■ NACT Class 6 – Maths Practice Set (100 MCQs with Answers)

Section 1: Logical Reasoning (25 Questions)

- Which number comes next in the series:
 2, 4, 8, 16, ____?
 A) 18 B) 24 C) 32 D) 30 Ans: C
- 2. If 'A' is coded as 1, 'B' as 2, what will be the code for "DOG"?
 A) 4 15 7 B) 3 14 6 C) 5 16 8 D) 4 16 7 —
 Ans: A
- 3. Find the odd one out: Circle, Square,
 Triangle, Rectangle, Cube
 A) Circle B) Square C) Cube D) Triangle —
 Ans: C (3-D figure)
- 4. Which is the mirror image of "123"?
 A) 321 B) E21 C) JlE D) 231 Ans: C
- 5. If MONDAY is 1st day, what day will be the 50th day?
 A) Monday B) Wednesday C) Thursday D) Friday Ans: A
- 6. Which word cannot be formed using letters of "MATHEMATICS"?A) MATH B) TEACH C) STATIC D) HATRED Ans: D (R, D absent)
- 7. Arrange 324, 243, 432, 234 in ascending order.
 A) 234, 243, 324, 432 B) 324, 243, 432, 234 C) 432, 324, 243, 234 D) 243, 234, 324, 432 Ans: A
- 8. Rina is 3 years older than her sister. If her sister is 12, Rina's age = ?A) 15 B) 12 C) 18 D) 9 Ans: A
- 9. If NORTH = 12345 and SOUTH = 52345, what is the code for HORSE?
 A) 41325 B) 45312 C) 41352 D) 41235 Ans: A (pattern-based per prompt)

- 10. Find the missing number: 5×2=10, 6×2=12, 7×2=?
 A) 13 B) 14 C) 12 D) 15 Ans: B
- 11. If a pencil costs ₹10 and a pen ₹15, cost of 3 pens & 2 pencils = ?
 A) ₹55 B) ₹60 C) ₹65 D) ₹70 Ans: C
- 12. Which of these is a symmetry shape?A) Rectangle B) Trapezium C) Arrow D)Cone Ans: A
- 13. How many letters are between M and T in the alphabet?A) 5 B) 6 C) 7 D) 8 Ans: B (N,O,P,Q,R,S)
- 14. Complete the analogy: 2 : 4 :: 5 : ?
 A) 6 B) 10 C) 15 D) 7 Ans: B
- 15. Which is not a multiple of 6?

 A) 36 B) 42 C) 44 D) 48 Ans: C
- 16. Which number will complete the series? 7, 14, 28, 56, ? A) 84 B) 98 C) 112 D) 126 — Ans: C
- 17. Which figure comes next?
 - A) ◆ B) ▲ C) D) — Ans: A
- 18. Aman is taller than Ravi but shorter than Suresh. Who is the shortest?A) Aman B) Ravi C) Suresh D) Cannot be determined Ans: B
- 19. Which of the following is the mirror image of the word BOWL?

 A) TWOB B) LOWB C) WOBL D) TLOW —

 Ans: A
- 20. Which is the odd one out? Mango, Apple, Banana, Potato A) Mango B) Apple C) Banana D) Potato

- Ans: D

21. If TABLE is written as 51234 and LAMP as 3456, then MAPLE = ?
A) 63415 B) 63514 C) 63451 D) 63145 —
Ans: B

- 22. Which number is different from the rest?
 121, 169, 225, 144
 A) 121 B) 169 C) 225 D) 144 Ans: D
 (not an odd square? actually 144=12² is
 even—others are odd squares)
- 23. If CAT = DBU, then DOG = ?

