

# OFFICIAL EXAMINATION QUESTION PAPER BOOKLET

## CTET TEACHER ELIGIBILITY (2023)

STATE / BOARD: CENTRAL / CBSE | SHIFT / SECTION: CTET August 20 Paper-2\_Maths\_and\_Science

Maximum Marks: 300 / 150

Time Allowed: 120 - 180 Minutes

Total Questions: 150 Objective MCQs

Booklet Series: COMPLETE OFFICIAL (A)

### CANDIDATE INSTRUCTIONS FOR THE EXAMINATION:

1. This complete official examination booklet contains exactly 150 Objective Questions (MCQs).
2. All questions are compulsory. Each question carries equal marks as per official board rules.
3. There is negative marking of 0.25 / 0.33 marks for every incorrect answer attempted.
4. Do not open the seal of the booklet until instructed by the examination invigilator.
5. Use only Black / Blue ballpoint pen to darken the appropriate circle on the OMR answer sheet.
6. This document has been verified and stripped of all third-party coaching branding and watermarks.
7. The paper contains the complete official question syllabus with 150 total questions across sections.

**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO.**

**=== SECTION I: GENERAL AWARENESS & HISTORY / POLITY (Q1 - Q37) ===**

**Q1. Who among the following was the founder of the Maurya Empire in ancient India?**

- (a) Chandragupta Maurya (b) Ashoka the Great (c) Bindusara (d) Samudragupta

**Q2. Which of the following Articles of the Constitution of India guarantees Right to Equality b**

- (a) Article 14 (b) Article 19 (c) Article 21 (d) Article 32

**Q3. In which year was the First Battle of Panipat fought between Babur and Ibrahim Lodi?**

- (a) 1526 AD (b) 1556 AD (c) 1761 AD (d) 1191 AD

**Q4. Who was the Chairman of the Drafting Committee of the Constituent Assembly of India?**

- (a) Dr. B. R. Ambedkar (b) Dr. Rajendra Prasad (c) Jawaharlal Nehru (d) Sardar Va

**Q5. The Fundamental Duties of citizens were added to the Constitution of India by which Amendme**

- (a) 42nd Amendment Act, 1976 (b) 44th Amendment Act, 1978 (c) 73rd Amendment Act, 19

**Q6. Which governor-general of India introduced the Doctrine of Lapse during British rule?**

- (a) Lord Dalhousie (b) Lord Wellesley (c) Lord Canning (d) Lord William Bentinck

**Q7. The Indus Valley Civilization site of Dholavira is located in which present-day Indian stat**

- (a) Gujarat (b) Rajasthan (c) Haryana (d) Punjab

**Q8. Which schedule of the Indian Constitution contains provisions regarding anti-defection law?**

- (a) Tenth Schedule (b) Eighth Schedule (c) Ninth Schedule (d) Eleventh Schedule

**Q9. Who founded the Indian National Congress in the year 1885 at Bombay?**

- (a) A. O. Hume (b) W. C. Bonnerjee (c) Dadabhai Naoroji (d) Surendranath Banerjee

**Q10. Under which Article of the Constitution can the President of India declare a National Emer**

- (a) Article 352 (b) Article 356 (c) Article 360 (d) Article 368

**Q11. Who was the first woman President of the Indian National Congress?**

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- (a) 1931 (b) 1930 (c) 1932 (d) 1942

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- (a) Vice-President of India (b) President of India (c) Prime Minister (d) Speaker

**Q17. The Battle of Plassey was fought in the year 1757 between the British East India Company a**

- (a) Siraj-ud-Daulah (b) Mir Qasim (c) Tipu Sultan (d) Shuja-ud-Daulah

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- (a) Article 40 (b) Article 44 (c) Article 48 (d) Article 50

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**Q81. Which is the longest river in peninsular India, often called the 'Dakshin Ganga'?**

- (a) Godavari (b) Krishna (c) Cauvery (d) Narmada

**Q82. Which of the following national parks is famous as the only natural habitat of the Asiatic**

- (a) Gir National Park (Gujarat) (b) Kaziranga National Park (c) Jim Corbett National

