

MAH B.P.Ed CET — Complete Sample Paper

Sample Paper — 5

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.
- No sectional time limit; total time: **60 minutes**.
- Mobile phones, calculators, and electronic gadgets are strictly prohibited.

PART A: GENERAL KNOWLEDGE (Q1–Q15)

Q1. The **FIH Men's Hockey World Cup 2023** was jointly hosted by which two Indian cities?



- (A) Mumbai and Pune
- (B) Bhubaneswar and Rourkela
- (C) Delhi and Lucknow
- (D) Kolkata and Chennai

Q2. Which country won the **FIH Men's Hockey World Cup 2023**, defeating Belgium in the final via a penalty shootout?

- (A) Australia
- (B) Netherlands
- (C) Belgium

(D) Germany

Q3. Virat Kohli created history by becoming the **first batsman** ever to score **50 centuries in One Day International (ODI)** cricket. He achieved this landmark during:

(A) Asia Cup 2023 against Sri Lanka at Colombo

(B) ICC Cricket World Cup 2023 against Australia at Chennai

(C) ICC Cricket World Cup 2023 against South Africa at Kolkata

(D) Asia Cup 2023 against Pakistan at Kandy

Q4. Who was awarded the **Nobel Prize in Literature 2023**?

(A) Annie Ernaux (France)

(B) Abdulrazak Gurnah (Tanzania/UK)

(C) Jon Fosse (Norway)

(D) Olga Tokarczuk (Poland)

Q5. Under the **Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PM-JAY)**, each eligible family receives cashless health insurance coverage of up to:

(A) Rs. 2 lakh per year

(B) Rs. 5 lakh per year

(C) Rs. 10 lakh per year

(D) Rs. 3 lakh per year

Q6. **Article 370** of the Indian Constitution, which granted special autonomous status to Jammu and Kashmir, was abrogated in which year?

(A) 2016

(B) 2017

(C) 2018

(D) 2019



- Q7.** Which of the following correctly represents the period of Mughal Emperor **Akbar's** reign?
- (A) 1556–1605
 - (B) 1526–1556
 - (C) 1605–1627
 - (D) 1542–1605
- Q8.** The **Satpura Range**, one of India's prominent east-west hill ranges, is primarily located in which Indian state?
- (A) Rajasthan
 - (B) Gujarat
 - (C) Madhya Pradesh
 - (D) Chhattisgarh
- Q9.** The **Bhima River**, flowing through Maharashtra and Karnataka, is a major left-bank tributary of which river?
- (A) Godavari
 - (B) Krishna
 - (C) Mahanadi
 - (D) Tungabhadra
- Q10.** Mahatma Gandhi launched the **Non-Cooperation Movement** against British colonial rule in India in which year?
- (A) 1915
 - (B) 1917
 - (C) 1919
 - (D) 1920
- Q11.** Which fish has been officially designated as the **State Fish of Maharashtra**?



- (A) Ravas (Indian Salmon)
- (B) Rohu
- (C) Hilsa (Ilish)
- (D) Catla

Q12. India's **Aditya-L1** mission, launched on 2 September 2023 by ISRO, is primarily designed to study:

- (A) Mars's atmosphere and climate
- (B) The Moon's geological surface
- (C) The Sun's corona and solar wind
- (D) Jupiter's moons and magnetic field

Q13. **Ganesh Chaturthi**, Maharashtra's most celebrated festival, traditionally lasts for how many days, culminating in the immersion (Visarjan) of the idol?

- (A) 7 days
- (B) 10 days
- (C) 11 days
- (D) 5 days

Q14. India officially became a sovereign democratic republic on:

- (A) 15 August 1947
- (B) 26 January 1947
- (C) 26 November 1949
- (D) 26 January 1950

Q15. India's first satellite, **Aryabhata**, was launched in 1975 from the rocket launch facility of which country?

- (A) Soviet Union (USSR) — Kapustin Yar

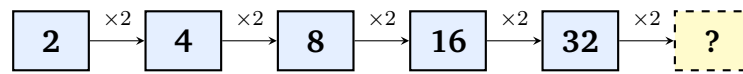


- (B) United States of America — Cape Canaveral
- (C) France — Guiana Space Centre
- (D) Japan — Tanegashima Space Center



PART B: MENTAL ABILITY (Q16–Q30)

Q16. Study the following number series and identify the **missing term**:



- (A) 48
- (B) 56
- (C) 64
- (D) 72

Q17. AZ : BY :: CX : ?

- (A) EV
- (B) EW
- (C) DV
- (D) DW

Q18. Milk : Butter :: Sugarcane : ?

- (A) Molasses
- (B) Sugar
- (C) Jaggery
- (D) Ethanol

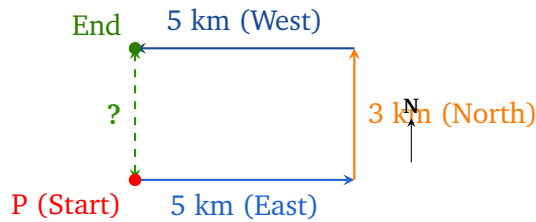
Q19. Which of the following numbers is the **odd one out**?

17 23 31 37 42

- (A) 42
- (B) 37
- (C) 23
- (D) 17



- Q20.** A boy starts from point **P**, walks **5 km East**, then **3 km North**, and finally **5 km West**. How far and in which direction is he from his starting point?



- (A) 5 km North
 (B) 3 km East
 (C) 3 km North
 (D) 5 km West
- Q21.** Find the **missing number** (?) in the following matrix, where each row follows a consistent pattern:

Col 1	Col 2	Col 3
1	3	5
2	6	10
3	9	?

