

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



DCA ENTRANCE EXAMINATION - VI
DEFENCE CAREER ACADEMY,
AURANGABAD.

As an ISO 9001 : 2008 - Certified

ENT : 2017-2018
TIME : 2.30 Hrs.

MATH & GAT

Sr. No.
MAXIMUM MARKS : 150

QUESTION - BOOKLET

GENERAL INSTRUCTIONS

1. Do not carry any book, paper or any other material with you inside the Examination Hall.
2. Carry only writing material with you in the Examination Hall.
3. Keep the Hall Ticket with you ready for scrutiny.
4. Result of this Examination will be displayed on the Notice Board. The Result Sheet will include the successful/ qualified candidates ONLY.
5. All successful candidates indicated on the list shall present themselves for the interview on the same day.
6. This Test Booklet contains 140 items (Questions). Question No. 1 to 140 (MCQ) carry 1 mark each and Question No. 141 (Descriptive) carries 10 marks. You have to select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, Choose Only One response for each item.
7. All the answers must be marked on the Answer Sheet only. Do not write anything on this Test Booklet.
8. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET DOES NOT HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR QUESTION ETC. IF SO, GET IT REPLACED BY A NEW ONE.
9. Ask for a separate paper for rough work.

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10. Read the questions carefully, Remember, answers are to be indicated in the Answer Sheet Only. Return the Test Booklet, Rough work papers and the Answer Sheet immediately when asked to do so. You are NOT permitted to take away with you any paper concerning the Examination.

ANSWER SHEET

11. The Answer Sheet contains 140 counts, each subdivided in four { (a) (b) (c) (d) } subdivisions for indicating the correct choice of answers. After having selected the correct choice from the test Booklet, you should indicate that choice by completely blackening the respective circle, DO NOT merely cross the circle. You should indicate correct answer by blackening ONLY ONE circle in each answer. Any answer having more than ONE blackened circle will be treated as WRONG answer.

12. Before starting the answering ensure that you have filled the complete information at the top of this Answer Sheet. Incomplete Answer Sheet will be regarded as invalid.

THANK YOU AND BEST OF LUCK

C

A

1. Write the following number in figure. Ten lakh
 a) 10,000 b) 10,00,000 c) 1,00,000 d) 100,000

2. Write following number in words. 15, 245
 a) One lakh two hundred forty five
 b) Fifteen thousand two hundred forty five
 c) Fiften Lakh forty five.
 d) None of these

3. $27, 94, 539$ $27, 49, 935$
 a) $>$ b) $<$ c) $=$ d) \leq

4. Arrange the number in desending order. 25, 64, 507; 25, 63, 201; 25, 69, 850
 a) 25, 69, 850; 25, 64, 507; 25, 63, 850
 b) 25, 64, 507; 25, 63, 850, 25, 69, 850
 c) 25, 69, 850; 25, 64, 507, 25, 63, 850
 d) None of these

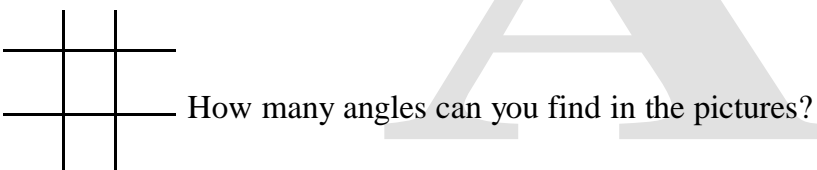
5. 8, 57, 00, 07,005
 a) $8000,000,000 + 500, 00, 00, 00 + 70000000 + 5 + 700$
 b) $8000000 + 500000 + 700 + 500$
 c) $8000000000 + 50000 + 7000 + 7000 + 50$
 d) $800000 + 500000 + 7000 + 5 + 70$

