the whole family.
- a) 4                                      b) 8                                      c) 12                                      d) 17
90. Pointing towards a boy, Veena said, "He is the son of my grandfather." How is that boy related to Veena?
- a) Uncle                                      b) Brother                                      c) Cousin                                      d) Data inadequate

**\* Descriptive question (Compulsory)**

- I) Write an essay on any one of the following. **10 M**
- a) Mobile Games : Affecting children
- b) My favourite Sport's man

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