- (A) 12
 (B) 13
 (C) 14
 (D) 15
- Q22.** In a coding system, each letter is shifted **one position forward** in the English alphabet ($A \rightarrow B$, $B \rightarrow C$, ..., $Z \rightarrow A$). If **HOUSE** is coded as **IPVTF**, what is the code for **RIVER**?
- (A) SJWFS
 (B) TKXGT
 (C) QHUDS



(D) RHWFS

Q23. Find the **next letter** in the series:

C, F, I, L, O, ____?

(A) P

(B) Q

(C) R

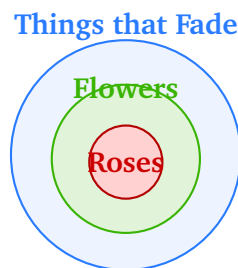
(D) S

Q24. Consider the following two statements:

s1: All roses are flowers.

s2: All flowers fade.

Which conclusion **necessarily** follows from both statements taken together?



(A) Some roses fade

(B) All roses fade

(C) All flowers are roses

(D) All fading things are roses

Q25. A's father has **only one son**, and that son is B. How is A related to B?

(A) Mother

(B) Brother

(C) Aunt



(D) Sister

Q26. In a code, each letter is replaced by its **position value in the English alphabet** (A=1, B=2, ..., Z=26) and the values are summed. If **PEN** = 35 (P=16, E=5, N=14; 16+5+14=35), what is the code for **BAT**?

(A) 23

(B) 25

(C) 27

(D) 29

Q27. 4 : 64 :: 5 : ?

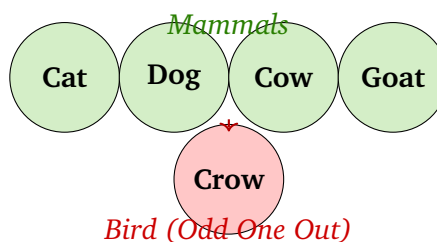
(A) 100

(B) 120

(C) 125

(D) 150

Q28. Which of the following is the **odd one out**?



(A) Cat

(B) Crow

(C) Dog

(D) Goat

Q29. Find the **next number** in the series:

7, 14, 28, 56, ____?



- (A) 96
- (B) 100
- (C) 108
- (D) 112

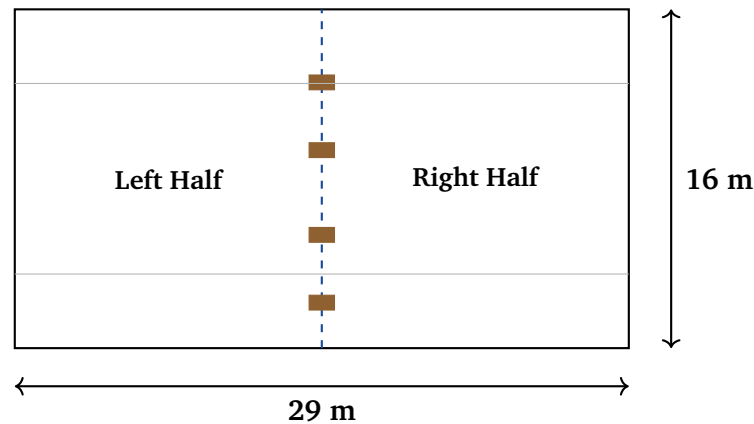
Q30. In a class of **30 students**, Anita ranks **10th from the front**. What is her rank from the **back**?

- (A) 21st
- (B) 20th
- (C) 19th
- (D) 22nd



**PART C: TEACHER APTITUDE & SPORTS
RELATED KNOWLEDGE (Q31–Q50)**

Q31. What are the official dimensions of the **Kho-Kho** playing court (playing area proper)?



- (A) 27 m $\times$ 16 m
- (B) 29 m $\times$ 16 m
- (C) 30 m $\times$ 15 m
- (D) 25 m $\times$ 18 m

Q32. According to the **Laws of Cricket** (MCC), how many official types (modes) of dismissal are recognised?

- (A) 7
- (B) 8
- (C) 9
- (D) 10

Q33. In **Kabaddi**, the **Bonus Line** is best described as:

- (A) A line drawn 3.75 m from the Baulk Line on the opponent's side; a raider crossing it (with at least one foot on or beyond it) earns a bonus point
- (B) The mid-line of the court dividing both teams' halves



- (C) The boundary line at each end of the court behind the defenders
- (D) A line 1 m from the end line used for defensive positioning during a raid

Q34. What is the regulation weight of the **discus** used by **men** in Olympic athletics competitions?

- (A) 1 kg
- (B) 1.5 kg
- (C) 2 kg
- (D) 2.5 kg

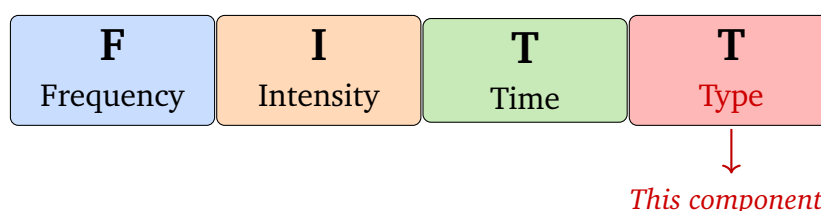
Q35. In competitive swimming, what is the correct **order of strokes** in a **Medley Relay** race?

- (A) Freestyle → Butterfly → Breaststroke → Backstroke
- (B) Backstroke → Breaststroke → Butterfly → Freestyle
- (C) Butterfly → Backstroke → Breaststroke → Freestyle
- (D) Breaststroke → Backstroke → Butterfly → Freestyle

Q36. In Olympic **artistic gymnastics**, the **floor exercise** is performed on a square sprung mat of what standard size?

