

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



DCA ENTRANCE EXAMINATION -V

DEFENCE CAREER ACADEMY,
AURANGABAD.

As an ISO 9001 : 2008 - Certified

ENT : 2020-2021
TIME : 02.00 Hrs.

MATH & GAT

Sr. No.
MAXIMUM MARKS : 100

QUESTION - BOOKLET

GENERAL INSTRUCTIONS

1. Do not carry any book, paper or any other material with you inside the Examination Hall.
2. Use only Black / Blue ball pen.
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 100 items (Questions). Question No. 1 to 100 (MCQ) carry 1 mark each. 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 THE SUPERVISOR.
9. Ask for a separate paper for rough work.
10. Read the questions carefully, Remember, answers are to be indicated in the Answer Sheet

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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 150 counts, each subdivided in four { (1) (2) (3) (4)} 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 a 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

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PART - I MATHS

1. If $x - 12 = 12$, then which number should be in the answer?
1) 28 2) 144 3) 24 4) 26
2. 15 minutes before bed time. 9.45 | ?
1) a.m. 2) p.m 3) both (1) & (2) 4) none of these
3. 8 kg = ----- gm.
1) 80 2) 800 3) 8000 4) 80000
4. 10 L 25 ml = ml.
1) 1025 2) 100025 3) 125 4) 10,025
5. $7 \times 3 + 9 - 12 = ?$
1) 14 2) 18 3) 17 4) 16
6. $45 + \boxed{?} = 65$
1) 19 2) 36 3) 18 4) 20
7. Which of the following number does not have a remainder, when divided by 8 ?
1) 73 2) 64 3) 42 4) 81
8. $2643 + 1956 = ?$
1) 1599 2) 3599 3) 4599 4) 4598
9. 25 m = ----- cm.
1) 35 2) 250 3) 2500 4) 35000
10. What digit should be put in the $16? + 224 = 386$
1) 2 2) 4 3) 3 4) 6
11. What is the correct pair of mixed number converted to improper fraction out of alternatives given below?
1) $9 \frac{3}{4} = \frac{42}{5}$ 2) $10 \frac{7}{9} = \frac{97}{9}$ 3) $3 \frac{1}{9} = \frac{25}{9}$ 4) $20 \frac{4}{8} = \frac{205}{8}$
12. What is the product of 25 and 5?
1) 525 2) 20 3) 125 4) 30
13. Add: $\frac{2}{4} + \frac{1}{4} = \boxed{}$
1) $\frac{4}{4}$ 2) $\frac{1}{4}$ 3) $\frac{3}{4}$ 4) $\frac{1}{3}$

14. If $125 \div 5 = ?$
- 1) 25 2) 18 3) 10 4) 15
55. $5 \times 2 + 4 = ?$
- 1) 12 2) 14 3) 15 4) 24
16. One fourth of number 40
- 1) 20 2) 28 3) 10 4) 160
17. If the numbers 50055, 50555, 50550, 50505 are arranged in the ascending order which will the second number.
- 1) 50055 2) 50550 3) 50505 4) 50555
18. Which of the following numbers is divisible by all the three numbers 2, 4 and 6 ?
- 1) 72 2) 74 3) 89 4) 67
19. 5 kg = gm
- 1) 50 2) 500 3) 0.5 4) 5000
20. $1 \text{ kg} = 5 \times \boxed{} \text{ g}$
- 1) 100 2) 1000 3) 200 4) 2000
21. The improper fraction of $3\frac{6}{7}$ is
- 1) $\frac{27}{7}$ 2) $\frac{9}{7}$ 3) $\frac{25}{7}$ 4) $\frac{27}{6}$
22. Perimeter of square whose sides are 10 cm.
- 1) 20 cm 2) 30 cm 3) 40 cm 4) 100 cm
23. $10 \div \boxed{?} = 2$ Which of the following numbers would come in place of question mark?
- 1) 4 2) 5 3) 3 4) 2
24. Diameter = 50 cm, $r = ?$
- 1) 50 cm 2) 100 cm 3) 25 m 4) 25 cm
25. The largest four digit number using the digit 7, 4, 5, 2
- 1) 2457 2) 5472 3) 2754 4) 7542
26. If $\frac{12}{7} - \frac{5}{7} = ?$
- 1) $\frac{17}{7}$ 2) $\frac{7}{17}$ 3) $\frac{12}{7}$ 4) 1

