

# UPSC Prelims 2003 — GS Paper 1

148 Questions with Solutions | UnlockIAS

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UPSC 2003

Medieval History › Delhi Sultanate

moderate

**Q1. Alam Khan, one of those who invited Babar to invade India was**

- (a) An uncle of Ibrahim Lodi and a pretender to the throne of Delhi**
- (b) A cousin of Ibrahim Lodi who was ill-treated and expelled from the country
- (c) The father of Dilawar Khan to whom cruel treatment was meted out by Ibrahim Lodi
- (d) A high official in Punjab province who was very much discontented with Ibrahim Lodi's treatment to his tribe

**Answer: (a)**

Alam Khan (also called Ala-ud-Din Alam Khan Lodi) was an uncle of Sultan Ibrahim Lodi; disgruntled with Ibrahim, he allied with Daulat Khan and invited Babur to invade, hoping to claim the Delhi throne. Hence option (a) is correct, while the other options misidentify his relationship or position. ([iasexamportal.com]([http://iasexamportal.com/paper/IAS\\_General\\_Studies\\_Prelims\\_Paper\\_2003\\_part-1?utm\\_source=openai](http://iasexamportal.com/paper/IAS_General_Studies_Prelims_Paper_2003_part-1?utm_source=openai)))

UPSC 2003

Medieval History › Mughal Empire

moderate

**Q2. The battle of Dharmat was fought between**

- (a) Muhammad Gori and Jai Chand
- (b) Babar and the Afghans
- (c) Aurangzeb and Dara Shikoh**
- (d) Ahmad Shah Durrani and the Marathas

**Answer: (c)**

The Battle of Dharmat (15 April 1658) was fought between Prince Aurangzeb and his elder brother Dara Shikoh during Shah Jahan's succession struggle; Aurangzeb's victory cleared his path to the throne. The other pairs belong to different periods/conflicts, so they are incorrect. ([indianexpress.com]([https://indianexpress.com/article/upsc-current-affairs/upsc-essentials/knowledge-nugget-aurangzeb-dara-shikoh-mughal-nagpur-upsc-history-9894427/?utm\\_source=openai](https://indianexpress.com/article/upsc-current-affairs/upsc-essentials/knowledge-nugget-aurangzeb-dara-shikoh-mughal-nagpur-upsc-history-9894427/?utm_source=openai)))

UPSC 2003

Geography › Economic & Mineral Geography

easy

**Q3. Which one among the following has the largest shipyard in India?**

- (a) Kolkata
- (b) Kochi**
- (c) Mumbai
- (d) Visakhapatnam

**Answer: (b)**

Cochin Shipyard in Kochi, Kerala, is India's largest shipbuilding and maintenance facility, possessing the greatest capacity among Indian yards; therefore Kochi is the correct choice. Kolkata, Mumbai and Visakhapatnam yards are smaller in capacity. ([edurev.in]([https://edurev.in/t/203066/Indian-Panorama-Solved-Questions--1995-2020--2?utm\\_source=openai](https://edurev.in/t/203066/Indian-Panorama-Solved-Questions--1995-2020--2?utm_source=openai)))

**Q4. Three flags, each of different colour, are available for a military exercise. Using these flags, different codes can be generated by waving**

- i) a single flag of different colours, or**
- ii) any two flags in a different sequence of colours, or**
- iii) three flags in a different sequence of colours.**

**The maximum number of codes that can be generated is**

- (a) 6
- (b) 9
- (c) 15**
- (d) 18

**Answer: (c)**

With three different-coloured flags: (i) single-flag signals = 3; (ii) two-flag ordered signals =  $3P_2 = 6$ ; (iii) three-flag ordered signals =  $3P_3 = 6$ . Total codes =  $3 + 6 + 6 = 15$ , so option (c) is correct; options 6, 9, 18 under- or over-count the permutations. ([edurev.in](https://edurev.in/t/203243/Permutation--Combination--Probability-Solved-Quest?utm\_source=openai))

**Q5. Match List I (Organisation) with List II (Location) and select the correct answer using the codes given below the list:**

**List I (Organisation)**

- A. National Sugar Institute**
- B. Mishra Dhatu Nigam Limited**
- C. Institute of Military Law**
- D. Institute of National Integration**

**List II (Location)**

- 1. Dehradun**
- 2. Kamptee**
- 3. Pune**
- 4. Hyderabad**

**Codes: A B C D**

- (a) 3 1 4 2
- (b) 5 1 4 3
- (c) 3 4 5 2
- (d) 5 4 2 3**

**Answer: (d)**

National Sugar Institute is in Kanpur (coded 5), Mishra Dhatu Nigam Ltd. is headquartered in Hyderabad (4), the Institute of Military Law is at Kamptee near Nagpur (2) and the Institute of National Integration is located at Pune (3). Hence the correct code sequence A-5 B-4 C-2 D-3, i.e. option (d). ([examrobot.com](https://examrobot.com/content/match-list-i-organisation-list-ii-location-and-select-correct-answer-using-codes-given-below?utm\_source=openai))

**Q6. Tim Montgomery set a new world record at the IAAF Grand Prix final in the year 2002 in**

- (a) Long Jump
- (b) 110 m Hurdle Race
- (c) 100 m Dash**
- (d) High Jump

**Answer: (c)**

At the IAAF Grand Prix Final in Paris on 14 September 2002, U.S. sprinter Tim Montgomery clocked 9.78 s in the 100 m dash, setting a new world record (later annulled for doping). Therefore the event was the 100 m dash. ([civilserviceindia.com](https://www.civilserviceindia.com/upsc\_questions/GeneralStudies-2003%28pre%29solved.htm))

**Q7. With reference to the work of human kidney, consider the following statements:**

1. After the waste is removed in the kidney, the cleaner blood is sent back through renal artery.
2. From Bowman's capsule, the filtered liquid passes through tiny tubes where much of the glucose is reabsorbed and sent back to the blood in the renal vein.

**Which of these statements is/are correct?**

- (a) Only 1
- (b) Only 2**
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Answer: (b)**

Clean, de-oxygenated blood leaves the kidney through the renal vein, not the renal artery, so statement 1 is incorrect. Statement 2 is correct: filtrate from Bowman's capsule enters the nephron tubules where glucose is largely re-absorbed; the re-absorbed glucose returns to circulation via capillaries that drain into the renal vein. Hence only statement 2 is correct. ([examrobot.com](https://examrobot.com/content/reference-work-human-kidney-consider-following-statements-1-after-waste-removed-kidney?utm\_source=openai))

**Q8. A hydrogen-inflated polythene balloon is released from the surface of the earth. As the balloon rises to an altitude up in the atmosphere, it will**

- (a) Decrease in size
- (b) Flatten into a disc-like shape
- (c) Increase in size**
- (d) Maintain the same size and shape

**Answer: (c)**

As the balloon rises, external atmospheric pressure falls faster than the temperature, so the hydrogen gas inside expands (Boyle's law). The balloon therefore increases in volume until the material's tensile limit is reached. ([selfstudyhistory.com](https://selfstudyhistory.com/2015/04/09/prelims-ias-general-studies-solved-paper-with-explanations-2003-part-4/?utm\_source=openai))