- (A) 10 m × 10 m
- (B) 14 m × 14 m
- (C) 15 m × 15 m
- (D) 12 m × 12 m

Q37. In the **FITT principle** of exercise programming, what does the letter '**T**' for *Type* specifically refer to?



- (A) The total duration of each exercise session
- (B) The intensity level (heavy/moderate/light) of training
- (C) The kind of exercise performed, such as aerobic versus resistance training
- (D) The number of training sessions per week

Q38. Which **field-based method** uses calipers to measure **skinfold thickness** at specific anatomical sites to estimate body fat percentage?

- (A) Caliperometry (Skinfold technique)
- (B) Hydrostatic weighing (underwater weighing)
- (C) Dual-Energy X-ray Absorptiometry (DEXA)
- (D) Bioelectrical Impedance Analysis (BIA)

Q39. Which of the following best characterises an **isotonic** muscle contraction?

- (A) The muscle generates force without any change in its length (static contraction)
- (B) The muscle changes length (shortens or lengthens) while tension remains relatively constant
- (C) The muscle only lengthens under a resistive load (purely eccentric)
- (D) The muscle shortens rapidly with no joint movement or displacement

Q40. In the context of **skill-related physical fitness**, 'Reaction Time' is best defined as:

- (A) The time required to complete an entire movement pattern or sequence
- (B) The time interval between two successive stimuli presented to an athlete
- (C) The time needed for the brain to fully process and interpret visual information



- (D) The elapsed time between the onset of a stimulus and the initiation of a movement response

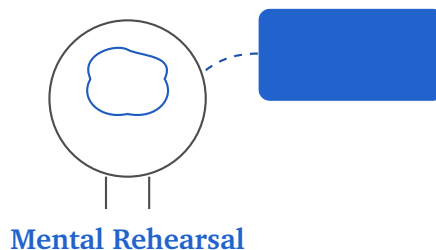
Q41. In Mosston and Ashworth's Spectrum of Teaching Styles, the **Guided Discovery** style is characterised by:

- (A) The student independently designing tasks and discovering solutions without any teacher input
- (B) Equal decision-making responsibilities shared between teacher and student
- (C) The teacher designing a converging sequence of questions or problems; the student discovers the single target answer
- (D) The student designing the questions while the teacher only evaluates outcomes

Q42. In sports psychology, **athlete burnout** is primarily attributed to:

- (A) Lack of natural sporting talent or poor genetic endowment
- (B) Chronic training overload combined with insufficient recovery time over an extended period
- (C) Inadequate nutritional intake during the competition season
- (D) Financial pressures and absence of sponsorship support

Q43. **Mental rehearsal** (imagery or visualisation) in sports psychology involves:



- (A) Mentally simulating and visualising a skill or performance without any physical movement
- (B) Watching video recordings of one's own performance repeatedly



- (C) Performing a skill at very low intensity to build neural pathways
- (D) Repeating physical drills at high volume until the movement becomes automatic

Q44. The **Dronacharya Award** for sports coaching is presented in two categories. Which category specifically honours coaches with **outstanding long-term contributions** spanning a distinguished career?

- (A) Regular Category only
- (B) Both categories have entirely identical eligibility criteria
- (C) The award is not divided into any categories
- (D) Lifetime Achievement Category

Q45. How many **gold medals** did India win at the **Commonwealth Games 2022** held in Birmingham, United Kingdom?

- (A) 18
- (B) 20
- (C) 22
- (D) 25

Q46. The **2023 World Athletics Championships** (19th edition) were hosted in which city?

- (A) Eugene, USA
- (B) Budapest, Hungary
- (C) Tokyo, Japan
- (D) London, UK

Q47. **Neeraj Chopra's** personal best javelin throw of **89.94 m** was achieved at which competition?

- (A) Wanda Diamond League, Stockholm, Sweden (2022)
- (B) Tokyo Summer Olympics 2020



- (C) World Athletics Championships 2022, Eugene, USA
- (D) Commonwealth Games 2022, Birmingham, UK

Q48. Which city will host the **2028 Summer Olympic Games**?

- (A) Paris, France
- (B) Brisbane, Australia
- (C) Seoul, South Korea
- (D) Los Angeles, USA

Q49. The **SAI TOPS** scheme is a flagship programme of the Government of India that supports elite athletes. What does **TOPS** stand for?

What do the letters stand for?

T – ...?

O – ...?

P – ...?

S – ...?

- (A) Total Olympic Performance Scheme
- (B) Target Olympic Podium Scheme
- (C) Training for Olympic Performance Support
- (D) Team Olympic Promotion System

Q50. Which of the following is classified as a **skill-related** (performance-related) component of physical fitness?

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



DETAILED SOLUTIONS

Solution 1.

Solution

Topic: FIH Men's Hockey World Cup 2023 — Venue

The 15th FIH Men's Hockey World Cup was jointly hosted by **India** in January–February 2023. Two venues were used: **Kalinga Stadium, Bhubaneswar** and the newly built **Birsa Munda Hockey Stadium, Rourkela** (the world's largest hockey stadium by seating capacity). India had previously hosted the tournament in 2010 (Delhi) and 2018 (Bhubaneswar). The 2023 edition featured 16 nations competing for the title.

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

Solution 2.

Solution

Topic: FIH Men's Hockey World Cup 2023 — Winner

Germany won the FIH Men's Hockey World Cup 2023, defeating Belgium 5–4 in a penalty shootout in the final held at Kalinga Stadium, Bhubaneswar. It was Germany's **fourth World Cup title**, their previous wins being in 2002, 2006, and 2012. The Netherlands defeated Australia in the bronze-medal match. Germany's goalkeeper **Jean-Paul Danneberg** was instrumental in the penalty shootout victory.

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

Solution 3.

