

MAH B.P.Ed CET — Complete Sample Paper

Sample Paper — 2

Duration: 60 Minutes

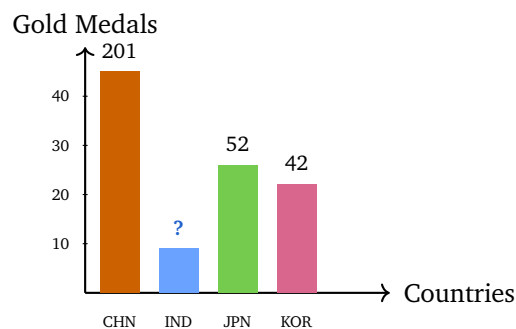
Maximum Marks: 50

Instructions

- This paper contains **50 Multiple Choice Questions** modelled on the MAH B.P.Ed CET written test pattern.
- **Part A:** General Knowledge (Q1–Q15) | **Part B:** Mental Ability (Q16–Q30) | **Part C:** Teacher Aptitude & Sports Related Knowledge (Q31–Q50).
- Each correct answer carries **+1 mark**. There is **no negative marking**.
- Only **one** option is correct per question. Choose carefully.
- No sectional time limit; move freely between parts. Total time: **60 minutes**.
- Mobile phones, calculators, and electronic gadgets are strictly prohibited.

Part A — General Knowledge (Q1–Q15) [15 Marks]

Q1. At the **Asian Games 2023** held in Hangzhou, China, how many **gold medals** did India win in total?



- (A) 22
- (B) 25
- (C) 30
- (D) 28

Q2. Which country won the **ICC Men's T20 World Cup 2024**?

- (A) Australia
- (B) India
- (C) England
- (D) South Africa

Q3. Which Indian scientist was conferred the **Padma Vibhushan 2024 posthumously** for his pioneering contributions to agricultural science and the Green Revolution?

- (A) M.S. Swaminathan
- (B) Ratan Tata
- (C) A.P.J. Abdul Kalam
- (D) C.N.R. Rao

Q4. The **Nobel Peace Prize 2023** was awarded to whom for her fight against the oppression of women in Iran?

- (A) Malala Yousafzai
- (B) Ales Bialiatski
- (C) Narges Mohammadi
- (D) Maria Ressa

Q5. How many **total medals** did India win at the **Commonwealth Games 2022** held in Birmingham, England?

- (A) 55
- (B) 58
- (C) 64
- (D) 61

Q6. The **Sangai Festival**, named after the endangered brow-antlered deer (the state animal), is celebrated as the flagship festival of which Indian state?



- (A) Nagaland
- (B) Manipur
- (C) Assam
- (D) Meghalaya

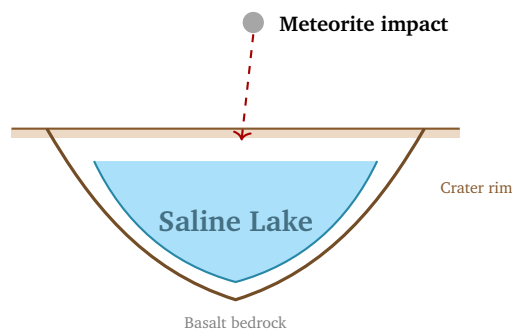
Q7. In which year was the **Third Battle of Panipat** fought, in which the Maratha Confederacy was decisively defeated by Ahmad Shah Durrani?

- (A) 1761
- (B) 1526
- (C) 1556
- (D) 1600

Q8. The **Narmada River** is unusual among the major rivers of India. In which direction does it flow before emptying into the Arabian Sea?

- (A) North
- (B) South
- (C) West
- (D) East

Q9. **Lonar Lake** in Buldhana district, Maharashtra is a unique geological wonder. What **type of lake** is it?



- (A) Freshwater tectonic lake
- (B) Glacial lake



- (C) Oxbow lake
- (D) Saline meteorite crater lake

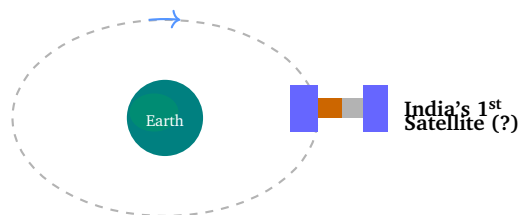
Q10. In which year was the **Indian National Congress (INC)** founded in Bombay (now Mumbai)?

- (A) 1880
- (B) 1885
- (C) 1890
- (D) 1895

Q11. What is the official **State Flower of Maharashtra**?

- (A) Jarul (Pride of India / *Lagerstroemia speciosa*)
- (B) Lotus (*Nelumbo nucifera*)
- (C) Marigold (*Tagetes erecta*)
- (D) Rose (*Rosa indica*)

Q12. What was the name of **India's first satellite**, launched by ISRO on April 19, 1975?



- (A) INSAT-1A
- (B) Rohini
- (C) Aryabhata
- (D) Chandrayaan-1

Q13. The centrally sponsored school nutrition scheme **PM POSHAN** (Pradhan Mantri Poshan Shakti Nirman) was previously known by what name?

- (A) Integrated Child Development Scheme (ICDS)



- (B) Mid-Day Meal Scheme
- (C) National Nutrition Mission (POSHAN Abhiyaan)
- (D) Beti Bachao Beti Padhao

Q14. The **Panchayati Raj system** was granted constitutional status in India through which Constitutional Amendment Act?

- (A) 42nd Amendment, 1976
- (B) 44th Amendment, 1978
- (C) 61st Amendment, 1988
- (D) 73rd Amendment, 1992

Q15. India successfully hosted the **G20 Summit 2023** under the theme “*Va-sudhaiva Kutumbakam.*” In which city was it held?

