

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



**ENTRANCE EXAMINATION - VIII<sup>TH</sup>**  
**DEFENCE CAREER ACADEMY,**  
**AURANGABAD.**

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

**ENT : 2013**

**SR. NO.**

**TIME ALLOWED : 2.00 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 accepted.
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.

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

**Q.1 to 3: Read the following passage carefully and answer the questions given at the end of it by choosing correct alternative answer.**

**PASSAGE**

Without causing any pollution in the form of suffocating fumes and earsplitting explosions, the bicycle converts energy into motion and, that too, more efficiently than any other machine. For the first time since the appearance of motor cars, the bicycle is seen today as a more attractive means of transport. Improved technology, combined with heightened interest in the environment, the outdoors and physical fitness, have transformed the image of bicycling in Europe and America into a fashionable and healthy activity. Cycling is a form of sport that enables people to rediscover nature. The ATB (all-terrain-bike) is used in riding to the top of mountains and in cross-country races. Riding an ATB is a great way of keeping fit, and it is quieter than walking. The cyclist hears no sound of the tyres on the path and is free to watch the flora and fauna while having a joyride with friends.

1. The image of the bicycle has changes mainly because of
  - a) improved technology and fashion
  - b) interest in environment and physical fitness
  - c) physical fitness and fashion
  - d) its noiselessness & smoke free operation
2. The bicycle is a machine which
  - a) Converts physical energy into motion easily
  - b) require as much energy as a motor car.
  - c) is not as good as a motor car for sight seeing
  - d) is not in fashion these days.
3. Riding on ATB is quieter than walking because
  - a) its tyres produce no sound while moving along the path
  - b) its tyres do not touch the ground
  - c) it has a very slow speed
  - d) walking shoes are noisy

**Q.4. to 6 : Read the following poem carefully and answer the questions choosing the correct option .**

If I held a bird in hand  
Soft as ever could be  
I'd listen to her racing heart  
And set her forever free.  
No joy can ever be as great  
Than the freedom of her song  
No matter she may never return  
And take her song along.  
Still I love to hold few birds  
And keep on setting them free  
Or feed them if they choose to stay  
And share their joys with me.

4. What is important ?
  - a) Love
  - b) Respect
  - c) Duty.
  - d) Freedom.

5. No joy can ..... be as great  
 a) ever                      b) never                      c) so ever                      d) great
6. Write the rhyming word for 'be'  
 a) free                      b) me                      c) song                      d) stay

**Instruction : Fill in the blanks with suitable alternative.**

7. You must Control Your anger  
 a) Common Noun      b) abstract Noun      c) Proper Noun      d) Collection Noun
8. I under took a Critical work  
 a) Verb                      b) adjective                      c) adverb                      d) noun
9. She decided to visit Kashmir.  
 a) noun                      b) adjective                      c) adverb                      d) pronoun
10. Don't eat fast.  
 a) adverb                      b) verb                      c) adjective                      d) noun
11. Yuvraj is good ..... singing.  
 a) for                      b) at                      c) to                      d) with
12. Shankar looked ..... Suman as goddess.  
 a) after                      b) upon                      c) about                      d) at
13. Ramchandra ..... Now.  
 a) was working                      b) working                      c) is working                      d) worked
14. Please ..... there.  
 a) go                      b) went                      c) is going                      d) gone

**Instruction : Find the word with correct spellings.**

15. a) Marriage                      b) Mayrage                      c) Merrage                      d) Myrage
16. a) Attand                      b) Attend                      c) Atend                      d) Aatend

**Instruction : Give the Synonyms of :**

17. He has *insidiously* wormed his way into her affetions.  
 a) in a polite manner      b) in a secret manner      c) in ugly way                      d) in a forceful manner
18. The *inexorable* demands of his workers brought the company to a closure.  
 a) unreasonable                      b) relentless                      c) monetary                      d) violent
19. *Sporadic* rise in this temperature has caused us much worry.  
 a) Frequent                      b) Irksome                      c) Irregular                      d) Scattered
20. The *benevolence* of the God of Rain has seen a very successful monsoon this year too.  
 a) vision                      b) morbidity                      c) kindness                      d) ill-will

**Instruction : Give the Antonyms of :**

21. I think would be a *quixotic* project for me.  
 a) wasteful                      b) profitable                      c) fantastic                      d) practical