**Q9. The power to enlarge the jurisdiction of the Supreme Court of India with respect to any matter included in the Union List of Legislative Powers rests with**

- (a) The President of India
- (b) The Chief Justice of India
- (c) The Parliament**
- (d) The Union Ministry of Law, Justice and Company Affairs

**Answer: (c)**

Article 138(1) of the Constitution empowers Parliament to enlarge the Supreme Court's jurisdiction over any matter in the Union List. Thus the power rests with Parliament, making option (c) correct. ([selfstudyhistory.com](https://selfstudyhistory.com/2015/04/09/prelims-ias-general-studies-solved-paper-with-explanations-2003-part-4/?utm\_source=openai))

**Q10. Which one of the following High Courts has the territorial jurisdiction over Andaman and Nicobar Islands?**

- (a) Andhra Pradesh
- (b) Calcutta**
- (c) Madras
- (d) Orissa

**Answer: (b)**

The Calcutta High Court's territorial jurisdiction, extended under the Calcutta High Court (Extension of Jurisdiction) Act, 1953, covers the State of West Bengal and the Union Territory of the Andaman & Nicobar Islands. Hence the High Court that entertains writs and appeals arising from these islands is the Calcutta High Court, not the High Courts of Andhra Pradesh, Madras or Orissa. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Calcutta\_High\_Court?utm\_source=openai))

**Q11. Under which Article of the Indian Constitution did the President make a reference to the Supreme Court to seek the Court's opinion on the constitutional validity of the Election Commission's decision on deferring the Gujarat Assembly elections (in the year 2002)?**

- (a) Article 142
- (b) Article 143**
- (c) Article 144
- (d) Article 145

**Answer: (b)**

When the Election Commission postponed the 2002 Gujarat Assembly polls, the Union Cabinet advised the President to seek the Supreme Court's advice; the reference was made under Article 143(1), which empowers the President to obtain the Court's advisory opinion on questions of law or public importance. The other Articles listed deal with Court powers to do complete justice (142), Court-enforced cooperation of authorities (144) and Court rules (145) and therefore are inapplicable. ([legalauthority.in](https://www.legalauthority.in/judgement/u-a-143-1-of-the-constitution-of-india-vs-20415?utm\_source=openai))

**Q12. Consider the following statements:**

1. India launched its first full-fledged meteorological satellite (METSAT) in September 2002.
2. For the first time, the space vehicle PSLV-C4 carried a payload of more than 1000 kg into a geosynchronous orbit.

**Which of these statements is/are correct?**

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2**
- (d) Neither 1 nor 2

**Answer: (c)**

ISRO launched METSAT (later renamed Kalpana-1) on 12 September 2002, its first dedicated meteorological satellite. The launch vehicle PSLV-C4 placed a 1,060 kg payload into geosynchronous transfer orbit—the first time a PSLV mission had lifted more than 1,000 kg to that orbit. Therefore, both statements are correct. ([isro.gov.in](https://www.isro.gov.in/KALPANA\_1.html?utm\_source=openai))

**Q13. Nanda Devi peak forms a part of**

- (a) Assam Himalayas
- (b) Kumaon Himalayas**
- (c) Nepal Himalayas
- (d) Punjab Himalayas

**Answer: (b)**

Nanda Devi (7,817 m) lies in Chamoli district of Uttarakhand between the Sutlej and Kali rivers, a segment that geographers label the Kumaon Himalayas. It is thus not part of the Assam, Nepal or Punjab sections of the Himalaya. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Nanda\_Devi?utm\_source=openai))

**Q14. Consider the following statements:**

1. India is the original home of the cotton plant.
2. India is the first country in the world to develop hybrid cotton variety leading to increased production.

**Which of these statements is/are correct?**

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2**
- (d) Neither 1 nor 2

**Answer: (c)**

Archaeological and textual evidence (e.g., Indus Valley cotton textiles) identifies India as one of the earliest and therefore an 'original' centres of cotton domestication. Further, Indian breeder C. T. Patel released Hybrid-4 (H-4) in 1970, the world's first commercially successful cotton hybrid, making India the first country to develop and cultivate a hybrid variety that dramatically boosted yields. Hence both statements are correct. ([textileworldasia.com](https://textileworldasia.com/textile-world-asia/twa-features/2010/09/india-a-cotton-giant/?utm\_source=openai))

**Q15. Who is the author of the book 'New Dimensions of India's Foreign Policy'?**

- (a) A B Vajpayee**
- (b) Jaswant Singh
- (c) P C Alexander
- (d) Yashwant Sinha

**Answer: (a)**

The book "New Dimensions of India's Foreign Policy" was written by Atal Bihari Vajpayee, who later became Prime Minister of India. None of the other listed leaders (Jaswant Singh, P. C. Alexander, Yashwant Sinha) authored a book by this title. ([gktoday.in](https://www.gktoday.in/question/who-wrote-the-book-new-dimensions-of-indias-foreign?utm\_source=openai))

**Q16. How did the Mughal Emperor Jahandar Shah's reign come to an early end?**

- (a) He was deposed by his wazir
- (b) He died due to a slip while climbing down steps
- (c) He was defeated by his nephew in a battle**
- (d) He died of sickness due to too much consumption of wine

**Answer: (c)**

Jahandar Shah's brief reign (1712-13) ended when he was defeated and deposed by his nephew Farrukhsiyar at the Battle of Agra; after capture he was executed. He was neither deposed by his wazir, killed by an accident, nor did he die of illness related to alcohol. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Jahandar\_Shah?utm\_source=openai))

**Q17. In India, among the following locations, the Dutch established their earliest factory at**

- (a) Surat
- (b) Pullicat**
- (c) Cochin
- (d) Cassimbazar

**Answer: (b)**

Among the places listed, the earliest Dutch factory was set up at Pulicat (on the Coromandel coast) in 1610; the Dutch entered Surat only in 1616 and Cochin in 1663, while Kasimbazar came still later. Hence Pulicat is the earliest. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Dutch\_Coromandel?utm\_source=openai))

**Q18. Consider the following statements:**

- 1. While members of the Rajya Sabha are associated with Committees on Public Accounts and Public Undertakings, Members of Committee on Estimates are drawn entirely from Lok Sabha.**
- 2. The Ministry of Parliamentary Affairs works under the overall direction of the Cabinet Committee on Parliamentary Affairs.**
- 3. The Minister of Parliamentary Affairs nominates members of Parliament on Committees, Councils, Boards and Commissions set up by the Government of India in the various ministries.**

**Which of these statements are correct?**

- (a) 1 and 2
- (b) 2 and 3
- (c) 1 and 3
- (d) 1, 2 and 3**

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**Answer: (d)**

1. The Public Accounts Committee (22 members) and Committee on Public Undertakings (22) include members from both Houses, but the Estimates Committee (30 members) is drawn only from the Lok Sabha—statement 1 is correct.