- (A) New Delhi
- (B) Mumbai
- (C) Bengaluru
- (D) Chennai

Part B — Mental Ability (Q16–Q30) [15 Marks]

Q16. What is the **missing number** in the following series?

1	4	9	16	25	?
1^2	2^2	3^2	4^2	5^2	6^2

- (A) 30
- (B) 32
- (C) 36
- (D) 49

Q17. Letter Analogy:

ACE : BDF :: MOQ : ?



- (A) NOP
- (B) NPQ
- (C) NPS
- (D) NPR

Q18. Word Analogy:

Pen : Write :: Knife : ?

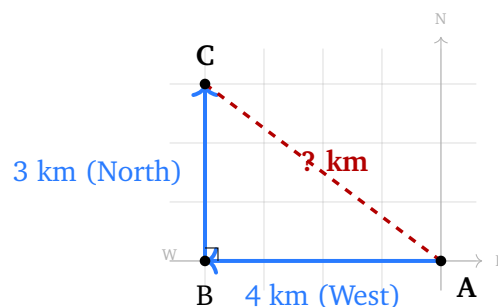
- (A) Stab
- (B) Cut
- (C) Cook
- (D) Pierce

Q19. Find the odd one out from the following group of numbers:

3, 5, 7, 11, 15

- (A) 15
- (B) 3
- (C) 7
- (D) 11

Q20. Direction Problem: Ram starts from point A, walks 4 km West, then turns and walks 3 km North. What is the **straight-line distance** from his starting point to his final position?



- (A) 4 km
- (B) 3 km
- (C) 7 km
- (D) 5 km

Q21. Matrix Problem: Find the missing value (?) in the matrix below:

1	2	3
2	4	6
3	6	?

- (A) 7
- (B) 9
- (C) 8
- (D) 12

Q22. Coding: In a certain code language, **MANGO** is written as **OCPIQ**. Using the same rule, what is the code for **RIVER**?

- (A) TKXGT
- (B) SJWFS
- (C) ULYGV
- (D) QJUDQ

Q23. Letter Series: What comes next in the following series?

AZ, BY, CX, DW, ?

- (A) EX
- (B) EU
- (C) EV

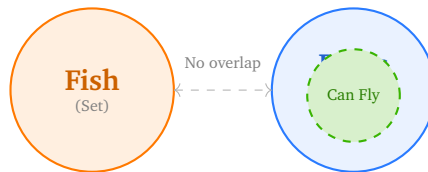


(D) FV

Q24. Syllogism: Read the two statements below and identify the **correct conclusion**:

Statement 1: No fish is a bird.

Statement 2: All birds can fly.



- (A) All fish can fly
- (B) No fish can fly
- (C) Some fish can fly
- (D) No birds can fly

Q25. Blood Relation:

A is B's father.

C is A's sister.

D is C's mother.

How is D related to B?

- (A) Aunt
- (B) Great-grandmother
- (C) Mother
- (D) Grandmother

Q26. Ranking: In a row of **40 students**, Aman is ranked **12th from the left end**. What is his rank from the **right end**?

- (A) 29th
- (B) 28th
- (C) 30th



(D) 27th

Q27. Number Analogy:

$$6 : 42 :: 8 : ?$$

(A) 64

(B) 56

(C) 72

(D) 80

Q28. Number Coding: If each letter of the English alphabet is assigned its position number (A = 1, B = 2, ..., Z = 26), what is the **numerical code** for the word **CAT**?

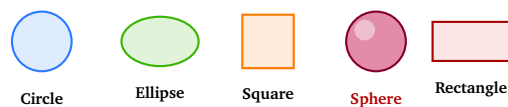
(A) 22

(B) 21

(C) 26

(D) 24

Q29. Odd One Out: Which of the following shapes does **NOT** belong to the same category as the others?



(A) Circle

(B) Sphere

(C) Square

(D) Rectangle

Q30. Clock Problem: At what time between **4 o'clock** and **5 o'clock** do the minute hand and the hour hand of a clock **coincide** (point in exactly the same direction)?

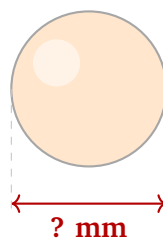


- (A) 4 hours $21\frac{9}{11}$ minutes
- (B) 4 hours 25 minutes
- (C) 4 hours 20 minutes
- (D) 4 hours 30 minutes

**Part C — Teacher Aptitude & Sports Re-
lated Knowledge (Q31–Q50) [20 Marks]**

- Q31.** In **Field Hockey** (as per FIH rules), how many players are there on each side during a match?
- (A) 9
 - (B) 10
 - (C) 11
 - (D) 12
- Q32.** In competitive swimming, which stroke uses the **butterfly kick** (simultaneous dolphin-like kick with both legs together)?
- (A) Breaststroke
 - (B) Backstroke
 - (C) Freestyle (Front Crawl)
 - (D) Butterfly stroke
- Q33.** What is the official **diameter** of a standard Table Tennis ball as per ITTF regulations (post-2000)?

Table Tennis Ball



- (A) 38 mm



- (B) 40 mm
- (C) 42 mm
- (D) 44 mm

Q34. In which Olympic wrestling style is the **use of legs prohibited** for holds or attacks, and all techniques must be executed using the upper body only?

- (A) Greco-Roman wrestling
- (B) Freestyle wrestling
- (C) Sambo
- (D) Judo

Q35. In a standard **Olympic 100 m sprint final**, how many lanes are used on the track?