27. Determine pattern and find out next 3 numbers.

i) 1, 4, 9, 16, , ,

1) 25, 36, 49

2) 36, 25, 49

3) 49, 25, 36

4) 49, 25, 81

28. Add : $3248 + 342$

1) 9034

2) 3905

3) 3590

4) 3509

29. $69999 + 1 = ?$

1) 79999

2) 79910

3) 70000

4) 79990

30. What is the expanded form at 909990 ?

1) $900000 + 90 + 9000 + 9$

2) $9000 + 90 + 90000 + 900$

3) $900 + 9 + 90000$

4) $90 + 9000 + 900000 + 900$

31. Convert the improper fraction $\frac{14}{3}$ into a mixed number.

1) $1\frac{3}{5}$

2) $4\frac{2}{3}$

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

4) $2\frac{5}{3}$

32. $\underline{\quad} \times 24 = 24000$

1) 100

2) 1000

3) 10

4) 10000

33. How many sides does a square have ?

1) 4

2) 3

3) 2

4) 5

34. Complete $45 \times 45 = 2025$

$55 \times 55 = 3025$

$65 \times 65 = \dots\dots\dots$

1) 5625

2) 4225

3) 1225

4) 2025

35. The cost of 4 TV sets is Rs. 9656. Find the cost of each set.

1) 4241

2) 2414

3) 2144

4) 2441

36. $120 < 123 < 210 < 313$ Which will be the third number if the sequence given above is reversed?

1) 210

2) 120

3) 123

4) 213

37. $\frac{2}{?} = \frac{6}{15}$

1) 3.

2) 2

3) 5

4) 1

38. What are the factors of 10 (prime factor)

1) 5×1

2) 2×5

3) 10×1

4) none of these

39. $\frac{1}{3}$ is equivalent to

1) $\frac{1}{6}$

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

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

4) $\frac{3}{4}$

40. Divide : $7\overline{)98}$

1) 12

2) 13

3) 15

4) 14

41. Write the fractions : Two fifths

1) $\frac{5}{2}$

2) $\frac{2}{5}$

3) $\frac{1}{5}$

4) $\frac{10}{5}$

42. The number 1 more than 999 =

1) 10

2) 100

3) 1000

4) 10,000

43. Perimeter of triangle whose sides are 15 cm, 12 cm, 8 cm

1) 34 cm

2) 35 cm

3) 36 cm

4) 37 cm

44. 81 m = cm ?

1) 81000

2) 8100

3) 81

4) 801

45. Calculate the number of days between. August 20 and september 1

1) 10

2) 11

3) 9

4) 13

46. equivalent fraction of $\frac{7}{9}$ is.

1) $\frac{9}{7}$

2) $\frac{14}{18}$

3) $\frac{100}{81}$

4) none of these

47. Find the perimeter of the squares whose side is 20 cm.

1) 80 cm

2) 100 cm

3) 120 cm

4) 40 cm

48. Which of the following is the correct method for the subtraction of $\frac{13}{3} - \frac{5}{3}$?

1) $\frac{5 \times 4}{9 \times 9}$

2) $\frac{5+4}{9+9}$

3) $\frac{13-5}{3}$

4) $\frac{5-4}{9}$

49. 1000 = _____ hundreds

1) 10

2) 1

3) 5

4) 100

50. The number of zeroes that come after 1 for 10 millions is:

1) 8

2) 7

3) 6

4) 9

PART - II GAT

* **Direction : Identify the Noun from the following.**

51. 1) donkey 2) drag 3) frank 4) decent
52. 1) angry 2) ankle 3) anxious 4) answerable

* **Direction : Identify the word opposite in meaning:**

53. Old × _____ (clothes)
1) new 2) dirty 3) cold 4) young
54. ever × _____
1) everyday 2) forever 3) never 4) no where

* **Direction : Identify the plurals.**

55. Tomato : ____
1) Tomatos 2) Tomatoes 3) Tamotos 4) Tometos
56. knife: _____
1) knives 2) knife 3) knives 4) knieves
57. box: _____
1) boxs 2) boxes 3) boxess 4) box's

* **Direction : Identify the correct spelling**

58. 1) patriot 2) petriot 3) paetriot 4) peatriot
59. 1) despline 2) descipline 3) descepline 4) discipline
60. 1) differince 2) difference 3) diference 4) diffarence

* **Direction : Identify the synonyms for**

61. rude = _____
1) well-treating 2) polite 3) mannerless 4) modest
62. cowardish = _____
1) bold 2) scaring 3) fearless 4) brave

* **Direction : Identify the Pronouns.**

63. 1) because 2) that 3) or 4) to
64. 1) who 2) how 3) why 4) when
65. 1) these 2) crow 3) ace 4) axe
66. If BOMBAY is written as MYMYMY, how TAMIL NADU be written in that code?
1) TIATIATIA 2) MNUMNUMNU 3) IATIATIAT 4) ALDALDALD

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

67. 1) Rigveda 2) Yajurveda 3) Atharvaveda 4) Ayurveda

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.