 A) EPH B) EOG C) EPH D) FPH Ans: A

 (+1 shift)
- 24. Which day comes after Wednesday?
 A) Tuesday B) Friday C) Thursday D)
 Saturday Ans: C
- 25. What comes next? A, C, E, G, ____ A) H B) I C) J D) K — Ans: B (skip-1 pattern: $+2 \rightarrow I$)

Section 2: Mathematical Reasoning (25 Questions)

- 26. 25 + 36 ÷ 6 = ? A) 10.5 B) 31 C) 41 D) 61 — **Ans: B**
- 27. The HCF of 18 and 24 is: A) 6 B) 3 C) 9 D) 12 — **Ans: A**
- 28. Smallest prime number:
 A) 0 B) 1 C) 2 D) 3 **Ans: C**
- 29. Area of a square of side 7 cm:

 A) 49 cm² B) 14 cm² C) 21 cm² D) 35 cm²

 Ans: A
- 30. Which is divisible by 3?
 A) 221 B) 123 C) 101 D) 100 Ans: B
- 31. 2/5 of a number is 16. The number is: A) 30 B) 35 C) 40 D) 45 — **Ans: C**
- 32. LCM of 4, 6, 8: A) 12 B) 24 C) 48 D) 16 — **Ans: B**
- 33. Sum of interior angles of a triangle: A) 90° B) 180° C) 270° D) 360° — Ans: B

- 34. Which is greater: 0.8 or 4/5?
 A) 0.8 B) 4/5 C) Equal D) Can't say **Ans:**C
- 35.15% of 80 = ?
 A) 10 B) 12 C) 14 D) 16 **Ans: B**
- 36. Convert 1.5 to a fraction.
 A) 1/2 B) 3/2 C) 2/3 D) 5/2 **Ans: B**
- 37. 17² = ?

 A) 289 B) 299 C) 279 D) 300 **Ans: A**
- 38. A number when divided by 7 gives remainder 3. Which can be the number?

 A) 17 B) 21 C) 24 D) 31 Ans: A (also 24, 31 fit; 17 is one correct choice)
- 39. Which angle measures exactly 90 degrees?
 - A) Acute B) Right C) Obtuse D) Straight —
 Ans: B
- 4<mark>0. A factor of 3</mark>6 that is also a prime number:
 - A) 2 B) 3 C) Both A and B D) 6 Ans: C
- 41. (72 ÷ 8) × 4 = ? A) 32 B) 34 C) 35 D) 36 — **Ans: D**
- 42. The perimeter of a square with side 12 cm is:
 - A) 24 cm B) 36 cm C) 48 cm D) 60 cm **Ans: C**
- 43. Average of 6, 8, 10 = ?
 A) 7.5 B) 8 C) 8.5 D) 9 **Ans: B**
- 44. 2³ + 3² = ? A) 15 B) 16 C) 17 D) 18 — **Ans: C**
- 45. Ratio of 50 paise to ₹5: A) 1:10 B) 10:1 C) 1:5 D) 5:1 — **Ans: A**
- 46. 2/3 of 90 = ?
 A) 45 B) 50 C) 55 D) 60 **Ans: D**
- 47. 2500 g = ? kg A) 2 B) 2.5 C) 25 D) 0.25 — **Ans: B**

- 48. 1/2 + 1/3 = ? A) 1/3 B) 2/5 C) 5/6 D) 1/4 — **Ans: C**
- 49. Perimeter of a rectangle 8 cm × 6 cm = ?
 A) 28 cm B) 30 cm C) 32 cm D) 26 cm —
 Ans: A
- 50. Which is a multiple of 9?
 A) 45 B) 54 C) 63 D) 81 **Ans: D**

Section 3: Everyday Mathematics (Application-Based) (25 Questions)

- 51. A bag has 5 red and 3 blue balls.

 Probability of picking a red ball:

 A) 3/8 B) 5/8 C) 1/2 D) 2/3 Ans: B
- 52. Ramesh travels 60 km in 2 hours. Speed = ?

 A) 20 km/hr B) 25 km/hr C) 30 km/hr D) 35 km/hr **Ans: C**
- 53. A shopkeeper earns ₹15 per item. By selling 40 items he earns:

 A) ₹600 B) ₹550 C) ₹500 D) ₹450 Ans:

 A
- 54. If 1 chocolate costs ₹25, how many can you buy with ₹200?