- (A) 6
- (B) 7
- (C) 8
- (D) 10

Q36. Which of the following **artistic gymnastics apparatus** is used **exclusively by men** in Olympic competition?

- (A) Balance beam
- (B) Vault
- (C) Floor exercise
- (D) Pommel horse

Q37. The **FITT Principle** is a widely used framework for structuring fitness training programs. What does the letter '**F**' stand for?



- (A) Flexibility
- (B) Frequency
- (C) Force
- (D) Fitness

Q38. The **sit-and-reach test** is a standard physical fitness field test. Which **health-related fitness component** does it primarily measure?

- (A) Flexibility
- (B) Muscular strength
- (C) Cardiovascular endurance
- (D) Body composition

Q39. When a person performs **plantar flexion** (stands on their toes), the ankle joint acts as which **class of lever**?

- (A) First-class lever
- (B) Third-class lever
- (C) Second-class lever
- (D) Zero-class lever

Q40. According to **Fitts and Posner's** model of motor learning, which stage is characterised by highly **automatic and effortless performance** with minimal conscious attention required?

- (A) Cognitive stage
- (B) Associative stage
- (C) Coordination stage
- (D) Autonomous stage

Q41. In **Mosston and Ashworth's Reciprocal Teaching Style (Style C)**, who is primarily responsible for **providing feedback** to the performer?

- (A) The teacher



- (B) The partner/observer
- (C) The performer themselves
- (D) The coach

Q42. Which of the following is **NOT a recognised goal** of Physical Education?

- (A) Improving students' academic examination marks exclusively
- (B) Development of physical fitness and motor skills
- (C) Promotion of social skills, cooperation, and teamwork
- (D) Character development and cultivation of sportsmanship

Q43. **Plyometric training** (e.g., box jumps, depth jumps, bounding) is primarily used to develop which component of physical fitness?

- (A) Flexibility
- (B) Aerobic endurance
- (C) Explosive power (muscular power)
- (D) Static balance

Q44. The **Rajiv Gandhi Khel Ratna Award** was renamed the **Major Dhyan Chand Khel Ratna Award** in which year?

- (A) 2019
- (B) 2020
- (C) 2022
- (D) 2021

Q45. Which **para-athlete** received the **Arjuna Award in 2023**, becoming one of the youngest Indian para-athletes to win medals at the Para Asian Games?

- (A) Deepa Malik
- (B) Sheetal Devi

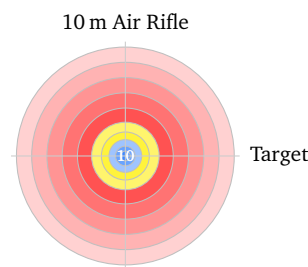


- (C) Devendra Jhajharia
- (D) Mariyappan Thangavelu

Q46. For the **Paris Olympic Games 2024**, where was the **Olympic flame traditionally lit** before beginning its relay journey to the host city?

- (A) Olympia, Greece
- (B) Paris, France
- (C) Athens, Greece
- (D) Rome, Italy

Q47. Who won **India's first-ever individual Olympic gold medal**, at the 2008 Beijing Olympics?



- (A) Leander Paes
- (B) Sushil Kumar
- (C) Abhinav Bindra
- (D) Rajyavardhan Singh Rathore

Q48. Where is the **headquarters of the Board of Control for Cricket in India (BCCI)** located?

- (A) New Delhi
- (B) Chennai
- (C) Kolkata
- (D) Mumbai

Q49. Coach **Jiwanjot Singh** was honoured with the **Dronacharya Award 2022 (Regular Category)**. For which sport was this award conferred?



- (A) Wrestling
- (B) Archery
- (C) Boxing
- (D) Athletics

Q50. The **Sports Authority of India (SAI)**, an autonomous body under the Ministry of Youth Affairs and Sports, is headquartered in which city?

- (A) Chennai
- (B) Hyderabad
- (C) New Delhi
- (D) Bengaluru



Detailed Solutions — Sample Paper 2

Solution 1.

Solution

Topic: Asian Games 2023 — India's medal tally

The **Asian Games 2023** were held in **Hangzhou, China** (September–October 2023). India put up its **best-ever performance** at the Asian Games, winning **28 gold, 38 silver, and 41 bronze medals** (107 total). China topped the gold medal tally with 201 golds. This surpassed India's previous best of 70 medals at the 2018 Jakarta Games.

Answer: (D) [Go Back to Q 1](#)

Solution 2.

Solution

Topic: ICC T20 World Cup 2024

India won the ICC Men's T20 World Cup 2024, which was co-hosted by the **West Indies and the USA**. India defeated **South Africa** by **7 runs** in the final held at Kensington Oval, Barbados. It was India's second T20 World Cup title (first in 2007). Rohit Sharma captained the team.

Answer: (B) [Go Back to Q 2](#)

Solution 3.

Solution

Topic: Padma Vibhushan 2024 (Posthumous)

M.S. Swaminathan (1925–2023), known as the “**Father of India's Green Revolution**,” was awarded the **Padma Vibhushan 2024 posthumously**. He passed away on September 28, 2023. Swaminathan's work in developing high-yielding wheat and rice varieties in the 1960s transformed India from a food-deficient to a food-surplus nation. He had previously received the Padma Shri (1967), Padma Bhushan (1972), Padma Vibhushan (1989), and the World Food Prize (1987).

