

Exam	RIMC Entrance Examination — Model Paper 2026	Duration	2 Hrs 30 Min
Academy	The Volume Education Academy, Dehradun	Total Marks	300
Sections	Mathematics English GK Intelligence	Medium	English

Instructions:

1. This paper has **FOUR** sections. Attempt **ALL** questions.
2. Part A (MCQ): Each question carries 2 marks. No negative marking.
3. Part B (Short Answer): Marks are indicated against each question.
4. Write Roll Number on all answer sheets. Use blue/black ballpoint pen only.
5. Rough work may be done in the space provided at the end of the paper.

SECTION 1: MATHEMATICS [80 Marks]

Part A — Multiple Choice Questions (2 Marks Each)

Q1. The LCM of 12, 18 and 24 is:

- (A) 36 (B) 48
(C) 72 (D) 96

Q2. If $3x - 7 = 11$, then $x =$

- (A) 4 (B) 5
(C) 6 (D) 7

Q3. A train travels 360 km in 4 hours. Its speed in m/s is:

- (A) 90 (B) 25
(C) 100 (D) 30

Q4. Area of a circle with radius 7 cm (use $\pi = 22/7$):

- (A) 44 cm^2 (B) 154 cm^2
(C) 132 cm^2 (D) 176 cm^2

Q5. If ratio of boys to girls is 3:2 and there are 30 boys, how many girls?

- (A) 15 (B) 18
(C) 20 (D) 25

Q6. Simple interest on Rs. 5000 at 8% p.a. for 3 years:

- (A) Rs. 1000 (B) Rs. 1200
(C) Rs. 1500 (D) Rs. 2000

Q7. What is 15% of 240?

- (A) 30 (B) 36
(C) 40 (D) 45

Q8. Which of the following is a prime number?

(A) 51

(B) 57

(C) 63

(D) 67

Q9. Square root of 1764:

(A) 42

(B) 44

(C) 46

(D) 48

Q10. A shopkeeper buys for Rs. 400, sells for Rs. 500. Profit %:

(A) 20%

(B) 25%

(C) 30%

(D) 15%

Q11. The value of $2^5 \times 2^3$:

(A) 256

(B) 128

(C) 512

(D) 64

Q12. If $a:b = 2:3$ and $b:c = 4:5$, then $a:c =$

(A) 8:15

(B) 2:5

(C) 6:10

(D) 4:9

Q13. Volume of a cube of side 5 cm:

(A) 25 cm^3

(B) 75 cm^3

(C) 125 cm^3

(D) 150 cm^3

Q14. Each interior angle of an equilateral triangle:

(A) 90°

(B) 45°

(C) 60°

(D) 72°

Q15. Average of 5, 10, 15, 20, 25:

(A) 12

(B) 13

(C) 15

(D) 16

Q16. HCF of 36 and 48:

(A) 6

(B) 12

(C) 18

(D) 24

Q17. If 5 men do work in 8 days, 10 men take:

(A) 2 days

(B) 4 days

(C) 6 days

(D) 8 days

Q18. Perimeter of rectangle: length 12 cm, breadth 8 cm:

(A) 20 cm

(B) 40 cm

(C) 96 cm

(D) 80 cm

Q19. A man walks at 5 km/h. Time (min) to walk 2 km:

(A) 20

(B) 24

(C) 30

(D) 40

Q20. Value of $(0.1)^2 + (0.2)^2 + (0.3)^2$:

(A) 0.14

(B) 0.36

(C) 0.06

(D) 0.16

Part B — Short Answer Questions (Marks as indicated)

QM1. [4 Marks] Find the value of x: $2x + 5 = 3x - 7$

QM2. [4 Marks] A cylinder has radius 7 cm and height 10 cm. Find its volume. ($\pi = 22/7$)

QM3. [5 Marks] Find compound interest on Rs. 8000 at 10% p.a. for 2 years.

QM4. [4 Marks] Angles of a triangle are in ratio 2:3:4. Find each angle.

QM5. [5 Marks] A boat goes 15 km upstream in 3 hrs and 15 km downstream in 1.5 hrs. Find speed of boat in still water.

SECTION 2: ENGLISH [80 Marks]

Part A — Multiple Choice Questions (2 Marks Each)

Q21. Synonym of VALIANT:

- (A) Cowardly
- (C) Weak

- (B) Brave
- (D) Lazy

Q22. Antonym of EXPAND:

- (A) Grow
- (C) Contract

- (B) Increase
- (D) Develop

Q23. Fill in the blank: The soldier _____ the enemy bravely.

- (A) confronted
- (C) confronting

- (B) confronts
- (D) confront

Q24. Part of speech of the underlined word: He runs quickly.