Solution

Topic: Virat Kohli — 50th ODI Century

Virat Kohli scored his record **50th ODI century** on **12 September 2023** against Sri Lanka in the **Asia Cup 2023** Super 4 match at R. Premadasa Stadium, Colombo. He surpassed the previous record of 49 ODI centuries he shared with Sachin Tendulkar. Kohli is the only batsman in the history of ODI cricket to achieve this landmark. His knock of 166* helped India post a massive total against Sri Lanka.



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

Solution 4.

Solution

Topic: Nobel Prize in Literature 2023

The **2023 Nobel Prize in Literature** was awarded to Norwegian author and playwright **Jon Fosse**. He was recognised “for his innovative plays and prose which give voice to the unsayable.” Fosse writes primarily in Nynorsk, one of two official written forms of Norwegian. His major works include the prose cycle *Septology* and numerous plays. He is one of the most widely performed contemporary playwrights in Europe. Option (A) Annie Ernaux won the 2022 prize; option (D) Olga Tokarczuk won the 2018 prize.

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

Solution 5.

Solution

Topic: Ayushman Bharat PM-JAY — Coverage Amount

The **Pradhan Mantri Jan Arogya Yojana (PM-JAY)**, launched on 23 September 2018, provides cashless and paperless health insurance coverage of up to **Rs. 5 lakh per family per year** for secondary and tertiary hospitalisation. It is the world’s largest government-funded health assurance scheme, covering over **50 crore beneficiaries** from economically vulnerable families. The scheme is administered by the National Health Authority (NHA) and is available at empanelled public and private hospitals across India.

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



Solution 6.**Solution**

Topic: Abrogation of Article 370 — Year

Article 370 of the Indian Constitution granted special autonomous status to Jammu and Kashmir. On **5 August 2019**, the Government of India issued a Presidential Order abrogating Article 370 and Article 35A. Jammu and Kashmir was subsequently reorganised into two Union Territories: **Jammu & Kashmir** (with a legislature) and **Ladakh** (without a legislature), effective from 31 October 2019. The Supreme Court of India upheld the abrogation in its landmark judgment in December 2023.

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

Solution 7.**Solution**

Topic: Mughal Emperor Akbar — Reign Period

Jalal-ud-Din Muhammad Akbar (born 1542) ascended the Mughal throne in **1556** at the age of 13, following the death of his father Humayun. He ruled until his death in **1605**, a reign of approximately 49 years. Akbar is celebrated for his policy of religious tolerance (*Din-i-Ilahi*), his administrative system of *Mansabdari*, the *Navratnas* (nine gems) at his court, and the abolition of *Jizya* tax. Option (B) 1526–1556 refers to Babur and then Humayun; option (C) 1605–1627 refers to Emperor Jahangir.

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

Solution 8.**Solution**

Topic: Satpura Range — Location

The **Satpura Range** is an east-west trending hill range in central India, running parallel to the Vindhya Range. It is primarily located in **Madhya Pradesh**, with extensions into parts of Maharashtra and Chhattisgarh. The range forms a watershed between the **Narmada River** (to the north) and the **Tapti River** (to the south). The highest peak is **Dhupgarh** (1,350 m) near Pachmarhi, which is also the highest point in Madhya Pradesh. Pachmarhi, a popular hill station, is situated within the Satpura range in



MP.

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

Solution 9.

Solution

Topic: Bhima River — Tributary

The **Bhima River** originates in the **Sahyadri Mountains** (Western Ghats) near Bhimashankar, Maharashtra. It flows approximately 861 km in a south-easterly direction through Maharashtra and Karnataka before joining the **Krishna River** near Raichur in Karnataka as a major left-bank tributary. Important cities on the Bhima's banks include Pune and Solapur. It is also known as **Chandrabhaga** in its upper reaches. The Ujjani Dam (Bhima Dam) on the Bhima is a major water source for western Maharashtra.

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

Solution 10.

Solution

Topic: Non-Cooperation Movement — Year of Launch

The **Non-Cooperation Movement** was launched by Mahatma Gandhi on **1 August 1920** after the Nagpur session of the Indian National Congress. The movement called on Indians to non-violently withdraw cooperation from British rule — by surrendering titles and honorary offices, boycotting courts, schools, legislative councils, foreign goods, and foreign cloth. The movement was **suspended in February 1922** following the violent **Chauri Chaura incident** (4 February 1922), in which a mob set fire to a police station. Option (C) 1919 refers to the Jallianwala Bagh massacre and the Rowlatt Act agitation.

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



Solution 11.**Solution**

Topic: Maharashtra State Fish — Ravas

The Maharashtra government officially designated **Ravas** (*Eleutheronema tetradactylum*), also known as the **Indian Salmon** or **Threadfin**, as the State Fish of Maharashtra. It is a popular marine food and game fish found extensively along India's west coast (Arabian Sea). Ravas is commercially important and widely consumed in coastal Maharashtra and Goa. The designation promotes awareness of indigenous fish species and supports conservation efforts. It should not be confused with the Atlantic or Pacific Salmon; Ravas belongs to the family Polynemidae.

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

Solution 12.**Solution**

Topic: Aditya-L1 Mission — Objective

Aditya-L1 is India's first dedicated solar observation mission, launched by ISRO on **2 September 2023** aboard the PSLV-C57 rocket. It travels to the **Sun-Earth Lagrange Point 1 (L1)**, approximately 1.5 million km from Earth, to study the **solar corona, solar wind, solar flares**, and coronal mass ejections (CMEs) continuously without any occultation. The spacecraft carries seven payloads, including VELC (Visible Emission Line Coronagraph) and SUT (Solar Ultraviolet Imaging Telescope). Aditya-L1's data helps in understanding space weather and its impact on Earth.