22. In the interest of one's own reputation one should avoid **ostentation** while entertaining friends.  
 a) innocence                      b) purity                      c) simplicity                      d) miserliness
23. Everyone wanted to be the **harbinger** of the good news to the king.  
 a) precursor                      b) tender                      c) opponent                      d) follower
24. Their team bore **delinquent** participants.  
 a) reverent                      b) uncivil                      c) quarrelsome                      d) law abiding

**Instruction : Find the error in one of the part of the sentence.**

25. The peoples      of this village      have decided      to build a temple.  
 (a)                      (b)                      (c)                      (d)
26. My mother      had been working      in      an university.  
 (a)                      (b)                      (c)                      (d)
27. Why were      your uncle      angry with      me?  
 (a)                      (b)                      (c)                      (d)
28. The children      in the garden      was playing      hide and seek  
 (1)                      (2)                      (3)                      (4)
29. Neither she      nor he      am      at fault  
 (1)                      (2)                      (3)                      (4)
30. One of the      football player      was      badly injured.  
 (1)                      (2)                      (3)                      (4)
31. Find the value of :  $\left(\frac{1}{8}\right)^2$   
 a)  $\frac{1}{8}$                       b)  $\frac{2}{64}$                       c)  $\frac{1}{64}$                       d)  $\frac{64}{1}$
32. Find :  $2x^0 = \square$   
 a) 1                      b) 4                      c) 0                      d) 2
33. Multiply :  $5x^2 \times 3x$   
 a)  $15x$                       b)  $15x^2$                       c)  $15x^3$                       d) 15
34. Simplify :  $m^2 + 4mn - m^2 - mn$   
 a)  $3mn$                       b)  $5mn$                       c)  $m^2 + 3mn$                       d)  $5mn$
35. Solve :  $4x - 7 = 21$   
 a)  $x = 4$                       b)  $x = 7$                       c)  $x = -7$                       d)  $x = -4$
36. Find simple interest : Rs. 6000 at 9% for 2 years.  
 a) 90 Rs.                      b) 102 Rs.                      c) 100 Rs.                      d) 1080 Rs.
37. Two angles are said to be ..... if their sum is  $90^\circ$ .  
 a) supplementary                      b) Complementary                      c) Right                      d) Both (a) & (b)
38. Complete :  $(a+b)^2 = a^2 + \dots + b^2$   
 a)  $2ba$                       b)  $2ab$                       c)  $2abc$                       d) both (a) & (b)

39. Simplify :  $25^2a + 10a + 1$   
a)  $(5a + 1)(5a + 1)$  b)  $(10a + 1)(5a + 1)$   
c)  $(5a + 1)$  d) None of these
40. The sum of the measures of the angles in a linear pair is .....  
a)  $180^\circ$  b)  $108^\circ$  c)  $360^\circ$  d)  $270^\circ$
41.  $(a^m)^n = \dots\dots\dots$   
a)  $a^{m+n}$  b)  $a^{m-n}$  c)  $a^m$  d)  $a^{mn}$
42. Natural numbers = { ..... }  
a)  $\{0, 1, 2, 3, 4, \dots\}$  b)  $\{\dots, 3, -2, \dots, 0, 1, 2, \dots\}$   
c) both (a) & (b) d)  $\{1, 2, 3, 4, \dots\}$
43. Prout of two numbers = .....  
a)  $\frac{G.C.D}{L.C.M}$  b) G.C.D.  $\times$  L.C.M. c) G.C.D. - L.C.M. d) G.C.D + L.C.M.
44. When a number is divisible by 2 & 3, then that number is also divisible by .....  
a) Divisibility by 6 b) Divisibility by 9 c) Divisibility by 11 d) both (a) & (b)
45. The angle inscribed in a semi circle is a .....  
a)  $180^\circ$  b)  $360^\circ$  c)  $60^\circ$  d)  $90^\circ$
46. Total surface area of a cube = .....  
a)  $6(\text{side})^2$  b)  $2(\text{side})$  c)  $4(\text{side})$  d)  $(\text{side})^2$
47. All radii of the same circle are .....  
a) unequal b) equal c) both (a) & (b) d) can't ray
48. The longest chord of a circle is the ..... of the circle.  
a) chord b) radius c) diameter d) none of above
49. The standard unit of ..... are sq.cm & sq.m.  
a) both (c) & (d) b) square c) volume d) Area
50. The common factor of  $6ab^2$ ,  $18a^2b$  is .....  
a)  $ab$  b)  $6ab^2$  c)  $6a$  d)  $6ab$
51. The side of a square is 6cm  $\therefore$  Area of the square = .....  
a)  $12\text{cm}^2$  b)  $36\text{cm}^2$  c)  $24\text{cm}^2$  d)  $36\text{cm}^2$
52.  $m \angle A = 65^\circ$ ,  $m \angle b = 65^\circ$ ,  $\therefore \angle A \dots\dots \angle B$   
a) 7 b)  $\angle$  c) = d)  $\neq$
53. Simplify :  $\frac{14}{9} + \frac{4}{9} = \dots\dots$   
a)  $\frac{18}{9}$  b)  $\frac{18}{81}$  c) 2 d)  $\frac{18}{18}$
54. Express in the equation form :  
twice a number increased by 2 gives 14  
a)  $2x = 2 + 14$  b)  $3x + 14 = 2$  c)  $2x + 14 = 2$  d)  $2x + 2 = 14$