6. How many right angle are there in given figure ?

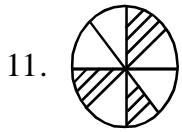
- a) 1 b) 2 c) 3 d) 04
 7. Find out the situation when a right angle is formed.
 a) 6 PM b) 9 PM c) 4 PM d) 12 AM

8. When clock show time 3. PM. angle is
 a) obtuse angle b) stright angle c) acute angle d) right angles

9. A right angle measures degrees.
 a) 120° b) 60° c) 180° d) 90°

10.  How many angles can you find in the pictures?

- a) 10 b) 8 c) 18 d) 16



11. Find the ratio

a) $\frac{2}{6}$

b) $\frac{1}{4}$

c) $\frac{3}{8}$

d) $\frac{4}{7}$

12. $\frac{1}{3}$ of lines are lines.

a) 2

b) 3

c) 5

d) 4

13. $\frac{2}{3} + \frac{5}{3} =$

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

b) $\frac{7}{3}$

c) $\frac{3}{3}$

d) $\frac{1}{3}$

14. $5\frac{1}{3} =$

a) $\frac{6}{3}$

b) $\frac{9}{3}$

c) $\frac{16}{3}$

d) $\frac{1}{15}$

15. Letter B has line of symmetry.

a) 1

b) 2

c) 3

d) 4

16. An equilateral triangle has _____ lines of symmetry.

a) 1

b) 2

c) 3

d) 4

17. The smallest factor of 16 is _____

a) 2

b) 4

c) 8

d) 1

18. Which is not factor of 21

a) 1

b) 5

c) 3

d) 7

19. 6, 12, 18, 24; Complete the number series.

a) 32

b) 28

c) 30

d)

20. HCF of 75, 50, 125 is

a) 20

b) 50

c) 75

d) 25

21. LCM of 26, 14, 91 is

a) 182

b) 180

c) 14

d) 91

22. Which two numbers gives the products 383240

a) 8156 and 45

b) 5896 and 65

c) 9842 and 25

d) 6425 and 12

23. Express $\frac{3}{10}$ of 3kg in grams.

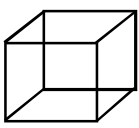
a) 300 gm

b) 600 gm

c) 900 gm

d) 2100 gm

24. 11, 121, 1333 complete the given pattern.
 a) 141 b) 1441 c) 14441 d) 144
25. $8 \times 9 = \square$
 a) 70 b) 63 c) 54 d) 72
26. Factor of 42
 a) 9 b) 6 c) 4 d) 8
27. Biggest number by using digits 3, 5, 8, 9
 a) 9538 b) 9853 c) 3589 d) 5893
28. Smallest 4 digit number by using number 3, 0, 5, 6
 a) 0356 b) 6503 c) 3056 d) 5603
29. 1, 3, 5, 7, 9 what will be the next number.
 a) 13 b) 11 c) 15 d) 7
30. 1, 3, 5, 7, 11, 13 complete the pattern.
 a) 17 b) 15 c) 19 d) 14
31. $56034 + 3412$
 a) 59446 b) 89446 c) 90152 d) 69436
32. $16 \times 9 = \square$
 a) 144 b) 136 c) 138 d) 134
33. 2000, 1000, 500, 250, complete the number pattern.
 a) 100 b) 200 c) 125 d) $62\frac{5}{10}$
34. Opposite direction of North.
 a) East b) West c) South d) None of these
35. How many faces are there in cube?
 a) 5 b) 8 c) 6 d) 12
36. 1 metre = cm
 a) 100 b) 10 c) 1000 d) 2
37. 1 kg = gram.
 a) 1000 b) 100 c) 500 d) 200
38. 2 hr 40 min = minute
 a) 240 b) 100 c) 80 d) 42
39. $\frac{18}{42} = \dots\dots\dots$
 a) $\frac{3}{7}$ b) $\frac{9}{7}$ c) $\frac{4}{7}$ d) $\frac{2}{7}$
40. 3m = cm.
 a) 300 cm b) 400 cm c) 300 cm d) 30 cm