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

Solution 13.**Solution**

Topic: Ganesh Chaturthi — Duration

Ganesh Chaturthi (also called Vinayaka Chaturthi) is a **10-day** Hindu festival celebrating the birth of Lord Ganesha. It begins on the fourth day (*Chaturthi*) of the bright fortnight in the Hindu month of **Bhadrapada** (August–September). The festival reaches its grand climax on the **11th day — Anant Chaturdashi** — with the immersion (*Visarjan*) of Ganesha idols in rivers, lakes, or the sea. The celebration is particularly grand in



Maharashtra, especially in Pune (where it was popularised by Lokmanya Bal Gangadhar Tilak in 1893 as a public festival) and Mumbai.

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

Solution 14.

Solution

Topic: India as Republic — Date

India officially became a **sovereign democratic republic** on **26 January 1950**, the day the **Constitution of India** came into force, replacing the Government of India Act (1935). This date is celebrated annually as **Republic Day**. Before 26 January 1950, India was an independent Dominion under the British Commonwealth since **15 August 1947**. The Constitution was adopted on **26 November 1949** (now observed as Constitution Day / Samvidhan Divas). **Dr. Rajendra Prasad** became India's first President on 26 January 1950.

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

Solution 15.

Solution

Topic: Aryabhata Satellite — Launch Facility

India's first satellite, **Aryabhata**, was launched on **19 April 1975** from the **Kapustin Yar** rocket launch and development site located in the **Soviet Union (USSR)** (in present-day Russia, near Astrakhan Oblast). It was built by the Indian Space Research Organisation (ISRO) and named after the ancient Indian mathematician and astronomer. Aryabhata carried payloads for X-ray astronomy, aeronomy, and solar physics studies. It operated for about 4 days before a power failure. The satellite re-entered Earth's atmosphere in 1992.

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



Solution 16.

Solution

Topic: Number Series — Powers of 2

The series follows a **geometric progression** with common ratio **2** (each term is double the previous): 2, 4, 8, 16, 32, ?. Equivalently, these are the powers of 2: $2^1, 2^2, 2^3, 2^4, 2^5, 2^6$. Applying the rule: $32 \times 2 = 64$. So the missing term is **64** ($= 2^6$). Option (A) 48 would be a wrong pattern (adding 16), option (B) 56 has no pattern, and option (D) 72 is also incorrect.

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

Solution 17.

Solution

Topic: Letter Analogy — Mirror Pairs

In the pattern **AZ : BY**, the **first letter** of each pair moves *forward* in the alphabet ($A \rightarrow B \rightarrow C \dots$) while the **second letter** moves *backward* ($Z \rightarrow Y \rightarrow X \dots$). Each pair consists of letters that are equidistant from opposite ends of the 26-letter alphabet: $A(1)+Z(26)=27$, $B(2)+Y(25)=27$, $C(3)+X(24)=27$. Continuing: $C(3)+X(24)=27 \rightarrow$ the next pair is $D(4)+W(23)=27$. Therefore, **CX : DW**.

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

Solution 18.

Solution

Topic: Word Analogy — Processing of Raw Material

The analogy is based on **processing a primary product to obtain a refined derivative**: Milk is processed/churned to produce **Butter**. By the same logic, Sugarcane is processed/refined to produce **Sugar** (the primary refined product). While sugarcane also yields molasses (a by-product of sugar refining), jaggery (unrefined), and ethanol (via fermentation), **Sugar** is the most direct and precise analogy to Butter from Milk — both being the main processed end-product of the raw material.

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

Solution 19.

Solution

Topic: Odd One Out — Prime vs. Non-prime Numbers

Examine each number: 17 (prime), 23 (prime), 31 (prime), 37 (prime), 42 (composite: $42 = 2 \times 3 \times 7$). All of 17, 23, 31, and 37 are **odd prime numbers**. The number **42** stands out because it is the **only even number** and the **only non-prime** (composite number) in the group. Therefore, **42** is the odd one out.

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

Solution 20.

Solution

Topic: Direction Sense — Net Displacement

The boy walks **5 km East**, then **3 km North**, then **5 km West**. The East and West components cancel each other: $+5 \text{ km (East)} - 5 \text{ km (West)} = 0$. The net East-West displacement is **zero**. The North component remains: $+3 \text{ km (North)}$. Therefore, the boy ends up exactly **3 km North** of his starting point P. The displacement is purely northward, with no East-West offset.

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

Solution 21.

Solution

Topic: Matrix Pattern — Row Sum Rule

Examine the row sums: Row 1: $1 + 3 + 5 = 9$; Row 2: $2 + 6 + 10 = 18$; Row 3: $3 + 9 + ? = ?$. The row sums form an arithmetic progression: 9, 18, 27 (each increases by 9). Therefore, Row 3 sum = 27, giving $3 + 9 + ? = 27 \Rightarrow ? = 15$. Cross-check using column pattern: Col 3 = Col 2 + Col 1 $\times 2$: Row 1: $3 + (1 \times 2) = 5 \checkmark$; Row 2: $6 + (2 \times 2) = 10 \checkmark$; Row 3: $9 + (3 \times 2) = 15 \checkmark$.

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

Solution 22.

Solution

Topic: Coding-Decoding — +1 Letter Shift

The rule is: each letter shifts **one position forward** in the alphabet. Verify with HOUSE $\rightarrow$ IPVTF: H $\rightarrow$ I, O $\rightarrow$ P, U $\rightarrow$ V, S $\rightarrow$ T, E $\rightarrow$ F ✓. Applying the same rule to **RIVER**: R(18) $\rightarrow$ S(19), I(9) $\rightarrow$ J(10), V(22) $\rightarrow$ W(23), E(5) $\rightarrow$ F(6), R(18) $\rightarrow$ S(19). Therefore, RIVER is coded as **SJWFS**. Option (B) TKXGT would result from a +2 shift; options (C) and (D) do not follow any consistent forward shift.

