TYBA COACHING CENTRE, AJMER (RAJASTHAN)

RMS CET Class VI Mathematics • Official Answer Key & Explanations

Chapter 4: Simplification & BODMAS Rule • Max Marks: 50 • Helpline: 6367029449

Official Master Answer Key (Q01 to Q20) / उत्तर तालिका

Distribution: 5A, 5B, 5C, 5D

Q.	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20
Ans	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D

Step-by-Step Solutions (Q01 to Q10) / चरणबद्ध व्याख्यात्मक हल

Part I

Q1. Ans: (A) 14

Expression: `24 ÷ 6 × 3 + 4 − 2`. Division first: 24 ÷ 6 = 4. Multiplication next: 4 × 3 = 12. Addition & Subtraction: 12 + 4 − 2 = 16 − 2 = **14**.

भाग पहले: 24÷6 = 4 → गुणा: 4×3 = 12 → 12+4−2 = 14।

Q2. Ans: (B) 4

Expression: `36 ÷ 6 of 3 × 2`. 'Of' must be calculated first: 6 of 3 = 6 × 3 = 18. Division: 36 ÷ 18 = 2. Multiplication: 2 × 2 = **4**.

'का' पहले: 6 of 3 = 18 → भाग: 36÷18 = 2 → गुणा: 2×2 = 4।

Q3. Ans: (C) 92

Expression: `100 − [80 ÷ {20 − (16 − 6)}]`. Round bracket: 16 − 6 = 10. Curly braces: 20 − 10 = 10. Box bracket: 80 ÷ 10 = 8. Final subtraction: 100 − 8 = **92**.

आंतरिक कोष्ठक: 16−6 = 10 → मंझिला: 20−10 = 10 → बड़ा: 80÷10 = 8 → 100−8 = 92।

Q4. Ans: (D) 16

Expression: `25 − [18 − {12 − (6 − 4 − 1)}] (bar on 4−1)`. Vinculum bar first: 4 − 1 = 3. Round: 6 − 3 = 3. Braces: 12 − 3 = 9. Box: 18 − 9 = 9. Final: 25 − 9 = **16**.

रेखा कोष्ठक: 4−1 = 3 → छोटा: 6−3 = 3 → मंझिला: 12−3 = 9 → बड़ा: 18−9 = 9 → 25−9 = 16।

Q5. Ans: (A) 1 1/4

Expression: `4/5 ÷ 4/5 of 4/5`. 'Of' first: 4/5 × 4/5 = 16/25. Division: (4/5) ÷ (16/25) = (4/5) × (25/16) = (1 × 5)/(1 × 4) = **5/4 = 1 1/4**.

'का' पहले: 4/5×4/5 = 16/25 → भाग: (4/5)×(25/16) = 5/4 = 1 1/4।

Q6. Ans: (B) 2.5

Continuous division: `120 ÷ 6 ÷ 4 ÷ 2`. Continuous division rule: 120 / (6 × 4 × 2) = 120 / 48 = **2.5** (or 5/2).

सतत भाग प्रमेय: 120/(6×4×2) = 120/48 = 2.5।

Q7. Ans: (C) 0.6

Expression: `0.6 × 0.6 ÷ 0.6 + 0.6 − 0.6`. Division first: 0.6 ÷ 0.6 = 1. Multiplication: 0.6 × 1 = 0.6. Add & Subtract: 0.6 + 0.6 − 0.6 = **0.6**.

भाग पहले: 0.6÷0.6 = 1 → 0.6×1 = 0.6 → 0.6+0.6−0.6 = 0.6।

Q8. Ans: (D) 21

Expression: `|-15| − |8 − 14| + |-3 × 4|`. Modulus values: |-15| = 15; |8 − 14| = |-6| = 6; |-12| = 12. Result: 15 − 6 + 12 = 9 + 12 = **21**.

मापांक हल: 15 − 6 + 12 = 21।

Q9. Ans: (A) 18

Equation: `15 × 4 − ? = 42`. Multiplication: 15 × 4 = 60. Then 60 − ? = 42 → ? = 60 − 42 = **18**.

समीकरण: 60 − ? = 42 → ? = 60 − 42 = 18।

Q10. Ans: (B) 1/5

Product: `(1 − 1/2)(1 − 1/3)(1 − 1/4)(1 − 1/5)` = (1/2) × (2/3) × (3/4) × (4/5). Telescoping cancellation leaves First numerator / Last denominator = **1/5**.