68. 3, 8, 22, 63, 185, (.....)
1) 550 2) 310 3) 295 4) 285

69. Five boys are standing in a row facing East. Deepak is to the left of Sameer, Tushar and Shailendra. Sameer, Tushar and Shailendra are to the left of Sushil. Shailendra is between Sameer and Tushar. If Tushar is fourth from the left, how far is Sameer from the right?

- 1) First 2) Second 3) Third 4) Fourth

* **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.**

70. Cobbler : Leather :: Carpenter : ?

- 1) Furniture 2) Wood 3) Hammer 4) Chair

71. Which of the following can produce food on their own?

- 1) Fish 2) Birds 3) Human beings 4) Plants

72. Dolphin is

- 1) a mammal 2) an egg laying animal 3) a fish 4) an egg laying fish

73. Kidneys are located in :

- 1) the chest 2) the abdomen 3) the hands 4) the left side of body

74. Mosquitoes spread :

- 1) Cancer 2) stomach ache 3) malaria 4) blood pressure

75. We can separate sand from water by:

- 1) Filtration 2) evaporation 3) boiling 4) all of these

76. To do work, we need :

- 1) force 2) energy 3) hands 4) muscles.

77. 1 kilometre = metres

- 1) 1000 2) 10,000 3) 10 4) 100

78. E-mails are sent through

- 1) postal covers 2) telephone 3) radio 4) computer

79. The earth completes one revolution in

- 1) one hour 2) one year 3) one day 4) one month

80. Conservation of soil can be done by
 1) contour farming 2) terrace farming 3) afforestation 4) all of these
81. Most of the metals are found.
 1) in the wood of trees 2) on the top of mountains
 3) deep inside the earth 4) dissolved in water
82. Which among the following is an chemical indicator?
 1) Hibiscus 2) Turmeric 3) lichen 4) methyl orange
83. Which among the following is a natural indicator?
 1) Phenolphthalein 2) Methyl orange 3) Turmeric 4) EDTA
84. In a battery cell, the energy is stored in the form of
 1) chemical energy 2) heat energy 3) light energy 4) physical energy
85. The plant 'tomato originates' from _____
 1) Africa 2) Europe 3) South America 4) none of them
86. The _____ plant is known as insectivorous plant.
 1) Tulsi 2) pitcher 3) lemon 4) cactus
87. _____ seeds used as spices.
 1) chilly 2) tomato 3) brinjal 4) potato
88. From _____, you can make chapati.
 1) rice 2) wheat 3) pulses 4) seeds
89. Lemon is _____ in taste.
 1) bitter 2) sweet 3) sour 4) salty
90. We work with our _____
 1) legs 2) eyes 3) hands 4) ears
91. _____ is not included in our taste zones.
 1) hot 2) salty 3) sweet 4) bitter
92. We get _____ when mosquito bites us.
 1) anaemia 2) T.B 3) cancer 4) malaria
93. _____ was India's first woman prime minister.
 1) Sarojini Naidu 2) Kiran Bedi 3) Indira Gandhi 4) Kalpana Chawala
94. _____ is known as Florence Nightingale of India.
 1) P.T. Usha 2) Rani Laxmibai 3) Sarojini Naidu 4) Kiran Bedi

95. Is known as input device.

- 1) keyboard 2) monitor 3) c.p.u 4) floppy disk

96. 'To erase the image' _____ tool is used.

- 1) curve 2) text 3) eraser 4) line

97. _____ is one of the feature of a computer.

- 1) portability 2) accuracy 3) utility 4) necessity

98. _____ is used for playing video games.

- 1) barcode reader 2) joystick 3) microphone 4) scanner

99. _____ is the worldwide system of computer networks in which users at one computer get information from other.

- 1) telephone 2) computer 3) email 4) internet.

100. A very important festival of the jain is _____

- 1) Diwali 2) Holi 3) Eid 4) Mahavir Jayanti

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