Answer: (A) [Go Back to Q 3](#)



Solution 4.**Solution**

Topic: Nobel Peace Prize 2023

The **Nobel Peace Prize 2023** was awarded to **Narges Mohammadi**, an Iranian civil rights activist and journalist, for her “fight against the oppression of women in Iran and her efforts to promote human rights and freedom for all.” She received the award while imprisoned at Evin Prison in Tehran. Her case drew global attention to the “Woman, Life, Freedom” movement in Iran.

Answer: (C) [Go Back to Q 4](#)

Solution 5.**Solution**

Topic: Commonwealth Games 2022 — India’s total medals

India finished **4th on the medal tally** at the **Commonwealth Games 2022** held in Birmingham, England, with a total of **61 medals** — 22 gold, 16 silver, and 23 bronze. This was India’s best performance since the 2010 Delhi Commonwealth Games. Australia topped the tally. India excelled in wrestling, weightlifting, boxing, and badminton.

Answer: (D) [Go Back to Q 5](#)

Solution 6.**Solution**

Topic: Sangai Festival — Manipur

The **Sangai Festival** is the state festival of **Manipur**, celebrated every year in **November** for ten days. It is named after the **Sangai deer** (*Cervus eldi eldi*), also called the brow-antlered deer, which is the state animal of Manipur and is found only in Keibul Lamjao National Park (the world’s only floating national park). The festival showcases Manipuri culture, handicrafts, cuisine, sports, and adventure activities.

Answer: (B) [Go Back to Q 6](#)



Solution 7.

Solution

Topic: Third Battle of Panipat (1761)

The **Third Battle of Panipat** was fought on **January 14, 1761**, between the **Maratha Confederacy** (led by Vishwasrao and Sadashivrao Bhau) and the **Afghan forces of Ahmad Shah Durrani (Abdali)**. The Marathas suffered a decisive defeat, halting their expansion northward and weakening their dominance in India. The First Battle of Panipat (1526) and Second Battle of Panipat (1556) are earlier historical events.

Answer: (A) [Go Back to Q 7](#)

Solution 8.

Solution

Topic: Direction of flow of the Narmada River

The **Narmada River** originates at **Amarkantak** in Madhya Pradesh and flows **westward** for about 1,312 km before emptying into the **Arabian Sea** at the Gulf of Khambhat in Gujarat. This westward flow makes it unusual, as most major Indian rivers (Ganga, Yamuna, Mahanadi, Godavari, Krishna, Kaveri) flow eastward into the Bay of Bengal. The Tapi River similarly flows westward.

Answer: (C) [Go Back to Q 8](#)

Solution 9.

Solution

Topic: Lonar Lake — Saline meteorite crater lake

Lonar Lake is located in Buldhana district, Maharashtra. It was formed approximately **52,000 years ago** due to a **meteorite impact** on the Deccan plateau basalt. It is the **only hyper-velocity meteorite impact crater in basaltic rock** in the world. The lake is both **saline and alkaline** (pH ≈ 10.5), making it unique. It is a declared National Geo-heritage Monument and a Ramsar Wetland site. The lake hosts a diverse ecosystem including migratory birds.

Answer: (D) [Go Back to Q 9](#)



Solution 10.

Solution

Topic: Founding of the Indian National Congress

The **Indian National Congress (INC)** was founded on **December 28, 1885**, in **Bombay (now Mumbai)** by **Allan Octavian Hume**, a retired British ICS officer, along with Dadabhai Naoroji and Dinshaw Wacha. It was the first modern nationalist political organisation in the British Empire in Asia. Womesh Chandra Bonnerjee became its first president. The INC later became the primary vehicle of India's independence movement.

Answer: (B) [Go Back to Q 10](#)

Solution 11.

Solution

Topic: State Flower of Maharashtra

The official **State Flower of Maharashtra** is **Jarul** (*Lagerstroemia speciosa*), also known as “**Pride of India**” or Giant Crape-myrtle. It blooms in vibrant shades of purple, pink, or lavender during **April to June** and is commonly found in tropical forests across Maharashtra. The **Lotus** is the national flower of India, not Maharashtra's state flower. Maharashtra's state animal is the Giant Squirrel and state bird is the Yellow-footed Green Pigeon (Hariyal).

Answer: (A) [Go Back to Q 11](#)

Solution 12.

Solution

Topic: India's first satellite — Aryabhata (1975)

Aryabhata was India's first satellite, launched on **April 19, 1975**, from the **Kapustin Yar** launch site in the Soviet Union using a Soviet Kosmos-3M rocket. It was built by ISRO and named after the ancient Indian mathematician and astronomer **Aryabhata** (476–550 CE). Weighing 360 kg, it carried instruments for X-ray astronomy, solar neutrons, and gamma-ray experiments. INSAT-1A was India's first operational communications satellite (1982); Rohini was the first satellite launched by an Indian rocket (1980).



Answer: (C) [Go Back to Q 12](#)

Solution 13.

Solution

Topic: PM POSHAN scheme — earlier known as Mid-Day Meal Scheme
The **PM POSHAN** (Pradhan Mantri Poshan Shakti Nirman) was launched in **September 2021**, renaming and expanding the earlier **Mid-Day Meal Scheme**. The Mid-Day Meal Scheme was started in 1995 under the National Programme of Nutritional Support to Primary Education. PM POSHAN covers children in Classes 1–8 in government and government-aided schools. It aims to improve nutritional outcomes, reduce dropout rates, and increase school attendance. It is distinct from POSHAN Abhiyaan (National Nutrition Mission), which targets children under 6 years.

Answer: (B) [Go Back to Q 13](#)

Solution 14.