- (A) Adjective
- (C) Adverb

- (B) Noun
- (D) Verb

Q25. Correct spelling:

- (A) Accomodate
- (C) Acommodate

- (B) Accommodate
- (D) Acomodate

Q26. Plural of 'child':

- (A) Childs
- (C) Children

- (B) Childes
- (D) Childrens

Q27. Correct punctuation:

- (A) Lets go
- (C) Let's go

- (B) Lets' go
- (D) Let's, go

Q28. 'A place where books are kept' is called a:

- (A) Museum
- (C) Bookstore

- (B) Library
- (D) Archive

Q29. Correct passive voice of 'He writes a letter':

- (A) A letter is written by him
- (C) A letter written by him

- (B) A letter was written by him
- (D) A letter is being written

Q30. 'The study of stars' is called:

- (A) Geology
- (C) Astronomy

- (B) Biology
- (D) Astrology

Q31. Correct article: _____ Himalaya is in India.

- (A) A
- (C) The

- (B) An
- (D) No article

Q32. Figure of speech in: 'The wind whispered through the trees.'

- | | |
|---------------------|------------------|
| (A) Simile | (B) Metaphor |
| (C) Personification | (D) Alliteration |

Q33. One-word substitute for 'one who loves his country':

- | | |
|-----------------|-------------|
| (A) Nationalist | (B) Patriot |
| (C) Loyalist | (D) Traitor |

Q34. Grammatically correct sentence:

- | | |
|---------------------------------|-----------------------|
| (A) She don't know | (B) She doesn't knows |
| (C) She doesn't know the answer | (D) She not know |

Q35. Idiom 'Bite the bullet' means:

- | | |
|-----------------------|----------------------------|
| (A) To eat metal | (B) To endure pain bravely |
| (C) To attack someone | (D) To be hungry |

Q36. Synonym of GALLANT:

- | | |
|--------------|---------------------|
| (A) Cowardly | (B) Noble and brave |
| (C) Foolish | (D) Cunning |

Q37. Antonym of VICTORY:

- | | |
|------------|-------------|
| (A) Win | (B) Success |
| (C) Defeat | (D) Triumph |

Q38. Choose the correctly spelt word:

- | | |
|--------------|--------------|
| (A) Calender | (B) Calandar |
| (C) Calendar | (D) Calander |

Q39. 'Comrades in arms' means:

- | | |
|--------------------|---------------------|
| (A) Enemies in war | (B) Fellow soldiers |
| (C) Weapons | (D) Officers only |

Q40. Identify the tense: 'The troops had marched for 20 km.'

- | | |
|------------------|---------------------|
| (A) Simple Past | (B) Past Continuous |
| (C) Past Perfect | (D) Present Perfect |

Part B — Short Answer Questions (Marks as indicated)

QE1. [8 Marks] Write a paragraph (5-6 sentences) on: MY IDEAL SOLDIER

QE2. [6 Marks] Make meaningful sentences using: (a) Courage (b) Discipline (c) Honour

QE3. [4 Marks] Rewrite in reported speech: Ram said, 'I am going to school.'

QE4. [2 Marks] Write degrees of comparison: BRAVE → Comparative → Superlative

QE5. [2 Marks] Correct the sentence: 'He have completed his homework yesterday.'

SECTION 3: GENERAL KNOWLEDGE [70 Marks]

Part A — Multiple Choice Questions (2 Marks Each)

Q41. RIMC is located in:

- (A) New Delhi
- (C) Dehradun

- (B) Pune
- (D) Chennai

Q42. Supreme Commander of Indian Armed Forces:

- (A) Prime Minister
- (C) President of India

- (B) Defence Minister
- (D) Chief of Army Staff

Q43. National animal of India:

- (A) Lion
- (C) Tiger

- (B) Elephant
- (D) Leopard

Q44. River known as 'Sorrow of Bengal':

- (A) Ganga
- (C) Damodar

- (B) Brahmaputra
- (D) Hooghly

Q45. India became a Republic on:

- (A) 15 Aug 1947
- (C) 2 Oct 1952

- (B) 26 Jan 1950
- (D) 26 Nov 1949

Q46. The Battle of Panipat (First) was fought in:

- (A) 1526
- (C) 1761

- (B) 1556
- (D) 1600

Q47. Who wrote 'Jana Gana Mana'?