([en.wikipedia.org](https://en.wikipedia.org/wiki/Estimates\_Committee?utm\_source=openai)) 2. The Ministry of Parliamentary Affairs functions under the overall direction of the Cabinet Committee on Parliamentary Affairs—statement 2 is correct. 3. Allocation of Business Rules entrust the Minister of Parliamentary Affairs with nominating MPs to various Committees, Councils, Boards and Commissions set up by the Government—statement 3 is correct. Therefore all three statements are correct. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Ministry\_of\_Parliamentary\_Affairs\_%28India%29?utm\_source=openai))

**Q19. The Genetic Engineering Approval Committee, whose permission is required for cultivation of any genetically modified crop such as Bt-Cotton in India, is under the Union Minister of**

- (a) Agriculture
- (b) Environment and Forests**
- (c) Commerce and Industry
- (d) Rural Development

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**Answer: (b)**

The Genetic Engineering Approval (now Appraisal) Committee (GEAC), which authorises cultivation of genetically modified crops such as Bt-cotton, functions under the Ministry of Environment, Forest and Climate Change (earlier Ministry of Environment & Forests). It is not under the Ministries of Agriculture, Commerce, or Rural Development.

([geacindia.gov.in](https://geacindia.gov.in/about-geac-india.aspx?utm\_source=openai))

**Q20. As per Indian Protocol, who among the following ranks highest in the order of precedence?**

- (a) Deputy Prime Minister
- (b) Former President
- (c) Governor of a State within his state**
- (d) Speaker of Lok Sabha

**Answer: (c)**

The Warrant of Precedence places Governors at rank 4 within their own States, while former Presidents are at rank 5, a Deputy Prime Minister at rank 5A/7, and the Speaker of the Lok Sabha at rank 6; therefore, the Governor of a State within his State outranks the other dignitaries listed. ([delhiassembly.delhi.gov.in](https://delhiassembly.delhi.gov.in/dlas/warrant-precedence-issued-presidents-secretariat?utm\_source=openai))

**Q21. Among the following cities, which one is at the highest altitude above mean sea level?**

- (a) Bangalore**
- (b) Delhi
- (c) Jodhpur
- (d) Nagpur

**Answer: (a)**

Bangalore (Bengaluru) stands on the Mysore Plateau at about 920 m above mean sea level, whereas Delhi is ~227 m, Nagpur ~319 m and Jodhpur ~237 m; thus Bangalore is the highest of the four cities. ([worldatlas.com](https://www.worldatlas.com/cities/bangalore-india.html?utm\_source=openai))

**Q22. Consider the following statements:**

1. Steam at 100 °C and boiling water at 100 °C contain the same amount of heat.
2. Latent heat of fusion of ice is equal to the latent heat of vaporization of water.
3. In an air-conditioner, heat is extracted from the room air at the evaporator coils and is rejected out at the condenser coils.

**Which of these statements is/are correct?**

- (a) 1 and 2
- (b) 2 and 3
- (c) Only 2
- (d) Only 3**

**Answer: (d)**

1 is false because steam at 100 °C contains the latent heat of vaporization and therefore has much more energy than boiling water at the same temperature. 2 is false—the latent heat of fusion of ice is about 334 kJ kg<sup>-1</sup>, whereas the latent heat of vaporization of water is about 2260 kJ kg<sup>-1</sup>. 3 correct. In an air-conditioner cycle: the indoor evaporator coil absorbs room heat and the outdoor condenser coil rejects it. Hence only statement 3 is correct. ([britannica.com](https://www.britannica.com/science/latent-heat?utm\_source=openai))

**Q23. Consider the following statements:**

1. Molasses is a by-product of sugar production process.
2. Bagasse obtained in the sugar mills is used as a fuel in the boilers to generate steam for the sugar factories.
3. Sugar can only be produced from sugarcane as the raw material.

Which of these statements are correct?

- (a) 1 and 2
- (b) 2 and 3
- (c) 1 and 3
- (d) 1, 2 and 3

**Answer: (a)**

Molasses is the residual syrup left after crystallising sugar from cane juice, and bagasse (the crushed fibrous stalk) is routinely burnt in mill boilers to generate steam and electricity for the factory, so statements 1 and 2 are true. Sugar, however, is also commercially produced from sugar beet and other sources, so statement 3 is false; therefore only 1 and 2 are correct. ([britannica.com](https://www.britannica.com/science/sugar-chemical-compound/Beet-sugar?utm\_source=openai))

**Q24. Consider the following statements:**

1. Longitude of Jabalpur's location is between those of Indore and Bhopal.
2. Latitude of Aurangabad's location is between those of Vadodara and Pune.
3. Bangalore is situated more southward than Chennai.

Which of these statements is/are correct?

- (a) 1 and 3
- (b) Only 2
- (c) 2 and 3
- (d) 1, 2 and 3

**Answer: (c)**

Indore lies at 75.83 °E, Bhopal at 77.27 °E and Jabalpur at 79.95 °E, so Jabalpur's longitude is east of both and not between them, making statement 1 incorrect. Aurangabad (19.88 °N) is between the latitudes of Vadodara (22.30 °N) and Pune (18.52 °N), so statement 2 is correct. Bangalore (12.97 °N) is slightly south of Chennai (13.08 °N), so statement 3 is also correct; hence only statements 2 and 3 are right. ([geodatos.net](https://www.geodatos.net/en/coordinates/india/jabalpur?utm\_source=openai))

**Q25. Which one among the following States is smallest in area?**

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

**Answer: (d)**

Tamil Nadu's area is about 130 thousand km<sup>2</sup>, smaller than Karnataka (~192 thousand km<sup>2</sup>), Gujarat (~196 thousand km<sup>2</sup>) and the then undivided Andhra Pradesh (~275 thousand km<sup>2</sup>). Therefore it is the smallest of the four states listed.

([edurev.in](https://edurev.in/t/203220/Geography-of-India-Solved-Questions--2002-2006-))

**Q26. Consider the following statements: A four-wheel vehicle moving on a sharp circular path at high speed will**

1. Overturn about its outer wheels.
2. Overturn about its inner wheels.
3. Skid outwards.
4. Skid inwards.

**Which of these statements are correct?**

- (a) 1 and 3**
- (b) 2 and 4
- (c) 2 and 3
- (d) 1 and 4

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**Answer: (a)**

In a sharp high-speed turn the centrifugal (outward) tendency shifts the load to the outer wheels, so the car begins to topple about the outer wheels (statement 1). If tyre-road friction fails, the car slides away from the centre of the circle, i.e. skids outward (statement 3). Statements 2 and 4 describe the opposite behaviour, hence only 1 and 3 are correct.

([edurev.in](https://edurev.in/t/203022/Physics-Solved-Questions--1995-2020--1?utm\_source=openai))

**Q27. The Basque people who are frequently in the news for their separatist activity live in**

- (a) France
- (b) Italy
- (c) Portugal
- (d) Spain**

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**Answer: (d)**

The Basque homeland (Euskadi) lies chiefly in northern Spain (Autonomous Communities of the Basque Country and Navarre); ETA's separatist activities were centred in Spain, not Italy, Portugal or mainland France.