Solution

Topic: 73rd Constitutional Amendment — Panchayati Raj
The **73rd Constitutional Amendment Act, 1992** came into force on **April 24, 1993**, granting constitutional status to **Panchayati Raj Institutions (PRIs)**. It added **Part IX** (Articles 243–243O) and the **11th Schedule** (29 subjects) to the Indian Constitution. Key provisions include: three-tier Panchayat system (gram, block, district), mandatory elections every 5 years, reservation for women (1/3rd) and SCs/STs, establishment of State Finance Commissions, and State Election Commissions.

Answer: (D) [Go Back to Q 14](#)



Solution 15.

Solution

Topic: G20 Summit 2023 — New Delhi, India

India hosted the **G20 Summit 2023** in **New Delhi** on **September 9–10, 2023**, at the Bharat Mandapam convention centre. The theme was “**Vasudhaiva Kutumbakam**” (One Earth, One Family, One Future). It was India’s first G20 Presidency. A landmark outcome was the **New Delhi Leaders’ Declaration**, and the African Union was admitted as a full member of the G20 under India’s presidency, expanding it to G21.

Answer: (A) [Go Back to Q 15](#)

Solution 16.

Solution

Topic: Number series — Perfect squares

The series is: 1, 4, 9, 16, 25, ... Each term is a **perfect square**:

$$1^2 = 1, \quad 2^2 = 4, \quad 3^2 = 9, \quad 4^2 = 16, \quad 5^2 = 25, \quad 6^2 = 36$$

The next term is $6^2 = 36$. Option (D) 49 would be 7^2 , skipping a term. Options (A) 30 and (B) 32 are not perfect squares.

Answer: (C) [Go Back to Q 16](#)

Solution 17.

Solution

Topic: Letter analogy — shift by +1

In **ACE : BDF**, each letter is shifted forward by 1 in the alphabet:

$$A \rightarrow B, \quad C \rightarrow D, \quad E \rightarrow F$$

Applying the same rule to **MOQ**:

$$M(13) \rightarrow N(14), \quad O(15) \rightarrow P(16), \quad Q(17) \rightarrow R(18)$$

Therefore **MOQ : NPR**. The answer is **NPR**.

Answer: (D) [Go Back to Q 17](#)



Solution 18.

Solution

Topic: Word analogy — tool and its function

The analogy follows the pattern: **Tool : Function**. A **Pen** is used to **Write**. Similarly, a **Knife** is used to **Cut**. This is a straightforward tool-to-primary-function analogy. While a knife can stab or pierce, its primary functional purpose is cutting. “Cook” is an activity done with knives among other tools, not the primary function of a knife itself.

Answer: (B) [Go Back to Q 18](#)

Solution 19.

Solution

Topic: Odd one out — prime vs. composite numbers

Among the numbers 3, 5, 7, 11, 15:

- 3 — prime (divisible only by 1 and 3)
- 5 — prime (divisible only by 1 and 5)
- 7 — prime (divisible only by 1 and 7)
- 11 — prime (divisible only by 1 and 11)
- $15 = 3 \times 5$ — **composite** (NOT a prime number)

All others are **prime numbers**. Therefore **15** is the odd one out.

Answer: (A) [Go Back to Q 19](#)

Solution 20.

Solution

Topic: Direction problem — Pythagorean theorem (3-4-5 triangle)

Ram walks **4 km West** and then **3 km North**, forming two sides of a right triangle. The straight-line (shortest) distance from start to end is the hypotenuse:

$$d = \sqrt{(\text{West})^2 + (\text{North})^2} = \sqrt{4^2 + 3^2} = \sqrt{16 + 9} = \sqrt{25} = 5 \text{ km}$$

This is the classic **3-4-5 Pythagorean triple**. The displacement is always



less than the total distance walked ($4 + 3 = 7$ km).

Answer: (D) [Go Back to Q 20](#)

Solution 21.

Solution

Topic: Matrix pattern — multiplication table

In the matrix $\begin{bmatrix} 1 & 2 & 3 \\ 2 & 4 & 6 \\ 3 & 6 & ? \end{bmatrix}$, each element at row i , column j equals $i \times j$:

- Row 1: $1 \times 1 = 1$, $1 \times 2 = 2$, $1 \times 3 = 3$
- Row 2: $2 \times 1 = 2$, $2 \times 2 = 4$, $2 \times 3 = 6$
- Row 3: $3 \times 1 = 3$, $3 \times 2 = 6$, $3 \times 3 = 9$

The missing value is **9**.

Answer: (B) [Go Back to Q 21](#)

Solution 22.

Solution

Topic: Coding — each letter shifted forward by 2

Rule: Each letter is replaced by the letter **two positions ahead** in the alphabet.

Verification with MANGO:

$$M \rightarrow O, \quad A \rightarrow C, \quad N \rightarrow P, \quad G \rightarrow I, \quad O \rightarrow Q \Rightarrow \text{OCPIQ} \checkmark$$

Applying the same rule to RIVER:

$$R(18) \rightarrow T(20), \quad I(9) \rightarrow K(11), \quad V(22) \rightarrow X(24), \quad E(5) \rightarrow G(7), \quad R(18) \rightarrow T(20)$$

Code for RIVER = **TKXGT**.

Distractor SJWFS is RIVER shifted by +1; ULYGV is shifted by +3; QJUDQ is shifted by -1.

Answer: (A) [Go Back to Q 22](#)



Solution 23.

Solution

Topic: Letter series — dual-direction pattern

In the series AZ, BY, CX, DW, ...:

- **First letter** progresses **forward**: A, B, C, D, E ...
- **Second letter** progresses **backward**: Z, Y, X, W, V ...