55. A number divided by 6 gives 4

a)  $\frac{6}{x} = 4$

b)  $\frac{4}{6} = x$

c)  $\frac{x}{6} = 4$

d)  $\frac{4}{x} = 6$

56. Simplify :  $\frac{4}{7} + \frac{16}{14}$

a)  $\frac{24}{14}$

b)  $\frac{20}{21}$

c)  $\frac{17}{23}$

d) None of these

57. Sum of angles of a quadrilateral is .....

a)  $180^0$

b)  $90^0$

c)  $360^0$

d)  $170^0$

58. Multiply :  $(x - 2) (x + 2)$

a)  $x^2 - 4$

b)  $x^2 + 4$

c)  $x^2 - 2$

d)  $x^2 - 1$

59. Factorise :  $16xy^2$

a)  $2 \times 2 \times 2 \times 2 \times x \times y \times y$

b)  $4 \times 4 \times x \times y \times y$

c)  $8 \times 2 \times x \times y^2$

d)  $x \times y^2 \times 16$

60. Simplify :  $\frac{16}{7} - \frac{10}{7}$

a)  $\frac{6}{7}$

b)  $\frac{7}{6}$

c)  $\frac{16}{7}$

d)  $\frac{10}{7}$

61. Read the following sentences and answer the question :

1. It rained cats and dogs yesterday.

2. I always enjoy a cat-nap after lunch.

3. Beware of the cat burglar at night

4. Micky is the name of our cat.

a) B

b) D

c) C

d) A

62. 3, 30, 33, 5, 10 How many numbers in the above sequence are divisible by 3 ?

a) Five

b) Four

c) Three

d) Two

**Direction : ABCDE FGHIJ KLMNO PQRST UVWXY**

63. Which is the letter adjacent to J but not to L ?

a) H

b) I

c) K

d) M

64. Find the odd man out :

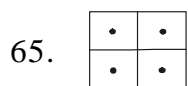
a) Table tennis

b) Boxing

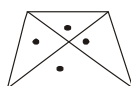
c) Carrom

d) Cricket

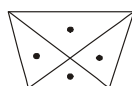
**Direction : Find the odd figure out of the given alternatives.**



a)



b)



c)



d)

**Direction : Find the odd man out from the question given below :**

66. a) 8465

b) 7654

c) 3456

d) 4321

**Direction : Find out the number which will occur at the place of question mark, in each series given below:**

67. 9, 16, 25, 36?

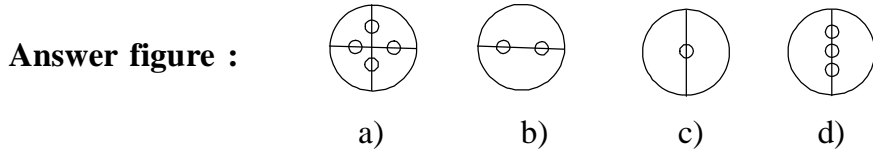
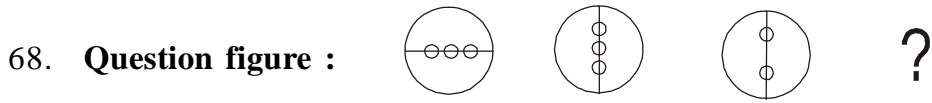
a) 45

b) 54

c) 56

d) 49

**Direction : Find the missing figure in the series given below :**



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

69. + - □ ∠ × \ ?