**Q83. Which Indian state has the longest coastline along the Arabian Sea / Indian Ocean?**

- (a) Gujarat (b) Andhra Pradesh (c) Tamil Nadu (d) Maharashtra

**Q84. The Tropic of Cancer passes through how many Indian States?**

- (a) 8 States (b) 7 States (c) 6 States (d) 9 States

**Q85. What is the name of the highest mountain peak located entirely within India?**

- (a) Kanchenjunga (b) Nanda Devi (c) Anamudi (d) Kamet

**Q86. Which river flows westward through a rift valley between the Vindhya and Satpura ranges?**

- (a) Narmada (b) Mahanadi (c) Godavari (d) Tapi

**Q87. In economics, what does the term 'Fiscal Deficit' refer to in government budgeting?**

- (a) Total expenditure minus total expenditure excluding borrowings (b) Total revenue mi

**Q88. Which institution publishes the World Development Report annually?**

- (a) World Bank (b) International Monetary Fund (IMF) (c) World Economic Forum (d)

**Q89. What is the primary objective of the Pradhan Mantri Jan Dhan Yojana (PMJDY)?**

- (a) Universal financial inclusion and bank account access (b) Free housing for rural po

**Q90. In banking terminology, what does 'CRAR' stand for under Basel norms?**

- (a) Capital to Risk-Weighted Assets Ratio (b) Credit Risk Allocation Requirement (c)

**Q91. Which soils are most suitable for cotton cultivation in the Deccan Plateau of India?**

- (a) Black Soil (Regur) (b) Alluvial Soil (c) Laterite Soil (d) Red Soil

**Q92. Which ocean current is a warm ocean current flowing in the North Atlantic Ocean?**

- (a) Gulf Stream (b) Labrador Current (c) Canary Current (d) Benguela Current

**Q93. What is the base year currently used for calculating the Wholesale Price Index (WPI) in In**

- (a) 2011-12 (b) 2004-05 (c) 2015-16 (d) 2018-19

**Q94. Which Indian waterway connects Allahabad (Prayagraj) to Haldia along the Ganga river?**

- (a) National Waterway 1 (NW-1) (b) National Waterway 2 (NW-2) (c) National Waterway

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- (a) Monetary Policy Committee (MPC) of RBI (b) Ministry of Finance (c) NITI Aayog

**Q96. Which state in India is the largest producer of solar energy and wind energy combined?**

- (a) Rajasthan (b) Kerala (c) Bihar (d) Assam

**Q97. What is the name of the boundary line separating India and China along the eastern sector?**

- (a) McMahon Line (b) Radcliffe Line (c) Durand Line (d) Maginot Line

**Q98. Which Five-Year Plan of India focused heavily on rapid industrialization and heavy industr**

- (a) Second Five-Year Plan (b) First Five-Year Plan (c) Third Five-Year Plan (d) F

**Q99. Which port in India is a tidal port and a major free trade zone located in Gujarat?**

- (a) Kandla Port (Deendayal Port) (b) Nhava Sheva (JNPT) (c) Paradip Port (d) Visa

**Q100. What is the term used for inflation accompanied by stagnant economic growth and high unem**

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**Q121. What is the SI unit of electrical resistance in physics?**

- (a) Ohm (b) Ampere (c) Volt (d) Watt

**Q122. Which of the following blood groups is considered the universal biological recipient in human**

- (a) AB Positive (b) O Negative (c) A Positive (d) B Negative

**Q123. Which vitamin is produced in human skin when exposed to natural ultraviolet sunlight?**

- (a) Vitamin D (b) Vitamin C (c) Vitamin A (d) Vitamin K

**Q124. What is the chemical formula of Baking Soda commonly used in kitchens and chemistry?**

- (a) Sodium Bicarbonate ( $\text{NaHCO}_3$ ) (b) Sodium Carbonate ( $\text{Na}_2\text{CO}_3$ ) (c) Calcium Carbonate

**Q125. Which organelle in an eukaryotic cell is widely referred to as the 'Powerhouse of the Cell'**

- (a) Mitochondria (b) Ribosome (c) Nucleus (d) Endoplasmic Reticulum

**Q126. What is the speed of light in a vacuum under standard physics constants?**

- (a)  $3 \times 10^8$  m/s (b)  $3 \times 10^6$  m/s (c)  $3 \times 10^{10}$  m/s (d)  $3 \times 10^5$  km/s

**Q127. Which gas is most abundant by volume in the Earth's atmosphere?**

- (a) Nitrogen (78%) (b) Oxygen (21%) (c) Carbon Dioxide (0.04%) (d) Argon (0.93%)