- (A) Bankim Chandra
- (C) Subhash Bose

- (B) Rabindranath Tagore
- (D) Sarojini Naidu

Q48. Highest gallantry award in India:

- (A) Param Vir Chakra
- (C) Vir Chakra

- (B) Mahavir Chakra
- (D) Ashoka Chakra

Q49. Operation Vijay (1999) refers to:

- (A) 1965 War
- (C) Bangladesh Liberation

- (B) Kargil War
- (D) Op Blue Star

Q50. Siachen Glacier is in:

- (A) Himachal Pradesh
- (C) Ladakh

- (B) Uttarakhand
- (D) Arunachal Pradesh

Q51. NDA stands for:

- (A) National Defence Academy
- (C) Naval Defence Agency

- (B) National Development Authority
- (D) National Discipline Academy

Q52. Mount Everest is in:

(A) India

(B) China

(C) Nepal

(D) Tibet

Q53. Capital of Uttarakhand:

(A) Haridwar

(B) Mussoorie

(C) Dehradun

(D) Nainital

Q54. First recipient of Param Vir Chakra:

(A) Abdul Hamid

(B) Somnath Sharma

(C) Albert Ekka

(D) Vikram Batra

Q55. The Indian Navy's motto is:

(A) Sham No Varunah

(B) Nabhah Sprisham Diptam

(C) Service Before Self

(D) Jai Hind

Part B — Short Answer Questions (Marks as indicated)

QG1. [6 Marks] Name any THREE recipients of the Param Vir Chakra.

QG2. [4 Marks] What does DRDO stand for? Name ONE product developed by DRDO.

QG3. [6 Marks] Name the three services of Indian Armed Forces and their chiefs' designations.

QG4. [4 Marks] Why is 16 December celebrated as Vijay Diwas?

QG5. [2 Marks] Name India's first indigenously built aircraft carrier.

SECTION 4: INTELLIGENCE TEST [70 Marks]**Part A — Multiple Choice Questions (2 Marks Each)**

Q56. Odd one out: 2, 3, 5, 7, 9, 11

(A) 9

(B) 7

(C) 5

(D) 11

Q57. Complete the series: 3, 6, 12, 24, ____

(A) 36

(B) 48

(C) 42

(D) 60

Q58. A is the son of B. B is the daughter of C. C is related to A as:

(A) Grandfather

(B) Grandmother

(C) Uncle

(D) Grandparent

Q59. Which number is missing? 1, 4, 9, 16, ____, 36

(A) 20

(B) 24

(C) 25

(D) 30

Q60. Next term: Z, X, V, T, ____

(A) Q

(B) R

(C) S

(D) P

Q61. A clock shows 3:15. Angle between hour and minute hands:

(A) 0 degrees

(B) 7.5 degrees

(C) 15 degrees

(D) 22.5 degrees

Q62. Pointing to a man, Priya said, 'His mother's only son is my father.' Priya is related to the man as:

(A) Sister

(B) Niece

(C) Daughter

(D) Aunt

Q63. In a code: SOLDIER = TPMEJFS. What is BRAVE in code?

(A) CSBWF

(B) ASBUD

(C) DSAWF

(D) CQBUF

Q64. How many triangles in a triangle divided into 4 equal smaller triangles?

(A) 4

(B) 5

(C) 6

(D) 8

Q65. If $6 \times 4 = 20$ and $5 \times 3 = 16$, then $8 \times 5 = ?$

(A) 26

(B) 40

(C) 30

(D) 28

Q66. MILITARY — how many letters appear more than once?

(A) 1

(B) 2

(C) 3

(D) 4

Q67. Arrange in rank order (lowest first): Corporal, Major, Lieutenant, Colonel, Captain

(A) Corporal, Lt, Capt, Major, Colonel

(B) Lt, Corporal, Capt, Major, Colonel

(C) Corporal, Capt, Lt, Major, Colonel

(D) Lt, Capt, Corporal, Major, Colonel

Q68. A is taller than B. C is taller than A. D is shorter than B. Who is tallest?

(A) A

(B) B

(C) C

(D) D

Q69. Complete: AZ, BY, CX, ____

(A) DV

(B) DW

(C) EW

(D) DX

Q70. Mirror image of the word 'ARMY' placed before a vertical mirror:

(A) YMRA

(B) ARMY reversed

(C) Laterally inverted ARMY

(D) AMRY

Part B — Short Answer Questions (Marks as indicated)

QI1. [5 Marks] A tank is $\frac{1}{3}$ full. After adding 80 litres it becomes $\frac{3}{4}$ full. Find the total capacity of the tank.

QI2. [4 Marks] In a row of soldiers, Rajan is 15th from the left and 10th from the right. How many soldiers are there in the row?

QI3. [4 Marks] A watch gains 5 minutes every hour. If correctly set at 9 AM, what time will it show at 1 PM?

QI4. [4 Marks] Find the missing number: Row 1: 2 4 8 Row 2: 3 9 27 Row 3: 4 16 ____

Q15. [5 Marks] A man is facing North. He turns 90° clockwise, then 180° anticlockwise. Which direction is he now facing?