दूरबीन निरस्तीकरण: मध्य पद कटकर 1/5 बचता है।

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Chapter 4: Simplification & BODMAS Rule • Helpline: 6367029449

Step-by-Step Solutions (Q11 to Q20) / चरणबद्ध व्याख्यात्मक हल (भाग 2) — Part II

Q11. Ans: (C) 8/5
Continued fraction: `1 + 1 / [1 + 1 / (1 + 1/2)]`. Base: 1 + 1/2 = 3/2. Reciprocal: 1 / (3/2) = 2/3. Middle: 1 + 2/3 = 5/3. Reciprocal: 1 / (5/3) = 3/5. Final: 1 + 3/5 = **8/5 = 1 3/5**.
नीचे से ऊपर: 1+1/2=3/2 → 1+2/3=5/3 → 1+3/5 = 8/5।

Q12. Ans: (D) 11
Expression: `18 − [6 − {4 − (8 − 6 + 3)}]`. Round: 8 − 6 + 3 = 2 + 3 = 5. Curly: 4 − 5 = −1. Box: 6 − (−1) = 6 + 1 = 7. Final: 18 − 7 = **11**.
छोटा कोष्ठक: 8−6+3 = 5 → मंझिला: 4−5 = −1 → बड़ा: 6−(−1) = 7 → 18−7 = 11।

Q13. Ans: (A) 32
Let correct questions = c, wrong = 40 − c. Marks equation: `3c − 1(40 − c) = 88` → 3c − 40 + c = 88 → 4c = 128 → c = 128 / 4 = **32**.
समीकरण: 3c − (40 − c) = 88 → 4c = 128 → सही उत्तर = 32।

Q14. Ans: (B) ₹185
Fare formulation: `20 + (12 − 1) × 15` = 20 + 11 × 15 = 20 + 165 = **₹185**.
किराया: 20 + (11 × 15) = 20 + 165 = ₹185।

Q15. Ans: (C) 6.0
Expression: `4.8 ÷ 0.6 × 0.5 + 3.2 − 1.2`. Division: 4.8 ÷ 0.6 = 8. Multiplication: 8 × 0.5 = 4. Addition: 4 + 3.2 = 7.2. Subtraction: 7.2 − 1.2 = **6.0**.
भाग: 4.8÷0.6 = 8 → 8×0.5 = 4 → 4+3.2−1.2 = 6.0।

Q16. Ans: (D) 17
Expression: `20 − 8 − 5 (bar over 8−5)`. Solve bar first: 8 − 5 = 3. Apply outer minus: 20 − 3 = **17**.
रेखा कोष्ठक: 8 − 5 = 3 → 20 − 3 = 17।

Q17. Ans: (A) 4
Expression: `(2 1/2 + 1 1/2) ÷ (2 1/2 − 1 1/2)`. Numerator bracket: 5/2 + 3/2 = 8/2 = 4. Denominator bracket: 5/2 − 3/2 = 2/2 = 1. Result: 4 ÷ 1 = **4**.
प्रथम कोष्ठक = 4, द्वितीय कोष्ठक = 1 → 4 ÷ 1 = 4।

Q18. Ans: (B) 12
Expression: `12 + 12 ÷ 12 × 12 − 12`. Division first: 12 ÷ 12 = 1. Multiplication: 1 × 12 = 12. Addition & Subtraction: 12 + 12 − 12 = **12**.
भाग: 12÷12 = 1 → 1×12 = 12 → 12+12−12 = 12।

Q19. Ans: (C) -20
Expression: `(-6) × (-5) ÷ (-3) + (-10)`. Mult/Div from left: (-6) × (-5) = +30. Then (+30) ÷ (-3) = -10. Add: -10 + (-10) = **-20**.
गुणा: (+30) → भाग: (+30)÷(−3) = −10 → −10 + (−10) = −20।

Q20. Ans: (D) ₹70
Cadet money: ₹800. Spent on books: 800 × 1/4 = ₹200. Spent on boots: ₹250. Total spent: 200 + 250 = ₹450. Left: 800 − 450 = ₹350. Each cadet gets: 350 ÷ 5 = **₹70**.
कुल खर्च: 200 + 250 = ₹450 → शेष: ₹350 → 350 ÷ 5 = ₹70।

RMS Entrance Exam Performance Scorecard & Cutoff Rubric / मूल्यांकन पैमाना — Max: 50 Marks

Score (अंक)	Correct Questions	Performance Grade	Action Plan / तैयारी सुझाव
45 – 50	18 – 20 Correct	★ Excellent (Merit Rank)	Maintain speed; practice daily mock tests.
38 – 44	15 – 17 Correct	Good (Selection Safe)	Revise 'Of' priority and continuous division drills.
Below 38	< 15 Correct	Needs Immediate Drill	Re-read 6-page Theory Notes; practice Worksheet Section F.