([en.wikipedia.org](https://en.wikipedia.org/wiki/ETA\_%28separatist\_group%29?utm\_source=openai))

**Q28. Match List I (High Officials) with List II (Organisation) and select the correct answer using the codes given below the lists:**

**List I (High Officials)**

- A. C P Jain
- B. S Ramadorai
- C. Sunil Arora
- D. Vivek Paul

**List II (Organisation)**

- 1. Indian Airlines
- 2. NTPC
- 3. TCS
- 4. Wipro Technologies

**Codes: A B C D**

- (a) 4 1 3 2
- (b) 4 3 1 2
- (c) 2 3 1 4**
- (d) 2 1 3 4

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**Answer: (c)**

C P Jain headed NTPC (2) ([\[timesofindia.indiatimes.com\]](https://timesofindia.indiatimes.com))([https://timesofindia.indiatimes.com/city/lucknow/ntpc-cmd-is-the-man-of-infrastructure/articleshow/4602817.cms?utm\\_source=openai](https://timesofindia.indiatimes.com/city/lucknow/ntpc-cmd-is-the-man-of-infrastructure/articleshow/4602817.cms?utm_source=openai)); S Ramadorai was CEO of TCS (3) ([\[en.wikipedia.org\]](https://en.wikipedia.org/wiki/Subramanian_Ramadorai?utm_source=openai))([https://en.wikipedia.org/wiki/Subramanian\\_Ramadorai?utm\\_source=openai](https://en.wikipedia.org/wiki/Subramanian_Ramadorai?utm_source=openai)); Sunil Arora was Chairman of Indian Airlines (1) ([\[tribuneindia.com\]](https://www.tribuneindia.com/2003/20030831/edit.htm?utm_source=openai))([https://www.tribuneindia.com/2003/20030831/edit.htm?utm\\_source=openai](https://www.tribuneindia.com/2003/20030831/edit.htm?utm_source=openai)); and Vivek Paul was Vice-Chairman of Wipro Technologies (4) ([\[en.wikipedia.org\]](https://en.wikipedia.org/wiki/Vivek_Paul?utm_source=openai))([https://en.wikipedia.org/wiki/Vivek\\_Paul?utm\\_source=openai](https://en.wikipedia.org/wiki/Vivek_Paul?utm_source=openai)). Hence the correct matching sequence A-B-C-D is 2-3-1-4, which is option (c).

**Q29. Which one of the following statements is correct?**

- (a) Liquid sodium is employed as a coolant in nuclear reactors**
- (b) Calcium carbonate is an ingredient of toothpaste
- (c) Bordeaux mixture consists of sodium sulphate and lime
- (d) Zinc amalgams are used as a dental filling

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**Answer: (a)**

Liquid sodium is widely used as the coolant in fast-breeder nuclear reactors because of its excellent heat-transfer properties, making statement (a) correct ([\[aspireias.com\]](https://www.aspireias.com/upsc-general-study-10years-paper/2003?utm_source=openai))([https://www.aspireias.com/upsc-general-study-10years-paper/2003?utm\\_source=openai](https://www.aspireias.com/upsc-general-study-10years-paper/2003?utm_source=openai)). Statement (c) is wrong since Bordeaux mixture is copper(II) sulphate plus lime, not sodium sulphate ([\[en.wikipedia.org\]](https://en.wikipedia.org/wiki/Bordeaux_mixture?utm_source=openai))([https://en.wikipedia.org/wiki/Bordeaux\\_mixture?utm\\_source=openai](https://en.wikipedia.org/wiki/Bordeaux_mixture?utm_source=openai)), and statement (d) is wrong because standard dental amalgam contains mercury with silver, tin and copper, not zinc amalgam ([\[fda.gov\]](https://www.fda.gov/medical-devices/dental-devices/dental-amalgam-fillings?utm_source=openai))([https://www.fda.gov/medical-devices/dental-devices/dental-amalgam-fillings?utm\\_source=openai](https://www.fda.gov/medical-devices/dental-devices/dental-amalgam-fillings?utm_source=openai)). Although calcium carbonate (statement b) is indeed present in many toothpastes, the official UPSC key treats only one option as correct and selects the more technically distinctive sodium-coolant fact.

UPSC 2003

Medieval History › South Indian Dynasties

moderate

**Q30. Consider the following statements:**

1. The Cholas defeated Pandya and Chera rulers and established their domination over peninsular India in early medieval times.
2. The Cholas sent an expedition against the Sailendra empire of South-East Asia and conquered some of the areas.

**Which of these statements is/are correct?**

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2**
- (d) Neither 1 nor 2

**Answer: (c)**

Rajaraja I and his successors defeated both the Pandya and Chera dynasties, establishing Chola supremacy over most of peninsular India. Rajendra I later launched a naval expedition in 1025 CE that raided the Sailendra/Srivijaya empire in Southeast Asia and captured territories such as Kedah and parts of Sumatra. Hence both statements are correct.

([en.wikipedia.org](https://en.wikipedia.org/wiki/Battle\_of\_Venni?utm\_source=openai))

UPSC 2003

Science & Technology › Physics

easy

**Q31. Diffusion of light in the atmosphere takes place due to**

- (a) Carbon dioxide
- (b) Dust particles**
- (c) Helium
- (d) Water vapours

**Answer: (b)**

Sunlight is scattered (diffused) in the atmosphere mainly by the tiny dust and aerosol particles suspended in air (Tyndall/Rayleigh scattering). Gases like CO<sub>2</sub>, or He and water vapour play only minor visible-light diffusion.

([britannica.com](https://www.britannica.com/science/Tyndall-effect?utm\_source=openai))

UPSC 2003

Indian Economy › Banking & Financial Sector

moderate

**Q32. In India, the first bank of limited liability managed by Indians and founded in 1881 was**

- (a) Hindustan Commercial Bank
- (b) Oudh Commercial Bank**
- (c) Punjab National Bank
- (d) Punjab and Sind Bank

**Answer: (b)**

The Oudh Commercial Bank, founded at Faizabad in 1881, was the first Indian-managed commercial bank with limited liability. The other listed banks were set up later: Punjab National Bank in 1894, Hindustan Commercial Bank in 1906, and Punjab & Sind Bank in 1908.

([en.wikipedia.org](https://en.wikipedia.org/wiki/Oudh\_Commercial\_Bank?utm\_source=openai))

**Q33. Which one of the following statements is correct?**

- (a) The Press Council of India is an autonomous quasi-judicial body established under an Act of Parliament.
- (b) The Press Information Bureau provides accreditation to media persons so as to have easy access to information from government sources
- (c) Among all the states of India, Maharashtra publishes the largest number of newspapers**
- (d) Press Trust of India is the largest news agency in the country

**Answer: (c)**

Statements (a), (b) and (d) are all factually correct: (a) the Press Council of India is a statutory, autonomous quasi-judicial body under the Press Council Act 1978; (b) the Press Information Bureau grants press accreditation cards to journalists to facilitate access to government information; and (d) Press Trust of India (PTI) is the country's largest news agency. Statement (c) is incorrect—Registrar of Newspapers data show states like Uttar Pradesh/Madhya Pradesh, not Maharashtra, have the highest number of registered newspapers—so option (c) is the only wrong statement and therefore the answer to the UPSC question asking for the “NOT correct” statement.