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

Solution 23.

Solution

Topic: Letter Series — Skip-3 Pattern

The series C, F, I, L, O follows the rule of **adding 3 to the alphabetical position** of each letter: C(3), F(6), I(9), L(12), O(15). The next term is at position $15 + 3 = 18$, which is the letter **R**. Mnemonic: the series picks every 3rd letter of the alphabet — C, F, I, L, O, **R**, U, X ... Option (A) P is only +1 from O; option (B) Q is +2; option (D) S is +4. The correct answer is **R**.

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

Solution 24.

Solution

Topic: Syllogism — Transitive Set Inclusion (Barbara Form)

From S1: Roses $\subseteq$ Flowers (all roses are flowers). From S2: Flowers $\subseteq$ Fading Things (all flowers fade). By the **transitive property** of set inclusion: Roses $\subseteq$ Flowers $\subseteq$ Fading Things $\Rightarrow$ Roses $\subseteq$ Fading Things. This is the classical **Barbara syllogism** (AAA-1): All M are P; All S are M; $\therefore$ All S are P. Therefore, the conclusion "**All roses fade**" necessarily follows. Option (A) is weaker (some) than what can be concluded; options (C) and (D) reverse the direction of inference.

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



Solution 25.

Solution

Topic: Blood Relations — Logical Deduction

The clue states: “A’s father has only one son, and that son is B.” Since A’s father has **only one son** (B), A cannot be a son of A’s father — A must be a **daughter**. A and B share the same father. Therefore, A is a daughter of the same father as B, making A the **sister of B**. In summary: A’s father → B (only son) and A (daughter). Hence, A is B’s **Sister**. Options (A) Mother and (C) Aunt involve a different generation and are ruled out.

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

Solution 26.

Solution

Topic: Coding by Alphabetical Position Sum

The code assigns each letter its **alphabetical position value** and sums them. Verify: PEN = P(16) + E(5) + N(14) = 35 ✓. For BAT: B= 2, A= 1, T= 20; Sum = 2 + 1 + 20 = **23**. Option (B) 25 would require BAT letters summing to 25 (incorrect); option (C) 27 and option (D) 29 are also wrong. The code for BAT is **23**.

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

Solution 27.

Solution

Topic: Number Analogy — Cubing

The relationship is $n : n^3$ (each number mapped to its cube): $4^3 = 64$ and $5^3 = 125$. Verify: $4 \times 4 \times 4 = 64$ ✓; $5 \times 5 \times 5 = 125$ ✓. Therefore, $4 : 64 :: 5 : 125$. Option (A) $100 = 10^2$ (square of 10, not 5); option (B) $120 = 5 \times 24$ (no cube relation); option (D) $150 = 5 \times 30$ (no relevant pattern). The answer is **125**.

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

Solution 28.

Solution

Topic: Odd One Out — Classification by Class (Aves vs Mammalia)

Cat, Dog, Cow, and Goat are all **mammals** (Class Mammalia): they are warm-blooded, give birth to live young (viviparous), and nurse their offspring with milk. **Crow** (*Corvus* sp.) is a **bird** (Class Aves): warm-blooded but oviparous (lays eggs), has feathers, wings, and a beak. Therefore, **Crow** is the odd one out as the only **non-mammal** (and the only bird) in the group. The other four all belong to the same biological class (Mammalia).

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

Solution 29.

Solution

Topic: Number Series — Geometric Progression (Doubling)

The series 7, 14, 28, 56, ? follows a **geometric progression** with common ratio **2**: each term doubles the previous one. $7 \times 2 = 14$; $14 \times 2 = 28$; $28 \times 2 = 56$; $56 \times 2 = 112$. Option (A) $96 = 56 + 40$ (no valid pattern); option (B) 100 and option (C) 108 are also incorrect. The next term is **112**.

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

Solution 30.

Solution

Topic: Ranking — Position from Front and Back

The formula relating ranks in a class of N students is:

$$\text{Rank from back} = N - \text{Rank from front} + 1$$

With $N = 30$ and rank from front = 10: Rank from back = $30 - 10 + 1 = 21$. Verification: Students in front of Anita = 9; students behind Anita = 20; total = $9 + 1$ (Anita) + 20 = 30 ✓. Therefore, Anita is **21st from the back**.

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



Solution 31.**Solution****Topic:** Kho-Kho — Court Dimensions

The standard **Kho-Kho playing court** (as per Kho-Kho Federation of India rules) measures **29 m × 16 m**. The court is divided into two equal halves by a central lane of 30 cm width, in which **eight wooden poles** are planted. Each half is further divided into lobby areas (3 m wide on each side) and the central zone. The game is played between two teams of 12 players each (9 active on the field). Kho-Kho originated in Maharashtra and is one of India's oldest traditional sports.

Answer: (B) [Go Back to Q 31](#)**Solution 32.****Solution****Topic:** Laws of Cricket — Modes of Dismissal

The **Laws of Cricket** (MCC) recognise **10 official modes of dismissal**: (1) Bowled, (2) Timed Out, (3) Caught, (4) Handled the Ball (now sub-type of Obstructing the Field since 2017), (5) Hit the Ball Twice, (6) Hit Wicket, (7) Leg Before Wicket (LBW), (8) Obstructing the Field, (9) Run Out, and (10) Stumped. In the 2017 MCC revision, “Handled the Ball” was merged into “Obstructing the Field,” but 10 modes are still counted. In practice, Bowled, Caught, LBW, Run Out, and Stumped account for the vast majority of dismissals.