 A) 8 B) 10 C) 6 D) 12 Ans: A
- 55. A train departs 6:45 AM and arrives 10:15 AM. Travel time:

 A) 3 hr 30 min B) 3 hr 45 min C) 3 hr 15 min D) 4 hr Ans: A
- 56. A mobile phone costs ₹9,500. You pay ₹6,500 now. Amount left:
 A) ₹3,000 B) ₹2,000 C) ₹4,000 D) ₹2,500
 Ans: A
- 57. A triangle has sides 6 cm, 8 cm, 10 cm. It is a:A) Scalene B) Equilateral C) Isosceles D)

Right-angled — Ans: D

- 58. A bottle holds 2.5 litres. How many millilitres is this?

 A) 250 B) 2,500 C) 25,000 D) 250,000 Ans: B
- 59. Temperature rose from 18°C to 30°C.

 Increase = ?

 A) 12°C B) 10°C C) 8°C D) 15°C Ans: A
- 60. A pack of 6 pencils costs ₹48. Cost of 1 pencil = ?
 - A) ₹8 B) ₹6 C) ₹7 D) ₹5 **Ans: A**
- 61. A bus covers 120 km in 4 hr. Speed = ?
 A) 25 km/hr B) 30 km/hr C) 35 km/hr D)
 40 km/hr **Ans:** B
- 62. Milk costs ₹24 per litre. 5 litres cost:
 A) ₹96 B) ₹100 C) ₹110 D) ₹120 Ans: D
- 63. A book has 240 pages. Riya reads 30/day.
 Days to finish:
 A) 8 B) 7 C) 9 D) 6 Ans: A
- 6<mark>4. A car uses 8</mark> L petrol for 120 km. Mileage per litre:
 - A) 12 km/L B) 14 km/L C) 15 km/L D) 16 km/L Ans: C
- 65. If 1 dozen = 12, then 5 dozen oranges = ?
 A) 50 B) 60 C) 72 D) 80 Ans: B
- 66. Cost of 3 shirts = ₹1500. Cost of 1 shirt = ?

 A) ₹400 B) ₹450 C) ₹500 D) ₹550 Ans:
- 67. A rope is 15 m long. Cut into 5 equal parts. Each part = ?

 A) 3 m B) 2.5 m C) 4 m D) 5 m Ans: A
- 68. Which is cheaper per pen: 5 pens ₹50 or 12 pens ₹120?

 A) 5 pens @ ₹10 B) 12 pens @ ₹10 C)

 Both equal D) Can't say Ans: C
- 69. Clock shows 4:30. Angle between hands = ?

- A) 35° B) 40° C) 42.5° D) 45° **Ans: D** (standard result)
- 70. Bus ticket costs ₹75. 12 students travel.

 Total cost = ?

 A) ₹800 B) ₹850 C) ₹900 D) ₹950 Ans:

 C
- 71. Water tank has 200 L. 50 L used. Left = ?
 A) 120 L B) 150 L C) 160 L D) 175 L —
 Ans: B
- 72. A bag costs ₹450. Discount 10%. Final price = ?
 A) ₹400 B) ₹405 C) ₹410 D) ₹415 Ans:
- 73. Work: 20 men finish in 10 days. 10 men will take:

 A) 10 days B) 12 days C) 15 days D) 20 days Ans: D
- 74. A family spends 2/5 of income on food.

 Income ₹25,000. Spent = ?

 A) ₹8,000 B) ₹9,000 C) ₹10,000 D)

 ₹12,500 Ans: C
- 75. If 100 paise = ₹1, then 375 paise = ?
 A) ₹3.50 B) ₹3.75 C) ₹3.60 D) ₹3.25 —
 Ans: B

Section 4: Achievers (HOTS) (25 Questions)

- 76. A number multiplied by itself gives 256. The number is:
 - A) 14 B) 16 C) 18 D) 20 Ans: B
- 77. If 3x 5 = 10, x = ?A) 3 B) 5 C) 6 D) 7 — **Ans: B**
- 78. A tank is 1/3 full. After adding 20 L, it is 2/3 full. Capacity = ?
 A) 40 L B) 60 L C) 30 L D) 50 L **Ans: B**
- 79. Which of these cannot form the sides of a triangle?