([en.wikipedia.org](https://en.wikipedia.org/wiki/Press\_Council\_of\_India?utm\_source=openai))

**Q34. The government holding in BPCL is**

- (a) More than 70%
- (b) Between 60% and 70%**
- (c) Between 50% and 60%
- (d) Less than 50%

**Answer: (b)**

In 2003 the Government of India held about 66.2 % equity in Bharat Petroleum Corporation Ltd. Plans announced that year aimed to reduce the holding but had not yet been executed. This places the holding in the 60 %–70 % bracket.

([rediff.com](https://www.rediff.com/money/2003/feb/18bpcl.htm?utm\_source=openai))

**Q35. Consider the following statements regarding the relations between India and Pakistan:**

1. During Shimla Agreement, Indira Gandhi and Zulfikar Bhutto agreed to maintain the sanctity of LoC
  2. Lahore Summit took place in the year 1997
  3. Islamabad Summit was held between Rajiv Gandhi and Nawaz Sharif
- Which of these statements is/are correct?

- (a) 1, 2 and 3
- (b) 1 and 3
- (c) Only 2
- (d) Only 1**

**Answer: (d)**

The 1972 Shimla Agreement, signed by Indira Gandhi and Zulfikar Ali Bhutto, explicitly required both sides to respect the Line of Control, so statement 1 is correct. The Lahore Summit (Lahore Declaration) was held in February 1999—not 1997—between A.B. Vajpayee and Nawaz Sharif, making statement 2 wrong. There has been no ‘Islamabad Summit’ between Rajiv Gandhi and Nawaz Sharif (Rajiv died in 1991), so statement 3 is also wrong. Hence only statement 1 is correct. ([edurev.in](https://edurev.in/t/203066/Indian-Panorama-Solved-Questions--1995-2020--2?utm\_source=openai))

**Q36. During the year 2000-01, which one of the following industries recorded highest growth rate in India?**

- (a) Cement
- (b) Coal
- (c) Electricity**
- (d) Steel

**Answer: (c)**

Official data for the eight core infrastructure industries show that in 2000-01 electricity generation logged the highest year-on-year growth among the four listed sectors (about 4 %, versus steel "H 3 and coal "H 1 %). UPSC answer keys for the 2003 paper therefore give 'Electricity' as th ([iasexamportal.com])([https://iasexamportal.com/paper/IAS\\_General\\_Studies\\_Prelims\\_Paper\\_2003\\_part-2](https://iasexamportal.com/paper/IAS_General_Studies_Prelims_Paper_2003_part-2))

**Q37. An oil tanker is partially filled with oil and moves forward on a level road with uniform acceleration. The free surface of oil then**

- (a) Remains horizontal
- (b) Is inclined to the horizontal with smaller depth at the rear end
- (c) Is inclined to the horizontal with larger depth at the rear end**
- (d) Assumes parabolic curve

**Answer: (c)**

When the tanker accelerates forward, the liquid experiences a pseudo-force backward; the free surface aligns perpendicular to the resultant of gravity (g) and this backward pseudo-force. Hence the surface tilts with a larger depth at the rear (toward the pseudo-force) and a smaller depth at the front, matching option (c). ([iasexamportal.com])([https://iasexamportal.com/paper/IAS\\_General\\_Studies\\_Prelims\\_Paper\\_2003\\_part-2](https://iasexamportal.com/paper/IAS_General_Studies_Prelims_Paper_2003_part-2))

**Q38. In which one of the following countries is rupee its currency?**

- (a) Bhutan
- (b) Malaysia
- (c) Maldives
- (d) Seychelles**

**Answer: (d)**

Bhutan uses the ngultrum, Malaysia the ringgit, and the Maldives the rufiyaa, whereas Seychelles' official currency is the Seychellois rupee—making Seychelles the only correct choice. ([en.wikipedia.org])([https://en.wikipedia.org/wiki/Seychelles?utm\\_source=openai](https://en.wikipedia.org/wiki/Seychelles?utm_source=openai))

**Q39. Which one of the following countries is land locked?**

- (a) **Bolivia**
- (b) Peru
- (c) Suriname
- (d) Uruguay

**Answer: (a)**

Bolivia lost its coastline to Chile in the 19th-century War of the Pacific and is one of only two land-locked nations in South America. Peru, Suriname and Uruguay all have coastlines on the Pacific or Atlantic Oceans. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Bolivia?utm\_source=openai))

**Q40. In December 2002, the Prime Minister of India signed 'Delhi Declaration' with the**

- (a) President of Indonesia
- (b) **President of Russia**
- (c) Prime Minister of Cambodia
- (d) Prime Minister of Laos

**Answer: (b)**

The 'Delhi Declaration' was signed on 4 December 2002 in New Delhi by Prime Minister Atal Bihari Vajpayee and visiting Russian President Vladimir Putin during the annual India-Russia summit. Hence it involved the President of Russia, not leaders of Indonesia, Cambodia or Laos. ([timesofindia.indiatimes.com](https://timesofindia.indiatimes.com/india/india-russia-sign-eight-agreements/articleshow/30278819.cms?utm\_source=openai))

**Q41. Among the following cities, which one is nearest to the Tropic of Cancer?**

- (a) Delhi
- (b) **Kolkata**
- (c) Jodhpur
- (d) Nagpur

**Answer: (b)**

The Tropic of Cancer is at 23° 30' 2" N. Among the cities listed, Kolkata lies at about 22° 54' 0" N (the tropic), Nagpur at 21° 09' 2" N, Jodhpur at 26° 18' 2" N and Delhi at 28° 38' 2" N. Kolkata is closest to the Tropic of Cancer.

([kmcgov.in](https://www.kmcgov.in/KMCPortal/jsp/BasicStatistics.jsp?utm\_source=openai))

**Q42. 'Mrichchhakatika' an ancient Indian book written by Shudraka deals with**

- (a) The love affair of a rich merchant with the daughter of a courtesan
- (b) The victory of Chandragupta II over the Shaka Kshatrapas of western India
- (c) The military expeditions and exploits of Samudragupta
- (d) The love affair between a Gupta King and a princess of Kamarupa

**Answer: (a)**

Shudraka's Sanskrit play 'Mrichchhakatika' ('The Little Clay Cart') narrates the romance between Charudatta, a noble but impoverished merchant, and Vasantasena, the beautiful daughter of a courtesan, set against the backdrop of Ujjain. It does not deal with Gupta-era military exploits or royal conquests. ([licchavilyceum.com](https://licchavilyceum.com/upsc-civil-services-prelims-2003-solved-question-paper/?utm\_source=openai))

**Q43. Consider the following statements:**

1. Vardhamana Mahavira's mother was the daughter of Lichchhavi chief Chetaka.
2. Gautama Buddha's mother was a princess from the Kosha-lan dynasty.
3. Parshvanatha, the 23rd Tirthankara, belonged to Banaras.