The next pair is therefore **EV**. Note that EX is wrong (X already appeared in CX), EU skips the backward progression, and FV jumps the forward sequence.

Answer: (C) [Go Back to Q 23](#)

Solution 24.

Solution

Topic: Syllogism — Celarent form (E-A-E)

Statement 1: No fish is a bird. (E-type proposition: Universal Negative)

Statement 2: All birds can fly. (A-type proposition: Universal Affirmative)

From S1: Fish and Birds are completely **disjoint sets** (no overlap).

From S2: “Can Fly” is a **subset of Birds**.

Since $\text{Fish} \cap \text{Birds} = \emptyset$, and “Can Fly” $\subseteq \text{Birds}$, Fish and “Can Fly” are also disjoint.

Conclusion: “No fish can fly.” (Valid; Celarent syllogism)

Answer: (B) [Go Back to Q 24](#)

Solution 25.

Solution

Topic: Blood relation chain

Tracing the relationships step by step:

1. D is **C’s mother**
2. C is **A’s sister** $\Rightarrow$ C and A are siblings, and they share the same parents



3. Therefore, D (C's mother) is also **A's mother**
4. A is **B's father** $\Rightarrow$ A is the father of B
5. D is A's mother and A is B's father $\Rightarrow$ **D is B's grandmother**

D is B's **Grandmother** (paternal grandmother, since A is B's father).

Answer: (D) [Go Back to Q 25](#)

Solution 26.

Solution

Topic: Ranking — position from right end

Formula: Position from right = Total students – Position from left + 1

$$\text{Position from right} = 40 - 12 + 1 = 29$$

Aman is **29th from the right** in the row. This formula ensures both positions together account for all 40 students: Position from left + Position from right – 1 = Total ($12 + 29 - 1 = 40$ ✓).

Answer: (A) [Go Back to Q 26](#)

Solution 27.

Solution

Topic: Number analogy — $N \times (N + 1)$

The pattern: $6 : 42$ means $6 \times (6 + 1) = 6 \times 7 = 42$.

Applying to 8: $8 \times (8 + 1) = 8 \times 9 = 72$.

Verification of other options: $64 = 8^2$ (squaring, not the pattern); $56 = 8 \times 7$ (wrong multiplier); $80 = 8 \times 10$ (wrong multiplier).

Answer: (C) [Go Back to Q 27](#)



Solution 28.

Solution

Topic: Alphabetical position coding — sum of letter values

Assign each letter its position: A=1, B=2, C=3, ..., Z=26.

For the word **CAT**:

$$C = 3, \quad A = 1, \quad T = 20$$

$$\text{Code} = 3 + 1 + 20 = \mathbf{24}$$

Common errors: (A) 22 may come from confusing C=2; (B) 21 from T=19; (C) 26 from treating C=5 or T=21.

Answer: (D) [Go Back to Q 28](#)

Solution 29.

Solution

Topic: Odd one out — 2D shapes vs. 3D shape

- **Circle** — 2D flat shape (plane figure)
- **Ellipse** — 2D flat shape (plane figure)
- **Square** — 2D flat shape (plane figure)
- **Sphere** — **3D solid shape** (three-dimensional object)
- **Rectangle** — 2D flat shape (plane figure)

All others are **two-dimensional (2D) geometric figures**. **Sphere** is the only **three-dimensional (3D) solid**, making it the odd one out. (The 3D equivalent of a circle is a sphere.)

Answer: (B) [Go Back to Q 29](#)



Solution 30.

Solution

Topic: Clock problem — coincidence of hands between 4 and 5

At **4:00**, the hour hand is at the 20-minute position ($4 \times 5 = 20$ min mark). The minute hand is at 0. The minute hand gains 5.5° per minute (or $\frac{11}{2}$ min-marks per minute) over the hour hand.

Time for the minute hand to catch up to the hour hand:

$$t = \frac{20}{\frac{11}{2}} = \frac{20 \times 2}{11} = \frac{40}{11} \times \frac{11}{2} \Rightarrow t = \frac{4 \times 60}{11} = \frac{240}{11} = 21\frac{9}{11} \text{ minutes}$$

The hands coincide at **4 hours** $21\frac{9}{11}$ **minutes** ($\approx 4:21:49$).

Answer: (A) [Go Back to Q 30](#)

Solution 31.

Solution

Topic: Field hockey — players per side

In **Field Hockey** (as per FIH — International Hockey Federation rules), each team has **11 players** on the field during a match: **10 outfield players** (forwards, midfielders, defenders) and **1 goalkeeper**. A squad may have up to 16 players with 5 substitutes on the bench. Field hockey is played on a $91.4 \text{ m} \times 55 \text{ m}$ pitch. India's men's team won the Olympic bronze medal at both Tokyo 2020 and Paris 2024.

Answer: (C) [Go Back to Q 31](#)

Solution 32.

Solution

Topic: Swimming strokes and kick types

The **butterfly kick** (also called the **dolphin kick**) is the leg movement used in the **butterfly stroke**, where both legs move simultaneously in an undulating, dolphin-like motion. Other kicks:

- **Breaststroke:** uses the **frog kick** (whip kick)
- **Backstroke and Freestyle:** use the **flutter kick** (alternating legs)

The butterfly stroke is considered the most physically demanding com-



petitive swimming stroke.

Answer: (D) [Go Back to Q 32](#)

Solution 33.

Solution

Topic: Table Tennis ball diameter

The **International Table Tennis Federation (ITTF)** changed the standard ball size from **38 mm to 40 mm** in **2000** to make rallies longer and the sport more attractive to spectators. In **2015**, the ITTF further changed the ball material from **celluloid to plastic (poly)**, while retaining the 40 mm diameter. The official ball weighs 2.7 g. The table is 2.74 m long, 1.525 m wide, and 76 cm high.