- A) 2, 3, 5 B) 4, 5, 6 C) 3, 3, 3 D) 2, 2, 3 **Ans: A**
- 80. Average of 12, 15, 18, 21, 24 = ?
 A) 18 B) 19 C) 17 D) 20 **Ans: A**
- 81. Smallest number which leaves remainder 2 when divided by 3, 4, and 5:
 A) 62 B) 58 C) 42 D) 38 Ans: A
- 82. A square and a rectangle have the same perimeter. Which has larger area?
 A) Square B) Rectangle C) Both D) Can't say Ans: A
- 83. Which fraction is closest to 0.75?

 A) 3/5 B) 2/3 C) 4/5 D) 3/4 Ans: D
- 84. The time is 2:15. Angle between hour & minute hand = ?
 A) 52.5° B) 45° C) 37.5° D) 60° Ans:
 Correct value is 22.5°, which isn't listed.
 (Note: None of the options is correct.)
- 85. 1/2 of a number is 3 less than 3/4 of that number. The number = ?

 A) 10 B) 12 C) 18 D) 24 Ans: B
- 86. Solve: 5x + 7 = 22. x = ? A) 2 B) 2.5 C) 3 D) 4 — **Ans: C**
- 87. If 2/3 of a number = 48, the number = ?
 A) 36 B) 60 C) 70 D) 72 **Ans: D**
- 88. Three consecutive even numbers sum to 54. Middle number = ?
 - A) 16 B) 18 C) 20 D) 22 Ans: B
- 89. How many edges does a cube have?
 A) 8 B) 10 C) 12 D) 14 **Ans: C**
- 90. Sum of first 10 natural numbers = ?
 A) 50 B) 55 C) 60 D) 65 **Ans: B**
- 91. A man walks 3 km East, then 4 km North.

 Distance from start = ?

 A) 4 km B) 6 km C) 5 km D) 7 km Ans:

 C

- 92. (12 × 12) (11 × 11) = ? A) 23 B) 24 C) 25 D) 26 — **Ans: A**
- 93. Two dice are thrown. Probability that the total is 7:
 - A) 1/12 B) 1/6 C) 5/36 D) 1/9 Ans: B
- 94. If A:B = 2:3 and B:C = 4:5, then A:B:C = ?
 - A) 2:3:5 B) 4:6:5 C) 8:12:15 D) 6:9:10 —
 - Ans: C
- 95. Distance = 120 km, Speed = 60 km/hr.
 - Time = ?
 - A) 2 hr B) 1 hr C) 1.5 hr D) 2.5 hr **Ans:**
 - Α
- 96. A man saves ₹1200 per month. Yearly
 - savings = ?
 - A) ₹12,000 B) ₹13,200 C) ₹14,000 D)
 - ₹14,400 Ans: D
- 97. If 10% of x = 50, then x = ?
 - A) 50 B) 100 C) 500 D) 1000 Ans: C
- 98. Which is larger: 3/4 or 5/8?
 - A) 3/4 B) 5/8 C) Equal D) Can't say —
 - Ans: A
- 99. What is 2/7 of 350?
 - A) 90 B) 95 C) 98 D) 100 Ans: D
- 100. The perimeter of a circle is called:
 - A) Diameter B) Circumference C) Radius
 - D) Arc Ans: B

Quick notes (for teacher use)

Q38: multiple correct values exist for "remainder 3 when ÷7"; among options, 17 is acceptable.

Q84: correct angle at **2:15** is **22.5°**; none of the options match—keep as a teaching moment or replace options in print.