
IQNEXUS MATHEMATICS OLYMPIAD (IQMO)

Sample Paper | Class 7 | Session: 2024-25

Challenging Minds, Building Futures

General Instructions:

- Total Questions: **30**
- Total Marks: **100**
- Time Allowed: **1 Hour**
- **All questions are compulsory.**
- Each question has **four options**, only one is correct.

STUDENT DETAILS

- **Student Name:** _____
 - **Class:** _____ **Section:** _____
 - **Exam Roll No.:** _____
 - **School Name:** _____
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SECTION 1: FUNDAMENTAL CONCEPTS (10 Questions, 30 Marks)

Q1. Find the value of $(3^2 + 4^2 - 5^2)$.

- A) 0
- B) 2
- C) 4
- D) 6

Q2. The sum of the first 10 natural numbers is:

- A) 45
- B) 55
- C) 65
- D) 75

Q3. The area of a right-angled triangle with base **12 cm** and height **16 cm** is:

- A) 96 cm²
- B) 100 cm²
- C) 120 cm²
- D) 130 cm²

Q4. Which of the following fractions is the largest?

- A) $\frac{3}{4}$
- B) $\frac{7}{8}$
- C) $\frac{5}{6}$
- D) $\frac{9}{10}$

Q5. If $7y - 4 = 24$, then y is:

- A) 3
- B) 4
- C) 5
- D) 6

Q6. The sum of interior angles of a pentagon is:

- A) 360°
- B) 450°
- C) 540°
- D) 380°

SECTION 2: LOGICAL THINKING (5 Questions, 15 Marks)

Q1. Find the missing term: **3, 9, 27, ?, 243**

- A) 54
- B) 81
- C) 108
- D) 144

Q2. If $A = 1$, $B = 2$, $C = 3$, then what is the value of **MATH**?

- A) 41
- B) 42
- C) 43
- D) 44

SECTION 3: APPLIED PROBLEM SOLVING (10 Questions, 35 Marks)

Q1. A shopkeeper gives a **10% discount** on a ₹600 item. What is the final price after a **5% GST**?

- A) ₹567
- B) ₹573
- C) ₹580
- D) ₹590

Q2. A car covers **180 km** in **3 hours**. What is its speed?

- A) 50 km/hr
- B) 55 km/hr
- C) 60 km/hr
- D) 65 km/hr

Q3. A sum of ₹5000 is invested at **8% per annum** for **3 years**. Find the simple interest.

- A) ₹1200
- B) ₹1300
- C) ₹1400
- D) ₹1500

Q4. The area of a circle with **radius 14 cm** is:

- A) 586 cm²
- B) 596 cm²
- C) 616 cm²
- D) 636 cm²

Q5. A train is **120 m long** and crosses a **180 m platform** in **18 sec**. Find its speed.

- A) 15 m/s
 - B) 16.67 m/s
 - C) 17.5 m/s
 - D) 18.5 m/s
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SECTION 4: ACHIEVERS SECTION (5 Questions, 20 Marks)

Q1. A father is **28 years older than his son**. In **8 years**, he will be **twice his son's age**. Find their current ages.

- A) 20, 48
- B) 22, 50
- C) 24, 52
- D) 26, 54

Q2. What is the sum of the first **15 odd numbers**?

- A) 121
- B) 225
- C) 256
- D) 289

Answer:

SECTION 1: FUNDAMENTAL CONCEPTS

- 1. A) 0
- 2. B) 55
- 3. A) 96 cm^2
- 4. D) $9/10$
- 5. B) 4
- 6. C) 540°

SECTION 2: LOGICAL THINKING

- 1. B) 81
- 2. B) 42

SECTION 3: APPLIED PROBLEM SOLVING

- 1. A) ₹567
- 2. C) 60 km/hr
- 3. A) ₹1200
- 4. C) 616 cm^2
- 5. B) 16.67 m/s

SECTION 4: ACHIEVERS SECTION

- 1. A) 20, 48
- 2. B) 225