Answer: (B) [Go Back to Q 33](#)

Solution 34.

Solution

Topic: Greco-Roman wrestling — no leg holds

Greco-Roman wrestling is an Olympic sport in which competitors are **prohibited from using their legs to apply holds** and may not hold below the hips or use leg trips. All techniques must involve the **upper body** only. This contrasts with **Freestyle wrestling**, where both arms and legs can be used for holds and trips. Greco-Roman wrestling is one of the oldest Olympic sports, tracing back to the ancient Games. India's Sushil Kumar competed in Freestyle wrestling.

Answer: (A) [Go Back to Q 34](#)

Solution 35.

Solution

Topic: 100 m sprint — number of lanes

A standard Olympic athletics track has **8 lanes**, each **1.22 m wide**. In major finals such as the 100 m sprint, all **8 lanes** are used. Lane assignments for finals are determined by semifinal performance — the fastest qualifier gets lane 4 or 5. World Athletics (formerly IAAF) mandates 8



lanes for international competition. Some facilities have 9 lanes, but only 8 are used in Olympic finals.

Answer: (C) [Go Back to Q 35](#)

Solution 36.

Solution

Topic: Artistic gymnastics — men-only apparatus

In Olympic Artistic Gymnastics:

- **Men's events:** Floor Exercise, Pommel Horse, Still Rings, Vault, Parallel Bars, Horizontal Bar (6 events)
- **Women's events:** Vault, Uneven Bars, Balance Beam, Floor Exercise (4 events)

The **Pommel Horse** (along with Still Rings, Parallel Bars, and Horizontal Bar) is **men-only**. The **Balance Beam** is women-only. Floor Exercise and Vault are **shared** (both genders compete, but with different routines/rules).

Answer: (D) [Go Back to Q 36](#)

Solution 37.

Solution

Topic: FITT Principle — components of training

The **FITT Principle** is a structured framework for designing exercise programs:

- **F = Frequency** — How often you exercise (e.g., 3 days/week)
- **I = Intensity** — How hard you exercise (e.g., 60–80% max HR)
- **T = Time** — Duration of each session (e.g., 30–60 minutes)
- **T = Type** — Mode/form of exercise (e.g., running, swimming)

Therefore, **F = Frequency**. Flexibility, Force, and Fitness are not part of the FITT acronym.

Answer: (B) [Go Back to Q 37](#)



Solution 38.**Solution**

Topic: Sit-and-reach test — flexibility

The **sit-and-reach test** is a classic **field fitness test** that measures **flexibility**, specifically the **hamstring and lower back flexibility**. The subject sits on the floor with legs extended, feet flat against a box, and reaches forward as far as possible. The distance reached is recorded.

The five **health-related fitness components** are: cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition. The sit-and-reach specifically targets **flexibility**.

Answer: (A) [Go Back to Q 38](#)

Solution 39.**Solution**

Topic: Biomechanics — lever classes in the human body

In a **lever system**: **F** = Fulcrum (pivot), **E** = Effort (force), **L** = Load (resistance).

When standing on toes (plantar flexion):

- **F (Fulcrum)**: Ball of the foot / metatarsals (contact with ground)
- **L (Load)**: Body weight acting downward at the ankle joint
- **E (Effort)**: Calf muscles (gastrocnemius/soleus) pulling at the heel via the Achilles tendon

Arrangement: **F – L – E** (Fulcrum, Load, Effort) $\Rightarrow$ **Second-class lever**. In a 2nd-class lever, the load is between the fulcrum and effort (like a wheelbarrow).

Answer: (C) [Go Back to Q 39](#)



Solution 40.

Solution

Topic: Stages of motor learning — Fitts & Posner model

Fitts and Posner (1967) described **three stages of motor learning**:

1. **Cognitive Stage:** The learner understands the task; performance is inconsistent and requires much conscious thought. “What do I do?”
2. **Associative Stage:** The learner refines the movement; fewer errors, more consistency, less conscious effort. “How do I improve?”
3. **Autonomous Stage:** Performance becomes **automatic, highly consistent, and effortless**; minimal conscious attention needed; can multi-task. “It just happens.”

The **Autonomous stage** is characterised by automatic performance.

Answer: (D) [Go Back to Q 40](#)

Solution 41.

Solution

Topic: Mosston's Spectrum — Reciprocal Teaching Style

In **Mosston and Ashworth's Reciprocal Teaching Style (Style C)**, students work in **pairs**:

- **Doer:** Performs the assigned task/skill
- **Observer (Partner):** Observes the doer and provides **immediate feedback** based on a **criteria sheet** prepared by the teacher

The **teacher** designs the task and criteria, interacts only with the observer (not directly with the doer), and provides feedback to the observer. The observer then relays feedback to the doer. This style develops social skills, communication, and empathy.

Answer: (B) [Go Back to Q 41](#)



Solution 42.

Solution

Topic: Goals of Physical Education

The recognised goals of **Physical Education** include:

- Development of physical fitness and motor skills
- Promotion of health and wellness
- Social development (teamwork, cooperation, sportsmanship)
- Emotional and character development
- Cognitive development (understanding of movement, tactics)

“Improving students’ academic examination marks exclusively” is **NOT a goal of PE**. While PE may indirectly support cognitive function, its direct goals are physical, social, and holistic development — not academic score improvement. This is a goal of academic instruction, not physical education.

Answer: (A) [Go Back to Q 42](#)

Solution 43.

