

## IDA CAFET

Sample Question Paper (NDA style, 80 MCQs) based on 12th-level GAT and 10th-level Math concepts, aligned with common NDA syllabus areas.

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### Section 1 – English Language (20 Questions)

Choose the most appropriate option for each question.

1. Choose the correct synonym of the word “Abundant”:  
(a) Scarce                      (b) Plentiful                      (c) Rare                      (d) Meagre
2. Choose the correct antonym of “Rigid”:  
(a) Firm                      (b) Harsh                      (c) Flexible                      (d) Strong
3. Select the correctly spelled word:  
(a) Relevent                      (b) Relavent                      (c) Relevant                      (d) Relevrent
4. Fill in the blank: He is not interested \_\_\_\_\_ playing football.  
(a) for                      (b) in                      (c) at                      (d) on
5. Choose the correct option: Each of the boys \_\_\_\_\_ given a prize.  
(a) have been                      (b) has been                      (c) are being                      (d) were
6. Identify the part of the sentence that has an error:  
He do not / know how / to operate / this machine.  
(a) He do not                      (b) know how                      (c) to operate                      (d) this machine
7. Fill in the blank with the correct article: He is \_\_\_\_\_ honest officer.  
(a) a                      (b) an                      (c) the                      (d) no article
8. Choose the correct preposition: The train arrived \_\_\_\_\_ time.  
(a) in                      (b) at                      (c) on                      (d) by
9. Choose the correct passive form: “They will announce the results tomorrow.”  
(a) The results are announced tomorrow.  
(b) The results will be announced tomorrow.  
(c) The results were announced tomorrow.  
(d) The results have been announced tomorrow.
10. Fill in the blank: She has been working here \_\_\_\_\_ 2020.  
(a) since                      (b) for                      (c) from                      (d) by
11. Choose the one word substitution: A person who speaks many languages.  
(a) Linguist                      (b) Polyglot                      (c) Orator                      (d) Philologist
12. Choose the correct indirect speech: He said, “I am preparing for the exam.”  
(a) He said that he is preparing for the exam.  
(b) He said that he was preparing for the exam.

- (c) He told that he was preparing for the exam.  
(d) He told that he is preparing for the exam.
13. Select the correct option to complete the idiom: "To hit the nail on the \_\_\_\_."  
(a) point                      (b) head                      (c) spot                      (d) mark
14. Fill in the blank: If he \_\_\_\_ harder, he would have passed.  
(a) study                      (b) studies                      (c) had studied                      (d) was studying
15. Choose the correct phrase: He is looking forward \_\_\_\_ his friends.  
(a) to meet                      (b) for meeting                      (c) to meeting                      (d) at meeting
16. Choose the correct tense: By next year, they \_\_\_\_ this project.  
(a) complete                      (b) will completed  
(c) will have completed                      (d) have completed
17. Fill in the blank with suitable conjunction: He went to the academy \_\_\_\_ he was ill.  
(a) and                      (b) or                      (c) but                      (d) because
18. Choose the correct comparative form: This road is \_\_\_\_ than that one.  
(a) more narrow                      (b) narrower                      (c) most narrow                      (d) more narrower
19. Choose the correct option: Neither the cadets nor the instructor \_\_\_\_ late.  
(a) are                      (b) were                      (c) is                      (d) have
20. Fill in the blank (phrasal verb): The parade was \_\_\_\_ off due to heavy rain.  
(a) called                      (b) called out                      (c) called off                      (d) called up
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## Section 2 – General Knowledge (20 Questions)

*Covers History, Geography, Polity, Science, Defence, Basics & Current-style knowledge as in NDA GAT.*

21. Who is known as the "Father of the Indian Constitution"?  
(a) Mahatma Gandhi                      (b) B. R. Ambedkar  
(c) Jawaharlal Nehru                      (d) Dr. Rajendra Prasad
22. Which is the largest planet in our Solar System?  
(a) Earth                      (b) Jupiter                      (c) Saturn                      (d) Mars
23. The Tropic of Cancer passes through which Indian state?  
(a) Punjab                      (b) Gujarat                      (c) Kerala                      (d) Tamil Nadu
24. What is the chemical symbol of Sodium?  
(a) So                      (b) Na                      (c) S                      (d) Sn
25. "Operation Vijay" is associated with which war/conflict?  
(a) Indo-Pak War 1965                      (b) Kargil War 1999  
(c) Indo-China War 1962                      (d) Operation Blue Star