Answer: (D) [Go Back to Q 32](#)**Solution 33.****Solution****Topic:** Kabaddi — The Bonus Line

In standard Kabaddi (as per Amateur Kabaddi Federation of India rules), the **Bonus Line** is a line drawn **3.75 m from the Baulk Line** on the **opponent's side** of the court. When a raider crosses the Bonus Line during a raid (with at least one foot on or beyond it and the other foot in the air), the raider earns a **Bonus Point of 1**, provided there are a minimum of 6 defenders on the court. This is in addition to any touch points scored. The Bonus Line rule is used in senior men's and women's



kabaddi but not in junior categories.

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

Solution 34.

Solution

Topic: Athletics — Discus Weight (Men)

In Olympic **men's** athletics, the regulation discus weighs **2 kg** (2000 g) and has a diameter of approximately **219–221 mm**. The **women's discus** weighs **1 kg**. The discus throw was one of the events in the ancient Greek pentathlon and has been part of the modern Olympics since 1896. The current men's world record is **74.08 m**, set by Jürgen Schult (East Germany) in 1986 — one of the longest-standing world records in athletics. Neeraj Chopra (India) competes in *Javelin*, not Discus.

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

Solution 35.

Solution

Topic: Swimming — Medley Relay Stroke Order

In a competitive **Medley Relay** (4×100 m or 4×200 m), the order of strokes is: **(1) Backstroke** → **(2) Breaststroke** → **(3) Butterfly** → **(4) Freestyle**. A useful mnemonic is “**BB-BF**”: Back, Breast, Butterfly, Free. Note this is the *reverse* of the order used in individual **Individual Medley (IM)**: Butterfly → Backstroke → Breaststroke → Freestyle. In relay, each of the four swimmers swims one leg. This order is governed by FINA (now World Aquatics) rules.

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



Solution 36.

Solution

Topic: Gymnastics — Floor Exercise Mat Size

In Olympic **artistic gymnastics**, the floor exercise is performed on a **12 m × 12 m** square sprung mat (a spring floor). The spring floor provides cushioning and bounce. Men's floor exercise (60–70 seconds) focuses on power tumbling and strength moves, while women's floor exercise (70–90 seconds) is performed to music and combines acrobatics, dance, and expression. A safety border area of approximately 1 m surrounds the mat. The 12 m × 12 m size is standard across all major international competitions including the Olympics and World Championships.

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

Solution 37.

Solution

Topic: FITT Principle — Type Component

The **FITT principle** is a framework for designing exercise programmes: **F**requency (how often — sessions per week), **I**ntensity (how hard — percentage of max HR, RPE, load), **T**ime (how long — duration per session), and **T**ype (what kind of exercise). The **Type** component refers to the **mode or form of physical activity selected** — for example, choosing **aerobic activities** (running, cycling, swimming) versus **resistance/anaerobic training** (weight lifting, plyometrics). Selecting the appropriate Type depends on the individual's goals: cardiovascular fitness, muscular strength, flexibility, or body composition improvement.

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

Solution 38.

Solution

Topic: Body Composition — Skinfold (Caliperometry) Method

Caliperometry (the Skinfold technique) involves using **skinfold calipers** to measure the thickness of subcutaneous fat at specific anatomical sites (e.g., triceps, biceps, subscapular, suprailiac, abdominal, thigh). These measurements are inserted into validated **prediction equations** (e.g., Jackson-Pollock 3-site or 7-site formula) to estimate body fat percentage.



It is **cost-effective, portable, and practical** for field settings such as sports camps and schools. Accuracy depends on the technician's skill and experience. Laboratory methods (DEXA, hydrostatic weighing) are more precise but less accessible.

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

Solution 39.

Solution

Topic: Muscle Contraction Types — Isotonic

An **isotonic contraction** is one in which the **muscle changes its length** (shortens or lengthens) while the **tension (force) remains relatively constant**. There are two sub-types: **Concentric** (muscle shortens as it overcomes a load, e.g., lifting a dumbbell upward) and **Eccentric** (muscle lengthens under load, e.g., lowering a dumbbell). Option (A) describes an **isometric** contraction (no length change, e.g., pushing against a wall). Most everyday movements and sports actions involve isotonic contractions. Isotonic literally means “same tension.”

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

Solution 40.

Solution

Topic: Skill-Related Fitness — Reaction Time

Reaction Time is defined as the **elapsed time between the onset of a stimulus** (visual, auditory, or tactile) **and the initiation of a voluntary movement response**. It is one of the six skill-related fitness components (Agility, Balance, Coordination, Power, Reaction Time, Speed). **Simple Reaction Time** involves one stimulus and one response (e.g., sprint start to a gun). **Choice Reaction Time** involves selecting among multiple possible responses. Reaction time is crucial in sports like sprinting, badminton, boxing, and cricket batting. It can be improved through specific training and anticipation drills.

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



Solution 41.

Solution

Topic: Mosston's Spectrum — Guided Discovery Style

In **Mosston and Ashworth's Spectrum of Teaching Styles**, the **Guided Discovery** style (Style F) is characterised by: the **teacher designs** a carefully planned **sequence of questions, clues, or tasks** that lead the learner step-by-step toward a **single, pre-determined target concept or movement solution**. The student discovers the answer through **active problem-solving and cognitive engagement** guided by the teacher's questions. This style bridges the command-based styles (A–E) and the discovery-based styles (G–K). It promotes thinking, intrinsic motivation, and ownership of learning, while still having the teacher control the outcome.

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

Solution 42.

Solution

Topic: Sports Psychology — Athlete Burnout

Athlete Burnout is a psychophysiological syndrome resulting from **chronic psychophysiological stress** caused by **training overload combined with insufficient recovery** over a sustained period (weeks to months). It manifests as three core dimensions (Raedeke & Smith, 2001): (1) emotional and physical exhaustion, (2) reduced sense of accomplishment, and (3) sport devaluation. Contributing factors include poor periodisation, excessive competition, lack of autonomy, perfectionism, and external pressure. It differs from simple overtraining (physical) in its profound psychological component. Effective prevention involves adequate rest, psychological support, and balanced training loads.