- a) ◇ □                      b) □ ◡                      c) ÷ -                      d) - +

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

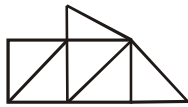
70. 2, 5, 11, 17, 19

- a) 19                      b) 5                      c) 2                      d) 17

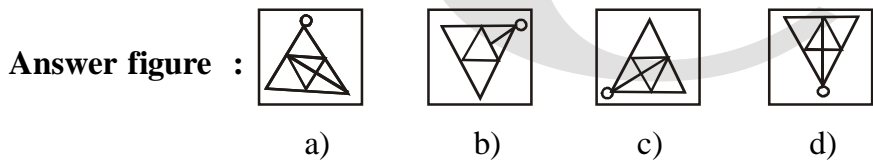
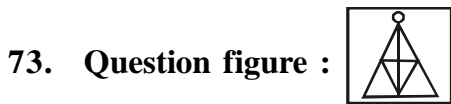
71. Ramesh has Rs. 5 more than Sadu. Sadu has Rs. 3 more than Kavita and Rs. 7 more than Suresh. so who has the least amount from the given alternative?

- a) Ramesh                      b) Sadu                      c) Kavita                      d) Suresh

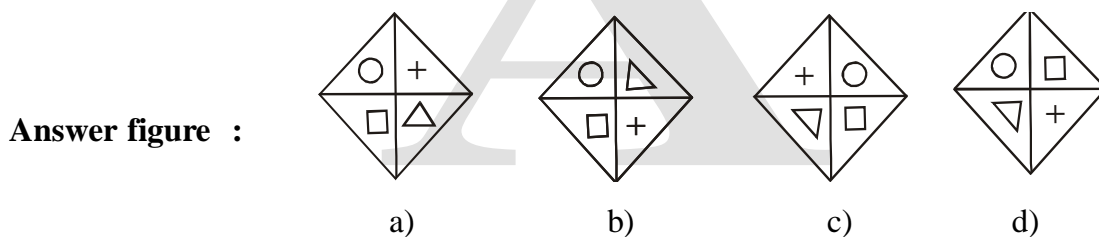
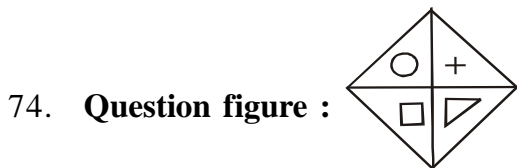
72. How many quadrilaterals are there in the given figure?



- a) 6                      b) 8                      c) 7                      d) 10



**Direction : Find the mirror image of the question figures below :**



**Direction : Find the word in the place of question mark?**

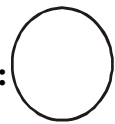
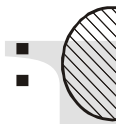

75. nose : ? :: ear : hear

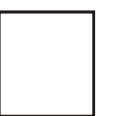

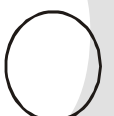

- a) stink                      b) smell                      c) sneeze                      d) nose-bridle

76. bank : money :: post office : ?

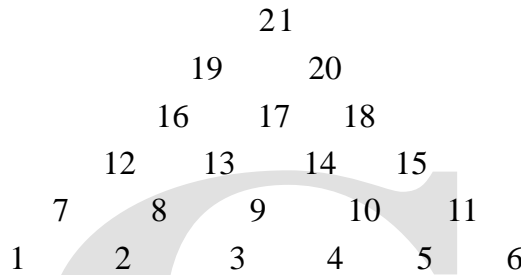
- a) postbox                      b) postman                      c) letters                      d) postmaster

**Direction : In the following questions, the 1st two figures bear some relationship to each other. The third and fourth figures bear the same relationship. One of the terms is missing. Find the missing term from amongst the four alternatives.**

77. Question figure :  :  ::  : ?

Answer figure :  a)  b)  c)  d)

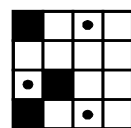
**Direction : Study the pyramid given below and answer questions upon it:**

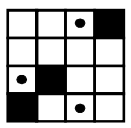
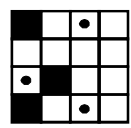
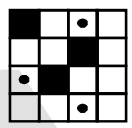
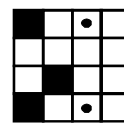


78. 12, 4, 5 : 18, 9, 8 :: ? : 20, 13, 12

- a) 16, 10, 11                      b) 12, 1, 2                      c) 19, 13, 12                      d) None

**Direction : Out of the given group of figures find out an exact similar figure to the given question figure:**

79. Question figure : 

Answer figure :  a)  b)  c)  d)

**Direction : In each question below, there is a problem. It can be seen from these problems, how do you think and react? There are four alternatives given below the question. Find out the correct or proper alternative.**

81. The Selection Body Officers of an interview are sitting in such a way that R is to the left of P but to the right of T. q is sitting to the left of S but to the right of P. Who is sitting exactly in the middle of them?