26. The headquarters of the Indian Navy is located at:  
(a) New Delhi            (b) Mumbai            (c) Kochi            (d) Visakhapatnam
27. Who was the first Indian woman to go into space?  
(a) Kalpana Chawla            (b) Sunita Williams  
(c) Indira Gandhi            (d) Sarla Thakral
28. The instrument used to measure atmospheric pressure is:  
(a) Thermometer            (b) Barometer  
(c) Hygrometer            (d) Anemometer
29. Which article of the Indian Constitution deals with Fundamental Rights?  
(a) Articles 12–35            (b) Articles 36–51  
(c) Articles 52–78            (d) Articles 110–117
30. “Jana-Gana-Mana” was adopted as the national anthem of India in:  
(a) 1947            (b) 1948            (c) 1950            (d) 1951
31. The longest river in India (within Indian territory) is:  
(a) Ganga            (b) Brahmaputra            (c) Godavari            (d) Yamuna
32. Where is the National Defence Academy (NDA) located?  
(a) Dehradun            (b) Khadakwasla            (c) Chennai            (d) Bengaluru
33. Which gas is most abundant in Earth’s atmosphere?  
(a) Oxygen            (b) Nitrogen            (c) Carbon dioxide            (d) Hydrogen
34. The smallest unit of life is:  
(a) Organ            (b) Tissue            (c) Cell            (d) Organ system
35. Who wrote the book “Discovery of India”?  
(a) Rabindranath Tagore            (b) Jawaharlal Nehru  
(c) Sardar Patel            (d) Subhas Chandra Bose
36. In which year did India become a republic?  
(a) 1947            (b) 1948            (c) 1950            (d) 1952
37. INS Vikrant is:  
(a) A missile            (b) A fighter aircraft            (c) An aircraft carrier            (d) A submarine
38. Which of the following is NOT a primary colour of light?  
(a) Red            (b) Blue            (c) Green            (d) Yellow
39. The line that divides day and night on Earth is called:  
(a) Equator            (b) Prime Meridian  
(c) International Date Line            (d) Terminator
40. Which organ in the human body purifies blood?  
(a) Heart            (b) Kidney            (c) Liver            (d) Lungs

### Section 3 – Aptitude (20 Questions)

Basic arithmetic, reasoning and data interpretation in line with elementary NDA-type aptitude.

41. What is 35% of 200?  
(a) 35                      (b) 40                      (c) 60                      (d) 70
42. A train travels 180 km in 3 hours. What is its average speed?  
(a) 30 km/h                      (b) 40 km/h                      (c) 50 km/h                      (d) 60 km/h
43. A number is increased from 160 to 200. What is the percentage increase?  
(a) 20%                      (b) 25%                      (c) 30%                      (d) 40%
44. If the ratio of boys to girls in a class is 3:2 and there are 30 students, how many boys are there?  
(a) 12                      (b) 15                      (c) 18                      (d) 20
45. Find the simple interest on ₹4000 at 5% per annum for 3 years.  
(a) ₹400                      (b) ₹500                      (c) ₹600                      (d) ₹700
46. If  $3x - 5 = 16$ , then  $x =$   
(a) 3                      (b) 5                      (c) 7                      (d) 9
47. The next term in the series 2, 6, 12, 20, ? is:  
(a) 24                      (b) 28                      (c) 30                      (d) 32
48. A man walks 3 km north, then 4 km east. How far is he from the starting point (straight line)?  
(a) 3 km                      (b) 4 km                      (c) 5 km                      (d) 7 km
49. If the average of 5 numbers is 18, the sum of the numbers is:  
(a) 60                      (b) 70                      (c) 80                      (d) 90
50. If 20% of a number is 50, the number is:  
(a) 200                      (b) 220                      (c) 230                      (d) 250
51. Choose the odd one out:  
(a) 16                      (b) 25                      (c) 36                      (d) 49
52. If  $\times$  means +, + means -, - means  $\times$ , then the value of  $6 \times 4 + 2 - 3$  is:  
(a)  $6 + 4 - 6$                       (b) 10                      (c) 8                      (d) 4
53. A sum is divided between A and B in the ratio 3:5. If B gets ₹5000, how much does A get?  
(a) ₹2000                      (b) ₹2500                      (c) ₹3000                      (d) ₹3500
54. The selling price is ₹600 and profit is 20%. What is the cost price?  
(a) ₹400                      (b) ₹450                      (c) ₹500                      (d) ₹550
55. The LCM of 6 and 8 is:  
(a) 12                      (b) 16                      (c) 18                      (d) 24

56. If a clock shows 3:15, the angle between the hour hand and the minute hand is:  
(a)  $0^\circ$  (b)  $7.5^\circ$  (c)  $30^\circ$  (d)  $37.5^\circ$
57. A tank is  $\frac{1}{3}$  full. 200 litres of water is added and it becomes  $\frac{1}{2}$  full. The capacity of the tank is:  
(a) 600 L (b) 800 L (c) 1000 L (d) 1200 L
58. If the perimeter of a rectangle is 40 cm and its length is 12 cm, what is its breadth?  
(a) 6 cm (b) 8 cm (c) 10 cm (d) 12 cm
59. Four consecutive even numbers add up to 52. The smallest number is:  
(a) 10 (b) 12 (c) 14 (d) 16
60. If 5 men can complete a work in 12 days, in how many days will 10 men complete the same work (same rate)?  
(a) 3 (b) 4 (c) 6 (d) 8
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#### Section 4 – General Mathematics (20 Questions)

Based on 10th-level arithmetic, algebra, geometry, mensuration and trigonometry in line with NDA basics.