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



Solution 43.

Solution

Topic: Sports Psychology — Mental Rehearsal (Imagery)

Mental rehearsal (also called motor imagery, mental imagery, or visualisation) is a **cognitive technique** in which an athlete **mentally simulates the execution of a skill, tactic, or competitive scenario without any physical movement**. Research (e.g., Suinn, 1976; Feltz & Landers meta-analysis) shows that imagery activates similar neural pathways in the motor cortex as actual physical practice, thereby reinforcing motor programmes. It is used to improve skill acquisition, enhance confidence, control anxiety, and maintain focus. Imagery is most effective when combined with physical training and when it is vivid (multi-sensory), controllable, and positive.

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

Solution 44.

Solution

Topic: Dronacharya Award — Categories

The **Dronacharya Award** (officially: Dronacharya Award for Outstanding Coaches in Sports and Games) is presented by the Government of India and is one of the highest honours for sports coaches. It is awarded in **two categories**: (1) **Regular Category** — for coaches who have coached medal-winning athletes at recent prestigious international sporting events (within the preceding 3–4 years); and (2) **Lifetime Achievement Category** — for coaches with **outstanding contributions over a distinguished career spanning many years**, where the recency criterion is relaxed. The award is named after Dronacharya, the legendary teacher of the Pandavas and Kauravas in the Mahabharata.

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



Solution 45.

Solution

Topic: Commonwealth Games 2022 — India's Gold Tally

At the **Commonwealth Games 2022** held in **Birmingham, United Kingdom** (28 July – 8 August 2022), India finished **fourth** in the overall medals tally, winning **22 gold, 16 silver, and 23 bronze** medals (total: 61 medals). This was India's best-ever Commonwealth Games performance by gold medal count. Top medal contributors included **weightlifting, wrestling, badminton, boxing**, and lawn bowls. **Achanta Sharath Kamal** was the flag bearer at the closing ceremony. Australia topped the overall medals table.

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

Solution 46.

Solution

Topic: World Athletics Championships 2023 — Host City

The **19th World Athletics Championships 2023** were held in **Budapest, Hungary**, from **19 to 27 August 2023**, at the National Athletics Centre. The USA topped the medals tally. **Neeraj Chopra** won a historic **gold medal** in the men's javelin throw with a distance of 88.17 m, becoming **India's first-ever World Athletics Championship gold medallist**. Option (A) Eugene, USA hosted the 2022 edition; option (C) Tokyo hosted the 1991 edition; option (D) London hosted the 2017 edition.

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

Solution 47.

Solution

Topic: Neeraj Chopra — Personal Best Javelin Throw

Neeraj Chopra set his **personal best (PB) of 89.94 m** at the **Wanda Diamond League meeting in Stockholm, Sweden**, on **30 June 2022**. This also constitutes the **Asian record** for the javelin. It surpassed his previous PB of 89.30 m. His Olympic gold (Tokyo 2020, 5 August 2021) was achieved with a throw of **87.58 m**. At the 2023 World Athletics Championships (Budapest), he threw **88.17 m** for gold. Neeraj is the reigning Olympic and World champion, and the current Asian record holder.



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

Solution 48.

Solution

Topic: 2028 Summer Olympics — Host City

The **2028 Summer Olympic Games** (XXXIV Olympiad) will be hosted by **Los Angeles, California, USA**. Los Angeles previously hosted the Summer Olympics in **1932** (X Olympiad) and **1984** (XXIII Olympiad). The 2024 Summer Olympics were held in **Paris, France**; the 2032 Summer Olympics are awarded to **Brisbane, Australia**. Los Angeles was confirmed as the 2028 host in 2017 by the International Olympic Committee (IOC), with Paris simultaneously awarded 2024. The LA28 Games will be the first Olympics with **cricket** included as an event.

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

Solution 49.

Solution

Topic: SAI TOPS Scheme — Full Form

TOPS stands for **Target Olympic Podium Scheme**. It is a flagship programme launched by the **Sports Authority of India (SAI)** and the Ministry of Youth Affairs and Sports in **2014**. The scheme identifies elite Indian athletes who have a realistic potential to win **medals at the Olympic Games** and provides them with comprehensive support: monthly stipend, international training camps, quality equipment, foreign competition exposure, and specialised coaching. The TOPS mission team continually evaluates and supports athletes across Olympic disciplines. Notable beneficiaries include Neeraj Chopra, PV Sindhu, and Bajrang Punia. TOPS is:

T – Target

O – Olympic

P – Podium

S – Scheme



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

Solution 50.

Solution

Topic: Skill-Related vs Health-Related Fitness Components

Physical fitness components are classified into two categories. **Health-Related Components** (important for overall health): Muscular Strength, Muscular Endurance, Cardiovascular Endurance, Flexibility, and Body Composition. **Skill-Related (Performance-Related) Components** (important for sport performance): Agility, Balance, **Coordination**, Power, Reaction Time, and Speed. **Coordination** — the ability to use the senses (especially vision) together with body parts to perform motor tasks smoothly and accurately — is a **skill-related fitness component**. Options (A) Muscular strength, (B) Cardiovascular endurance, and (D) Body composition are all health-related components.

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



ANSWER KEY

Each answer is a hyperlink — click to jump directly to the detailed solution.

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

Option Distribution Summary:

Option	Frequency	Percentage
(A)	12	24%
(B)	13	26%
(C)	12	24%
(D)	13	26%
Total	50	100%

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Prepared for practice purposes. All questions are original and modelled on the official exam pattern.