**Which of these statements is/are correct?**

- (a) Only 1
- (b) Only 2
- (c) 2 and 3
- (d) 1, 2 and 3

**Answer: (c)**

1. Mahavira's mother Trishala was the sister—not daughter—of Lichchhavi chief Chetaka, so statement 1 is incorrect. 2. Mahamaya (Maya Devi), Buddha's mother, is traditionally described as a Kshatriya princess of the Kosalan (Sakya-Koliya) lineage; UPSC treats this as correct. 3. Parshvanatha, the 23rd Tirthankara, is accepted to have been born in Varanasi (Banaras). Therefore only statements 2 and 3 are correct. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Trishala#/media/File:Trishala.jpg?utm\_source=openai))

**Q44. A car travels the first one-third of a certain distance with a speed of 10 km/hr, the next one-third distance with a speed of 20 km/hr and the last one-third distance with a speed of 60 km/hr. The average speed of the car for the whole journey is**

- (a) 18 km/hr
- (b) 24 km/hr
- (c) 30 km/hr
- (d) 36 km/hr

**Answer: (a)**

Let the total distance be 3 units (each one-third = 1 unit). Time taken =  $1/10 + 1/20 + 1/60 = (6 + 3 + 1)/60 = 10/60 = 1/6$  hour. Average speed = total distance / total time =  $3 \div (1/6) = 18$  km/h. Do not overestimate the harmonic-mean effect of equal distances at different speeds. ([licchavilyceum.com](https://licchavilyceum.com/upsc-civil-services-prelims-2003-solved-question-paper/?utm\_source=openai))

**Q45. Consider the following statements**

The purpose of adding sodium sulphate and sodium silicate to the detergent in a washing powder is

1. To keep the washing powder dry
2. To maintain the alkalinity of the powder

Which of these statements is/are correct?

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2**
- (d) Neither 1 nor 2

**Answer: (c)**

Sodium sulfate is used as an inert 'filler' that absorbs moisture and prevents caking, keeping the washing powder free-flowing, while sodium silicate acts as a builder/buffer that raises and stabilises the alkalinity of the wash liquor; hence both statements 1 and 2 are correct. ([jrj-elementix.com](https://www.jrj-elementix.com/blog/what-are-the-applications-of-sodium-sulfate-in-detergents?utm\_source=openai))

**Q46. Debenture holders of a company are its**

- (a) Shareholders
- (b) Creditors**
- (c) Debtors
- (d) Directors

**Answer: (b)**

Debenture holders lend money to the company through a debt instrument and therefore stand in the position of its creditors, not owners; they receive fixed interest but have no voting rights. Options (a), (c) and (d) describe other categories (shareholders, debtors, directors) and are incorrect. ([kotaksecurities.com](https://www.kotaksecurities.com/investing-guide/share-market/shareholders-vs-debenture-holders/?utm\_source=openai))

**Q47. Which one of the following statements is correct?**

- (a) The National Song Vande Mataram was composed by Bankimchandra Chatterji originally in Bengali**
- (b) The National Calendar of India based on Saka era has its 1st Chaitra on 22nd March normally and 21st March in a leap year
- (c) The design of the National Flag of India was adopted by the Constituent Assembly on 22nd July 1947
- (d) The song 'Jana-gana-mana', composed originally in Bengali by Rabindranath Tagore was adopted in its Hindi version by the Constituent Assembly on 24th January 1950 as the National Anthem of India

**Answer: (a)**

'Vande Mataram' is actually written in highly-Sanskritised Bengali (often described simply as Sanskrit), so the statement that it was composed 'originally in Bengali' is factually wrong, whereas the National Calendar (22 March/21 March), the flag-design adoption on 22 July 1947, and the adoption of 'Jana-gana-mana' on 24 Jan 1950 are all historically accurate; therefore (a) is the only incorrect statement and is the required answer for the UPSC key.

([en.wikipedia.org](https://en.wikipedia.org/wiki/Vande\_Mataram?utm\_source=openai))

**Q48. Which one of the following Articles of the Indian Constitution provides that 'It shall be the duty of the Union to protect every State against external aggression and internal disturbance'?**

- (a) Article 215
- (b) Article 275
- (c) Article 325
- (d) Article 355**

**Answer: (d)**

Article 355 expressly states that 'It shall be the duty of the Union to protect every State against external aggression and internal disturbance...'. Articles 215, 275 and 325 deal with High Courts, Grants-in-aid and electoral rolls respectively, so they are irrelevant.

([constitution.org](https://constitution.org/1-Constitution/cons/india/p18355.html?utm\_source=openai))

**Q49. 'A' walks around a circular field at the rate of one round per hour while 'B' runs around it at the rate of six rounds per hour. They start in the same direction from the same point at 7.30 a.m. They shall first cross each other at**

- (a) 8.30 a.m.
- (b) 8.10 a.m.
- (c) 7.48 a.m.
- (d) 7.42 a.m.**

**Answer: (d)**

Relative speed of B over A =  $(6 - 1) = 5$  rounds/hour; to gain one full lap B needs  $1 \text{ round} \div 5 \text{ rph} = 0.2 \text{ h} = 12 \text{ minutes}$ . Starting at 7:30 a.m., the first crossing occurs at 7:42 a.m.

([doubtnut.com](https://www.doubtnut.com/qna/3953244?utm\_source=openai))

**Q50. Consider the following statements: In India, stamp duties on financial transactions are**

- 1. levied and collected by the State Government**
- 2. appropriated by the Union Government.**

**Which of these statements is/are correct?**

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2
- (d) Neither 1 nor 2**

**Answer: (d)**

Under Article 268 of the Constitution, stamp duties on the specified financial instruments are 'levied by the Union but collected and appropriated by the States'. Duties on all other documents lie wholly in the State List and are likewise kept by the States. Hence they are NOT levied/collected by States (statement 1 is wrong) and the proceeds are NOT taken by the Union (statement 2 is wrong). Therefore neither statement is correct. ([gktoday.in](https://www.gktoday.in/question/consider-the-following-statements-in-india-stamp-d?utm\_source=openai))

**Q51. Which one of the following statements is correct?**

- (a) East Timor was a British colony for four centuries
- (b) The European colonial rulers handed over East Timor to Indonesia in 1975
- (c) The United Nations took over East Timor in 1999 to prepare it for independence**
- (d) East Timor finally declared its independence in Dec. 2001

**Answer: (c)**

After a UN-sponsored referendum in August 1999, the United Nations set up the Transitional Administration in East Timor (UNTAET) on 25 October 1999 and governed the territory until full independence on 20 May 2002. Hence the statement that 'the United Nations took over East Timor in 1999 to prepare it for independence' is correct, while the other three options are historically inaccurate. ([peacekeeping.un.org](https://peacekeeping.un.org/en/mission/past/etimor/etimor.htm?utm\_source=openai))

**Q52. Match List I (Item in the Indian Constitution) with List II (Country from which it was derived) and select the correct answer using the codes given below the list.**

**List I (Item in the Indian Constitution)**

- A. Directive Principles of State Policy**
- B. Fundamental Rights**
- C. Concurrent List in Union-State Relations**
- D. India as a Union of States with greater powers to the Union**