61. Simplify:  $\frac{3}{4} + \frac{5}{8}$ .  
(a)  $\frac{1}{2}$  (b)  $\frac{7}{8}$  (c)  $\frac{11}{8}$  (d)  $\frac{13}{8}$
62. Solve:  $7x - 9 = 5x + 3$ .  
(a)  $x = 3$  (b)  $x = 4$  (c)  $x = 5$  (d)  $x = 6$
63. If  $a = 3$  and  $b = 4$ , then  $a^2 + b^2$  equals:  
(a) 5 (b) 12 (c) 25 (d) 7
64. The value of  $\sqrt{196}$  is:  
(a) 12 (b) 13 (c) 14 (d) 15
65. If the length and breadth of a rectangle are 10 cm and 6 cm, its area is:  
(a)  $16 \text{ cm}^2$  (b)  $30 \text{ cm}^2$  (c)  $60 \text{ cm}^2$  (d)  $80 \text{ cm}^2$
66. The circumference of a circle is  $2\pi r$ . If the radius is 7 cm, the circumference is (take  $\pi = \frac{22}{7}$ ):  
(a) 22 cm (b) 44 cm (c) 66 cm (d) 88 cm
67. In right triangle ABC, right-angled at B, if  $AB = 5$  and  $BC = 12$ , then AC equals:  
(a) 10 (b) 11 (c) 13 (d) 17
68. If  $\sin \theta = \frac{3}{5}$ , then  $\cos \theta$  is:  
(a)  $\frac{4}{5}$  (b)  $\frac{5}{3}$  (c)  $\frac{3}{4}$  (d)  $\frac{4}{3}$

69. The value of  $(x + 3)(x - 3)$  is:  
(a)  $x^2 + 9$                       (b)  $x^2 - 9$                       (c)  $x^2 + 6x + 9$                       (d)  $x^2 - 6x + 9$
70. A sum of money doubles itself in 8 years at simple interest. The rate of interest per annum is:  
(a) 6%                      (b) 10%                      (c) 12.5%                      (d) 25%
71. Express 0.375 as a fraction in simplest form.  
(a)  $\frac{3}{8}$                       (b)  $\frac{5}{8}$                       (c)  $\frac{3}{5}$                       (d)  $\frac{8}{15}$
72. If  $x : y = 2 : 5$  and  $y : z = 10 : 7$ , then  $x : z$  is:  
(a) 2 : 7                      (b) 4 : 7                      (c) 1 : 7                      (d) 5 : 7
73. The median of the data 3, 7, 9, 15, 18 is:  
(a) 7                      (b) 9                      (c) 12                      (d) 15
74. The HCF of 24 and 36 is:  
(a) 4                      (b) 6                      (c) 8                      (d) 12
75. If two angles of a triangle are  $40^\circ$  and  $60^\circ$ , the third angle is:  
(a)  $70^\circ$                       (b)  $80^\circ$                       (c)  $90^\circ$                       (d)  $100^\circ$
76. The volume of a cuboid with length 8 cm, breadth 5 cm and height 4 cm is:  
(a)  $17 \text{ cm}^3$                       (b)  $80 \text{ cm}^3$                       (c)  $120 \text{ cm}^3$                       (d)  $160 \text{ cm}^3$
77. If  $a = 2$ ,  $b = -3$ , then the value of  $2a - 3b$  is:  
(a) -5                      (b) 5                      (c) 13                      (d) -13
78. The value of  $\frac{2}{3} \div \frac{4}{5}$  is:  
(a)  $\frac{10}{12}$                       (b)  $\frac{8}{15}$                       (c)  $\frac{5}{6}$                       (d)  $\frac{15}{8}$
79. A ladder 13 m long leans against a wall and reaches a height of 12 m. The distance of the foot of the ladder from the wall is:  
(a) 3 m                      (b) 4 m                      (c) 5 m                      (d) 6 m
80. If  $(x - 2)^2 = 25$ , then  $x$  can be:  
(a) 3 only                      (b) 7 only                      (c) 3 or 7                      (d) -3 or -7