41. Length 50 m \times width 15 m = m (length of boundary)
 a) 100 m b) 150 m c) 7500 m d) 130 m
42. Area of square is (side - a)
 a) a^2 b) $2a$ c) $4a$ d) a^3
43. 1345×6
 a) 6070 b) 8070 c) 8076 d) 8706
44. 49×51
 a) 3599 b) 4599 c) 2599 d) 9529
45. 24×100000
 a) 40000 b) 24000 c) 24000 d) 2400000
46. $(12 + 1) \times 2 = \square$
 a) 25 b) 24 c) 27 d) 26
47. $6000 = 30 \times \square$
 a) 200 b) 20 c) 300 d) 600
48. $10 \times 5 \times 3 = \square$
 a) 130 b) 150 c) 510 d) 300
49. $463 \div 77$
 a) 9 b) 6 c) 8 d) 4
50. The volume of 2 cm cube is \square
 a) 18 b) 15 c) 8 d) 6
51. The area of circle is (radius) 7 cm.
 a) 164cm^2 b) 154cm^2 c) 144cm^2 d) 22cm^2
52. 5×243
 a) 1205 b) 1015 c) 643 d) 1215
53. $9656 \div 2$
 a) 4323 b) 4823 c) 4828 d) 4833
54. $14 \div 3$ remainder is.
 a) 4 b) 2 c) 1 d) 0
55. Identify given shape
 a) Square
 b) rectangle
 c) cube
 d) cone
- 
56. Price of 1 pen is 10 what is price of 5 pen.
 a) 5 b) 30 c) 50 d) 10
57. 1 metre = millimeters.
 a) 10 b) 100 c) 0.10 d) 1000

58. $1500\text{m} + 2\text{ km} = ?$ metre
 a) 2500 b) 3500 c) 153 d) 152.
59. Smallest three digit number
 a) 999 b) 900 c) 100 d) 102
60. Biggest 4 digit number.
 a) 1000 b) 9000 c) 9999 d) 2599
61. $5962 \times 11 =$
 a) 615582 b) 65582 c) 95625 d) 625582
62. $9656 \div 8 =$
 a) 127 b) 1207 c) 1027 d) 182
63. $80 \div \square = 40$
 a) 20 b) 2 c) 3 d) 20
64. Solve $[(35 \times 2) + 5] \div 25 =$
 a) 3 b) 4 c) 8 d) 16
65. In leap year there are days in february.
 a) 28 b) 29 c) 30 d) 31
66. $36 = 12 \times \square$
 a) 2 b) 3 c) 4 d) 9
67. A cone has line of symmetry.
 a) 1 b) 2 c) 3 d) 4
68. $56299 + 5698 + 312 + 2 = ?$
 a) 62412 b) 62411 c) 32426 d) 63423
69. $69000 - 5689 = ?$
 a) 54211 b) 5421 c) 54, 3111 d) 40000
70. $32\text{ F} = ?\text{ }^\circ\text{C}$
 a) 32°C b) 0°C c) 100°C d) 60°C
71. $100^\circ\text{C} = ?\text{ F}$
 a) 312 b) 100 c) 32 d) 212
72. $\frac{1}{4}$ Part 36 is = \square
 a) 12 b) 9 c) 144 d) 36
73. Smallest three digit number + biggest 2 digit number?
 a) 2098 b) 199 c) 999 d) 190
74. If side of square is 5 then what is difference between area and periameter \square
 a) 35 b) 5 c) 45 d) 30
75. $22 + 5 + 3 - 2$
 a) 42 b) 31 c) 36 d) 28

PART - II GAT

- * **Q.76. to 79 :** Read the following passage carefully and answer the questions choosing the correct option.