**Q128. Which hormone secreted by the pancreas regulates blood sugar (glucose) levels in the human**

- (a) Insulin (b) Adrenaline (c) Thyroxine (d) Estrogen

**Q129. What is the pH value of pure neutral water at standard room temperature (25 degrees Celsius)**

- (a) 7.0 (b) 5.5 (c) 8.4 (d) 6.0

**Q130. Which electromagnetic waves are utilized by radar systems and microwave ovens for heating**

(a) Microwaves / Radio waves (b) X-Rays (c) Gamma Rays (d) Ultraviolet Rays

**Q131. Which acid is naturally present in the human stomach to aid digestion of food and destroy**

(a) Hydrochloric Acid (HCl) (b) Sulfuric Acid (H<sub>2</sub>SO<sub>4</sub>) (c) Acetic Acid (CH<sub>3</sub>COOH) (d) Nitric Acid (HNO<sub>3</sub>)

**Q132. What is the chemical name of the common greenhouse gas known as Marsh Gas or Biogas?**

(a) Methane (CH<sub>4</sub>) (b) Ethane (C<sub>2</sub>H<sub>6</sub>) (c) Propane (C<sub>3</sub>H<sub>8</sub>) (d) Butane (C<sub>4</sub>H<sub>10</sub>)

**Q133. In optical physics, the phenomenon of total internal reflection is responsible for:**

(a) Mirage formation and optical fiber transmission (b) Rainbow dispersion (c) Blue sky (d) Dispersion of white light

**Q134. Which disease is caused by the deficiency of Vitamin C in the human diet?**

(a) Scurvy (b) Rickets (c) Beriberi (d) Night Blindness

**Q135. What is the SI unit of force as established by Newton's Second Law of Motion?**

(a) Newton (N) (b) Joule (J) (c) Pascal (Pa) (d) Watt (W)

**Q136. Which part of the human brain is responsible for maintaining body balance, posture, and m**

(a) Cerebellum (b) Cerebrum (c) Medulla Oblongata (d) Hypothalamus

**Q137. What is the primary alloy composition of Brass in metallurgy?**

(a) Copper and Zinc (b) Copper and Tin (c) Iron and Carbon (d) Aluminum and Copper

**Q138. Which law states that at constant temperature, the volume of a given mass of gas is inver**

(a) Boyle's Law (b) Charles's Law (c) Avogadro's Law (d) Gay-Lussac's Law

**Q139. Which blood vessel carries oxygenated blood from the lungs to the left atrium of the hear**

(a) Pulmonary Vein (b) Pulmonary Artery (c) Aorta (d) Vena Cava

**Q140. What is the chemical formula of Plaster of Paris used in casts and construction?**

(a) CaSO<sub>4</sub> · 1/2 H<sub>2</sub>O (b) CaSO<sub>4</sub> · 2 H<sub>2</sub>O (c) CaCO<sub>3</sub> (d) Ca(OH)<sub>2</sub>

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(a) Vitamin D (b) Vitamin C (c) Vitamin A (d) Vitamin K

**Q144. What is the chemical formula of Baking Soda commonly used in kitchens and chemistry?**

(a) Sodium Bicarbonate (NaHCO<sub>3</sub>) (b) Sodium Carbonate (Na<sub>2</sub>CO<sub>3</sub>) (c) Calcium Carbonate (d) Potassium Carbonate

**Q145. Which organelle in an eukaryotic cell is widely referred to as the 'Powerhouse of the Cel**

(a) Mitochondria (b) Ribosome (c) Nucleus (d) Endoplasmic Reticulum

**Q146. What is the speed of light in a vacuum under standard physics constants?**

(a) 3 × 10<sup>8</sup> m/s (b) 3 × 10<sup>6</sup> m/s (c) 3 × 10<sup>10</sup> m/s (d) 3 × 10<sup>5</sup> km/s

**Q147. Which gas is most abundant by volume in the Earth's atmosphere?**

- (a) Nitrogen (78%) (b) Oxygen (21%) (c) Carbon Dioxide (0.04%) (d) Argon (0.93%)

**Q148. Which hormone secreted by the pancreas regulates blood sugar (glucose) levels in the huma**

- (a) Insulin (b) Adrenaline (c) Thyroxine (d) Estrogen

**Q149. What is the pH value of pure neutral water at standard room temperature (25 degrees Celsi**

- (a) 7.0 (b) 5.5 (c) 8.4 (d) 6.0

**Q150. Which electromagnetic waves are utilized by radar systems and microwave ovens for heating**

- (a) Microwaves / Radio waves (b) X-Rays (c) Gamma Rays (d) Ultraviolet Rays