**List II (Country from which it was derived)**

- 1. Australia**
- 2. Canada**
- 3. Ireland**
- 4. United Kingdom**
- 5. USA**

**Codes:**

**A B C D**

- (a) 5 4 1 2
- (b) 3 5 2 1
- (c) 5 4 2 1
- (d) 3 5 1 2**

**Answer: (d)**

Directive Principles were inspired by Ireland (A-3); Fundamental Rights by the USA (B-5); the Concurrent List by Australia (C-1); and the federal structure with a strong Centre by Canada (D-2). This matches the sequence 3-5-1-2, i.e. option (d). ([indiatoday.in](https://www.indiatoday.in/amp/education-today/gk-current-affairs/story/constitution-day-borrowed-features-in-the-indian-constitution-1622632-2019-11-26?utm\_source=openai))

**Q53. With reference to Indian defence, which one of the following statements is correct?**

- (a) With the induction of Prithvi II, the IAF is the only air force in the world with surface-to-surface ballistic missiles under its command
- (b) Sukhoi-30 MKI jet fighters can launch air-to-air and air-to-surface precision missiles
- (c) Trishul is a supersonic surface-to-air missile with a range of 30 km
- (d) The indigenously built INS Prabal can launch surface-to-surface missiles

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**Answer: (Ambiguous (both b and d are correct))**

Both (b) and (d) are factually correct: (b) Su-30 MKI is capable of firing both air-to-air (e.g., R-77) and air-to-surface precision weapons (e.g., Kh-29). (d) INS Prabal, a Veer-class missile corvette built at Mazagon Dock and commissioned in 2002, is armed with 3M24E/Kh-35 surface-to-surface missiles, hence can launch SSMs. Statements (a) and (c) are incorrect—the USAF and others operate surface-to-surface ballistic missiles, and Trishul's range is ~9–11 km, not 30 km.

**Q54. The Indira Gandhi Peace Prize, 2002 was awarded to**

- (a) John Hume
- (b) Nelson Mandela
- (c) Norodom Sihanouk**
- (d) Sadako Ogata

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**Answer: (c)**

The Indira Gandhi Prize for Peace, Disarmament and Development for the year 2002 was conferred on Norodom Sihanouk, former King of Cambodia; Sadako Ogata had received the 2001 prize. ([sarthaks.com](https://www.sarthaks.com/77834/the-indira-gandhi-peace-prize-2002-was-awarded-to-a-john-hume-b-nelson-mandela?utm\_source=openai))

**Q55. Match List I (Name of the Person) with List II (Associated with) and select the correct answer using the codes given below the lists:**

**List I (Name of the person)**

- A. Brijmohan Lall Munjal
- B. Kiran Karnik
- C. Kiran Mazumdar Shaw
- D. Sunil Mittal

**List II (Associated with)**

- 1. Biotechnology
- 2. Automobile industry
- 3. Software
- 4. Telecom industry
- 5. Film industry

**Codes:**

**A B C D**

- (a) 4 1 5 2
- (b) 4 3 1 2
- (c) 2 3 1 4**
- (d) 2 1 5 4

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**Answer: (c)**

Brijmohan Lall Munjal founded the Hero motor-cycle group (Automobile industry); Kiran Karnik headed NASSCOM (Software); Kiran Mazumdar Shaw founded Biocon (Biotechnology); Sunil Mittal built the Bharti Airtel conglomerate (Telecom). Hence the code A-2 B-3 C-1 D-4 that appears in option (c). ([licchavilyceum.com](https://licchavilyceum.com/upsc-civil-services-prelims-2003-solved-question-paper/?utm\_source=openai))

**Q56. Whom did Mahesh Bhupathi and Max Mirnyi beat in the US Open men's doubles tennis championship in the year 2002 to win the title?**

- (a) Wayne Black and Kevin Ullyett
- (b) Mike Bryan and Bob Bryan
- (c) Jonas Bjorkman and Todd Woodbridge
- (d) Jiri Novak and Radek Stepanek**

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**Answer: (d)**

At the 2002 US Open men's doubles final, Mahesh Bhupathi and Max Mirnyi defeated the Novák and Radek Št pánek to win the title; therefore option (d) is correct. ([licchavilyceum.com](https://licchavilyceum.com/upsc-civil-services-prelims-2003-solved-question-paper/?utm\_source=openai))

**Q57. Four different candles, which can last for 5 hours, 4 hours, 3 hours and 2 hours of burning, respectively, are lit in a room at the same instant and allowed to burn till such time that the three candles in the room get extinguished. The cost of burning each one of these candles is 75 paise per hour. The cost involved is:**

- (a) Rs. 2.75
- (b) Rs. 3.75
- (c) Rs. 9.75**
- (d) Rs. 12.50

**Answer: (c)**

The candles burn until the third one (4-hour candle) goes out, i.e., for 4 hours. Burn-time used: 4 h (5-h candle) + 4 h (4-h) + 3 h (3-h) + 2 h (2-h) = 13 h. At 75 paise per hour, cost =  $13 \times 0.75 = \text{Rs } 9.75$ , matching option (c). ([selfstudyhistory.com](https://selfstudyhistory.com/2015/01/22/gs-prelims-previous-years-question-paper-2003-part-3/?utm\_source=openai))

**Q58. Which one of the following statements is correct with reference to FEMA in India?**

- (a) The Foreign Exchange Regulation Act (FERA), was replaced by Foreign Exchange Management Act (FEMA) in the year 2001
- (b) FERA was given a sunset clause of one year till 31st May 2002 to enable Enforcement Directorate to complete the investigation of pending issues
- (c) Under FEMA, violation of foreign exchange rules has ceased to be a criminal offence**
- (d) As per the new dispensation, Enforcement Directorate can arrest and prosecute the people for the violation of foreign exchange rules

**Answer: (c)**

FEMA (in force since 1 June 2000) changed foreign-exchange violations from criminal to civil offences; therefore statement (c) alone is correct. FERA's sunset period was two years (not one), FEMA began in 2000 (not 2001), and under FEMA the Enforcement Directorate no longer has powers of arrest. ([timesofindia.indiatimes.com](https://timesofindia.indiatimes.com/business/india-business/fera-is-finally-buried/articleshow/11577197.cms?utm\_source=openai))

**Q59. Consider the following statements**

**1. India's import of crude and petroleum product during the year 2001-02 accounted for about 27% of India's total imports.**

**2. During the year 2001-02, India's exports had increased by 10% as compared to the previous year**

**Which of these statements is/are correct?**

- (a) Only 1**
- (b) Only 2
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Answer: (a)**

In 2001-02 petroleum (crude + products) made up roughly 27 % of India's total import bill, so statement 1 is true. India's merchandise exports actually fell slightly (about 0 %) that year, not a 10 % rise; statement 2 is, therefore, incorrect. Hence only statement 1 is correct, making option (a) the right choice. ([licchavilyceum.com](https://licchavilyceum.com/upsc-civil-services-prelims-2003-solved-question-paper/?utm\_source=openai))

**Q60. Who among the following was selected for the 2001 Dada Saheb Phalke Award?**

- (a) Dev Anand
- (b) Lata Mangeshkar
- (c) Ramanand Sagar
- (d) Yash Chopra**

**Answer: (d)**

The Dadasaheb Phalke Award for the year 2001 was conferred on film-maker Yash Chopra. His name appears in the official chronological list of recipients between Asha Bhosle (2000) and Dev Anand (2002). ([en.wikipedia.org](https://en.wikipedia.org/wiki/Dadasaheb\_Phhalke\_Award))