PASSAGE - I

One day, when I was going towards my boat, I was surprised to see the footprint of a man on the sand. I stood amazed ! I listened; I looked around me : I could neither hear nor see anything. I went up higher to look down; I went up the shore and down the shore, but it was no good; I could find no other footprint but that one. I went to it again to see if there were any more footprints and to tell if it had been my imagination. But I was not mistaken, for there was exactly the print of a foot - toes, heel, every part of a foot. I could not imagine how it came there.

76. I was going toward -----
a) my boat b) my car c) my house d) my farm
77. I was surprised to see -----
a) the footprint of a man b) the footprint of a tiger
c) the footprint of a beast d) the footprint of a deer.
78. I could neither ----- nor ----- anything.
a) take, give b) sell, buy c) hear, see d) read, write.
79. It was a print of a -----
a) toes b) heel c) leg d) foot

- * **Q.80. to 83 :** Read the following passage carefully and answer the questions choosing the correct option.

PASSAGE - II

Crying only a little bit
is no use. You must cry
until your pillow is soaked!
Then you can jump in the shower
and splash-splash-splash!

80. ----- is no use.
a) mere passing in exam b) killing time throughout day
c) wait for others d) crying only a little bit
81. You must cry until -----
a) you get wet all over b) your pillow is soaked
c) your demand get fulfilled d) you get money.
82. poet says one can ----- in the shower.
a) run b) dance c) soak d) jump.
83. poem tells us about -----
a) laughing b) sleeping c) working d) crying

* **Direction: Answer the following questions by identifying noun.**

84. Mohan studies one hour daily.

- a) studies b) daily c) Mohan d) one

85. It runs on battery.

- a) It b) runs c) on d) battery

* **Direction: Identify the gender going opposite**

86. Fox

- a) lioness b) tigress c) vixon d) mare

87. Bull

- a) cow b) bitch c) hen d) doe

* **Direction: Identify the correct 'plural' form of the words given below.**

88. Knife

- a) knives b) knifves c) knives d) knie's

89. Buffalo

- a) buffalos b) buffalo's c) buffaloves d) buffaloes

90. Mouse

- a) mouses b) mouse's c) mousess d) mice

* **Direction: Do as direced :-**

91. Find the word with correct spellings

- a) satellite b) satellight c) satelite d) sattelite

92. a) praimary

- b) primary c) primery d) primerry

* **Direction: Give the synonyms of :-**

93. Same

- a) love b) equal c) like d) lame

94. Change

- a) charge b) modify c) create d) make

* **Direction: Identify the pronoun.**

95. Ram and Rahim have paid their charges.

- a) Rahim b) paid c) their d) charges

* **Direction: Identify the verb.**

96. Cricket is favourite in India.

- a) Cricket b) is c) favourite d) India

* **Direction: Give the Antonyms of :-**

97. Easy

- a) simple b) difficult c) different d) lucid

98. Short

- a) tall b) length c) high d) height

* **Direction: Identify the adjectives from the following**

99. a) lubricant b) good-tempered c) wish d) blessings
100. a) juice b) cold c) movement d) tale
101. In a certain code, MONKEY is written as XDJMNL. How is TIGER written in that code?
a) QDFHS b) SDFHS c) SHFDQ d) UJHFS

* **Direction : In each of the following questions, four words have been given, out of which three are alike in some manner and one is different. Choose the odd one.**

102. a) Tortoise b) Duck c) Snake d) Whale

* **Direction : In each of the following questions, a number series is given with one term missing. Choose the correct alternative that will continue the same pattern and fill in the blank spaces.**

103. 2, 5, 9, (.....), 20, 27
a) 12 b) 11 c) 15 d) 19
104. Starting from a point P, Sachin walked 20 metres towards South. He turned left and walked 30 metres. He then turned left and walked 20 metres. He again turned left and walked 40 metres and reached a point Q. How far and in which direction is the point Q from the Point P?
a) 20 metres West b) 10 metres East c) 10 metres West d) 10 Metres North