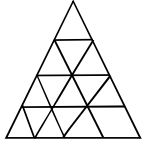
- a) P                      b) Q                      c) R                      d) S



81. P,Q,R,S and T are sitting circular facing to the centre. R is sitting just left to T. P. is sitting between S and T. Who is sitting just left to R?  
 a) P                                  b) Q                                  c) S                                  d) T
82. Seema was born on Monday, 15th September, 2008. On which day will her third birthday fall?  
 a) Thursday                          b) Friday                          c) Wednesday                      d) Saturday

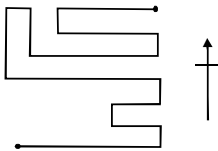
**Direction : Study the figures given below carefully and write the answers in the box.**

83. How many lines does the adjoining figure have ?

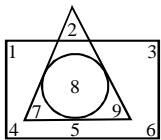


- a) 9                                  b) 11                                  c) 15                                  d) 48

**Direction : (Question No. 84-85) In the adjoining figure, a path of travelling from A to B is shown. Answer the questions based upon this figure?**

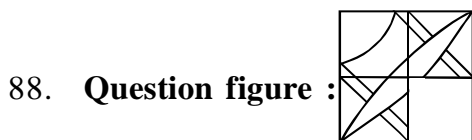


84. While reaching B from A, how many times the South direction will be at the left ?  
 a) 5 times                          b) 3 times                          c) 4 times                          d) 7 times
85. To which direction of B is A ?  
 a) South - east                      b) South - west                      c) North-west                      d) North-east
86. Which is the digit common to all the three figures - the circle, the triangle and the rectangle?



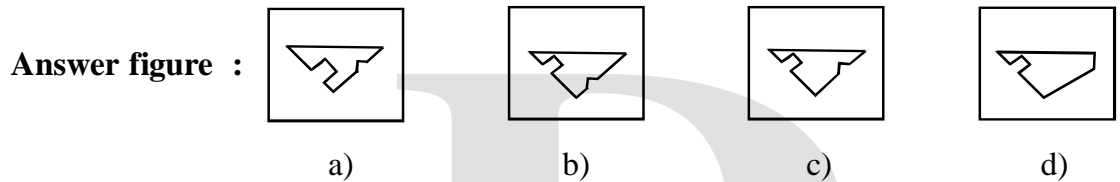
- a) 8                                  b) 7                                  c) 6                                  d) 5
87. I wanted to cut 11 equal pieces of a rope. In order to do this work faster, I folded the rope in half. How many times should I cut the rope to get 11 equal pieces?  
 a) 5                                  b) 6                                  c) 10                                  d) It is not possible

**Direction : In question below, one question figure is given to the left side. Its one part is incomplete. Choose the correct alternative from the answer figures given to the right side, so that the incomplete picture may be completed without changing its direction.**

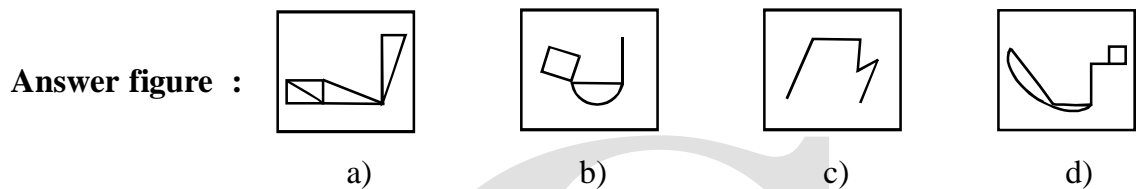
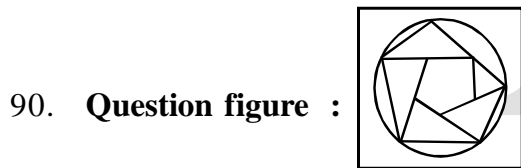


- Answer figure :**
- a)                                  b)                                  c)                                  d)

**Direction :** In the question figure, the dotted lines are shown along which the figure is folded and the shaded part are shown where the figure is cut. If the given question figure is unfolded, which of the answer figures will represent this unfolded figure?



Direction : One of the answer figures is hidden in the question figure. Find the correct alternative:



**\* Descriptive question (Compulsory)**

- I) Write an essay on any one of the following in 150 words. 5M
- a) Health is wealth
  - b) Utility of Forests
  - c) My best friend
- II) Expansion of an idea in 150 words - 5M
- As you sow, so shall you reap.

\* \* \*