Solution

Topic: Plyometrics — explosive power development

Plyometric training involves rapid muscle stretching (eccentric phase) immediately followed by a powerful contraction (concentric phase), training the **stretch-shortening cycle (SSC)**. This develops **muscular power (explosive strength)** — the ability to exert maximum force in minimum time.

Examples: box jumps, depth jumps, bounding, medicine ball throws. Plyometrics is widely used in training for sports requiring explosive movements (sprinting, basketball, football, jumping events).

Note: It does **not** primarily develop flexibility, aerobic endurance, or static balance.

Answer: (C) [Go Back to Q 43](#)



Solution 44.

Solution

Topic: Rajiv Gandhi Khel Ratna renamed (2021)

Prime Minister Narendra Modi announced the renaming of the **Rajiv Gandhi Khel Ratna Award** to the **Major Dhyan Chand Khel Ratna Award** on **August 6, 2021**. This was done to honour the legendary Indian hockey player **Major Dhyan Chand** (1905–1979), known as the “**Hockey Wizard**,” on the occasion of his birth anniversary (August 29 — also celebrated as **National Sports Day**). The award is India’s highest sporting honour.

Answer: (D) [Go Back to Q 44](#)

Solution 45.

Solution

Topic: Arjuna Award 2023 — Sheetal Devi (Para Archery)

Sheetal Devi, a para-archer from Jammu & Kashmir, received the **Arjuna Award in 2023**. Born with a congenital condition (phocomelia) affecting her upper limbs, she shoots the bow using her **feet and toes**. At the **Para Asian Games 2022** in Hangzhou, she won **gold medals** in compound Women’s Individual, Mixed Team, and Women’s Team events, becoming one of the youngest and most inspirational para-athletes in India.

Answer: (B) [Go Back to Q 45](#)

Solution 46.

Solution

Topic: Olympic flame lighting tradition — Olympia, Greece

By tradition established in 1936, the **Olympic flame** is lit at the **ancient site of Olympia** in Greece, using a parabolic mirror to focus **sunlight**. From Olympia, it travels in a relay to the host city. For the **Paris 2024 Olympics**, the flame was lit in Olympia, Greece in April 2024, then carried by ship to Marseille, France, and relayed across France to Paris for the Opening Ceremony on July 26, 2024. Athens is the site of the 1896 modern Games, not the flame lighting.

Answer: (A) [Go Back to Q 46](#)



Solution 47.

Solution

Topic: India's first individual Olympic gold medal — Abhinav Bindra

Abhinav Bindra won India's first-ever **individual Olympic gold medal** at the **2008 Beijing Olympics** on August 11, 2008, in the **10 m Air Rifle** event. He scored 700.5 in the final (104.5 in the 10-shot final). Before Bindra, India's Olympic golds had all been in **team events** (hockey). Rajyavardhan Singh Rathore won silver in 2004 (double trap shooting). Leander Paes won bronze in 1996 (tennis). Sushil Kumar won medals in 2008 and 2012 (wrestling). Bindra's autobiography is titled "*A Shot at History*."

Answer: (C) [Go Back to Q 47](#)

Solution 48.

Solution

Topic: BCCI headquarters location

The **Board of Control for Cricket in India (BCCI)** is headquartered at the **Cricket Centre, Wankhede Stadium, Mumbai (Maharashtra)**. Founded in 1928, the BCCI is the governing body for cricket in India and one of the wealthiest and most influential cricket boards in the world. The **BCCI headquarters address** is: Cricket Centre, Churchgate, Mumbai – 400020. The Confederation of Indian Industry (CII) is in Delhi; BCCI is distinctly in Mumbai.

Answer: (D) [Go Back to Q 48](#)

Solution 49.

Solution

Topic: Dronacharya Award 2022 — Jiwanjot Singh (Archery)

Jiwanjot Singh received the **Dronacharya Award 2022** (Regular Category) for his outstanding contribution as a coach in **Archery**. The Dronacharya Award is India's highest coaching honour, awarded to coaches who have produced medal-winning athletes at the international level. Jiwanjot Singh has mentored Indian archers and contributed significantly to the development of the sport in India. The award is named after Dronacharya, the legendary archery guru of the Mahabharata.



Answer: (B) [Go Back to Q 49](#)

Solution 50.

Solution

Topic: Sports Authority of India (SAI) — headquarters

The **Sports Authority of India (SAI)** is an autonomous body under the **Ministry of Youth Affairs and Sports**, Government of India. It is headquartered in **New Delhi**. SAI was established in 1984 and manages multiple **national training centres, academies, and hostels** across the country (e.g., National Sports Centres, Centres of Excellence, TOPS scheme). SAI Headquarters is located at **Jawaharlal Nehru Stadium Complex, New Delhi**. It also manages the National Institute of Sports (NIS) in Patiala.

Answer: (C) [Go Back to Q 50](#)



Answer Key — Sample Paper 2

Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	Q.No.	Answer
1	D	2	B	3	A	4	C	5	D
6	B	7	A	8	C	9	D	10	B
11	A	12	C	13	B	14	D	15	A
16	C	17	D	18	B	19	A	20	D
21	B	22	A	23	C	24	B	25	D
26	A	27	C	28	D	29	B	30	A
31	C	32	D	33	B	34	A	35	C
36	D	37	B	38	A	39	C	40	D
41	B	42	A	43	C	44	D	45	B
46	A	47	C	48	D	49	B	50	C

Option-Wise Distribution Summary

Option A	Option B	Option C	Option D	Total
12	13	12	13	50

*All questions carry +1 mark. There is **no negative marking**. Answers are clickable links to solutions.*