* **Direction : In each of the following questions, there is a certain relationship between two given words on one side of : : and one word is given on another side of : : while another word is to be found from the given alternatives, having the same relation with this word as the words of the given pair bear. Choose the correct alternative.**

105. Influenza : Virus : : Typhoid : ?
a) Bacillus b) Parasite c) Protozoa d) Bacteria
106. _____ have sharp sense of smell
a) dog ii) kite c) horse d) man
107. _____ have sharp sense of sight
a) dog ii) bat c) mosquito d) kite
108. _____ dives sense of touch.
a) eye ii) ear c) skin d) nose
109. Sunita William went to space in _____
a) space craft b) airplane c) helicopter d) satellite
110. Diwali is celebrated on _____ when we have no moon.
a) pornima b) amavasya c) chaturthi d) ekadashi
111. The sun, stars, moon are all in _____
a) sky b) space c) atmosphere d) galaxy
112. Salt can be obtained from _____
a) river b) sea c) pond d) spring

113. Oil is lighter than _____ hence floats
 a) water b) soil c) powder d) charcoal
114. Every drop of water is _____
 a) precious b) important c) round d) colorless
115. A severe earth quake too place on 26th December 2001 in _____
 a) killari b) kutch c) Mumbai d) goa
116. When there is no rain of r a very long time _____ occurs
 a) drought b) flood c) famine d) cyclone
117. The intensity of an earthquake is measured on the _____ scale.
 a) rishter b) meter c) centimeter d) decimeter
118. _____ means jungle in the kuduk language
 a) wildlife b) sanctuaries c) forest d) 200
119. Trees and forests are for _____
 a) all b) birds c) animals d) snakes
120. Forests are home to many tribal communities known as _____
 a) zombie b) advises c) actor d) scientist
121. The _____ helps us to taste food.
 a) Tounge b) Nose c) Teeth d) Eyes
122. _____ is the main source of water on the earth
 a) Rain b) Well c) Tank d) Tap
123. Everyone has a right to get enough _____ to live land drink.
 a) Water (b) Juice c) Oil d) Kerosene
124. Truck that run on _____
 a) Petrol b) Diesel c) CNG d) None of above
125. Earthquakes are _____ calamities
 a) Man-Made b) Natural c) Human d) None of this
126. Many years ago farmers grew crops according to the _____
 a) Season b) time c) Month d) Rain
127. _____ is used to spun cotton
 a) Charkha b) Roller c) Wheel d) None of this
128. The Biggest ocean or earth is _____
 a) Pacific Ocean b) Atlantic Ocean c) Indian d) Artic Ocean
129. What is the capital city if Maharashtra ?
 a) Mumbai b) Pune c) Delhi d) Nagpur
130. Earth is a _____
 a) Star b) Planet c) Satellite d) None of these

131. The people of France are called—————
 a) French b) Poles c) Dutch d) Swiss
132. In which city is char miner situated ?
 a) Hyderabad b) Mumbai c) Pune d) Nagpur
133. Darjeeling is situated in —————
 a) Assam b) Bihar c) West Bengal d) Gujarat
134. Nepali is one of the official language of —————
 a) Sikkim b) Assam c) Meghalaya d) both (a) & (b)
135. The Ramayana was written by—————
 a) Tulsidas b) Kalidas c) Valmiki d) Ramdas
136. MRF is the brand name of —————
 a) Camera b) TV c) Fan d) Tyre
137. Grane is an example of —————
 a) Wheel (b) Pulley c) Lever d) Square
138. Ear, Nose, Throat Specialist use a ——— Mirror.
 a) Conver b) Concave c) Plane d) Big
139. There are —————bones in the human body.
 a) 270 b) 206 c) 200 d) 202
140. Which is the largest land animal ?
 a) Giraf b) Ostrich c) Elephant d) Tiger

PART - III ESSAY

* **Direction : Write an essay on one of the followings.**

10 M

1. My favourite friend
2. My family
3. Diwali