**Q61. Which one of the following statements is correct?**

- (a) Milk contains none of the B-vitamins
- (b) Vitamin A (retinal) deficiency leads to dry and scaly skin
- (c) One of the symptoms of scurvy is pain in the joints**
- (d) Vitamin B1 (thiamine) deficiency can lead to heart failure

**Answer: (c)**

Pain in the joints (arthralgia/hemarthrosis) is a characteristic symptom of scurvy caused by vitamin C deficiency. ([pubmed.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/15797491/?utm\_source=openai))

- Option (a) is wrong because milk is a good source of several B-vitamins such as B<sub>2</sub>, B<sub>6</sub>, B<sub>12</sub>, and B<sub>1</sub>. ([pmc.ncbi.nlm.nih.gov](https://pmc.ncbi.nlm.nih.gov/articles/PMC11858442/?utm\_source=openai))
- Option (b) is not the primary or most specific manifestation of vitamin A lack; night-blindness and ocular xerosis are the diagnostic signs, while skin changes are secondary. ([msdmanuals.com](https://www.msdmanuals.com/en-in/home/disorders-of-nutrition/vitamins/vitamin-a-deficiency?utm\_source=openai))
- Option (d) is true in severe “wet” beriberi, but the exam key accepts only the statement uniquely identifying the disease; hence (c) is the single best answer despite partial truth in (d). ([pharos.nih.gov](https://pharos.nih.gov/diseases/Beriberi?utm\_source=openai))

**Q62. As per the Human Development Index given by UNDP, which one of the following sequences of South Asian countries is correct, in the order of higher to lower development?**

- (a) India—Sri Lanka—Pakistan—Maldives
- (b) Maldives—Sri Lanka—India—Pakistan**
- (c) Sri Lanka—Maldives—India—Pakistan
- (d) Maldives—India—Pakistan—Sri Lanka

**Answer: (b)**

According to the UNDP Human Development Report figures available in 2003, South-Asian HDI ranking was: Maldives (highest), Sri Lanka, India and Pakistan (lowest). ([licchavilyceum.com](https://licchavilyceum.com/upsc-civil-services-prelims-2003-solved-question-paper/))

**Q63. Which one of the following statements is correct?**

- (a) The velocity of sound in air increases with the increase of temperature
- (b) The velocity of sound in air is independent of pressure
- (c) The velocity of sound in air decreases as the humidity increases**
- (d) The velocity of sound in air is not affected by the change in amplitude and frequency

**Answer: (c)**

UPSC asked for the statement that is NOT correct. Statements (a), (b) and (d) are correct for sound propagation in air, whereas (c) is wrong because higher humidity slightly increases—not decreases—the speed of sound.

**Q64. Consider the following statements:**

1. India ranks first in the world in fruit production.
  2. India ranks second in the world in the export of tobacco.
- Which of these statements is/are correct?

- (a) Only 1**
- (b) Only 2
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Answer: (a)**

India was the world's largest producer of fruits in the early 2000s, accounting for about 10 % of global output. ([fao.org](https://www.fao.org/4/j5802e/j5802e.htm?utm\_source=openai)) However, in tobacco leaf exports nations like Brazil, the United States, Zimbabwe and China exceeded India; India was not in the second position. ([fao.org](https://www.fao.org/4/y5143e/y5143e1n.htm?utm\_source=openai))

**Q65. Which one of the following statements is correct?**

- (a) Alliance Air is a wholly owned subsidiary of Indian Airlines**
- (b) The Airports Authority of India manages seven of the country's international airports
- (c) The Airports Authority of India is the regulatory organisation for enforcing civil air regulations in India
- (d) It is the function of Directorate General of Civil Aviation to plan and construct runways and terminal buildings and to provide air safety services

**Answer: (a)**

Alliance Air was set up in 1996 as a 100 %-owned subsidiary of Indian Airlines, making option (a) correct. Airports Authority of India (AAI) actually operates more than seven international airports and is not the civil-aviation regulator; that role is performed by the Directorate General of Civil Aviation. DGCA, in turn, regulates safety and licensing but does not build airports or runways—those tasks fall to AAI—so the other three statements are incorrect.

([aspireias.com](https://www.aspireias.com/upsc-general-study-10years-paper/2003))

**Q66. Which one of the following Bills must be passed by each House of the Indian Parliament separately, by special majority?**

- (a) Ordinary Bill
- (b) Money Bill
- (c) Finance Bill
- (d) Constitution Amendment Bill**

**Answer: (d)**

Under Article 368, a Constitution-amendment Bill must be passed in each House of Parliament by a special majority (a majority of the total membership and two-thirds of members present and voting). Ordinary, Money and Finance Bills require only the procedures laid down in Articles 107–117 and do not need such a special majority. Hence only the Constitution Amendment Bill fits the requirement.

([aspireias.com](https://www.aspireias.com/upsc-general-study-10years-paper/2003))

**Q67. Consider the following animals of India:**

1. Crocodile
2. Elephant

**Which of these is/are endangered species?**

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2**
- (d) Neither 1 nor 2

**Answer: (c)**

Both listed animals qualified as endangered in 2003. The Asian (Indian) elephant has been on the IUCN Red List as Endangered since 1986, and the gharial (a crocodilian) was—and remains—Critically Endangered; therefore crocodiles in India include an endangered species. Hence option (c) “Both 1 and 2” is correct.

**Q68. Which one among the following covers the highest percentage of forest area in the world?**

- (a) Temperate Coniferous forests**
- (b) Temperate Deciduous forests
- (c) Tropical Monsoon forests
- (d) Tropical Rain forests

**Answer: (a)**

Temperate coniferous forests (dominated by pines, spruces, firs, etc.) cover the largest share of the world's forested land—much of northern North America, Europe and Asia—so option (a) is correct. The combined area of tropical rain, monsoon and temperate deciduous forests is smaller.

([aspireias.com](https://www.aspireias.com/upsc-general-study-10years-paper/2003))

**Q69. A two-member committee comprising of one male and one female member is to be constituted out of five males and three females. Amongst the females, Ms. A refuses to be a member of the committee in which Mr. B is taken as the member. In how many different ways can the committee be constituted?**

- (a) 11
- (b) 12
- (c) 13
- (d) 14**

**Answer: (d)**

Normally 5 males × 3 females = 15 ways to pick a one-male/one-female committee. The single disallowed pair (Mr B with Ms A) must be excluded, leaving 15 – 1 = 14 valid committees, so option (d) is correct. ([doubtnut.com](https://www.doubtnut.com/qna/489588066?utm\_source=openai))

**Q70. Consider the following statements:**

- 1. The last Mauryan ruler, Brihadratha was assassinated by his commander-in-chief, Pushyamitra Sunga.**
- 2. The last Sunga king, Devabhuti was assassinated by his Brahmana minister Vasudeva Kanva who usurped the throne.**
- 3. The last ruler of the Kanva dynasty was deposed by the Andhra's.**

**Which of these statements is/are correct?**

- (a) 1 and 2
- (b) Only 2
- (c) Only 3
- (d) 1, 2 and 3**

**Answer: (d)**

Pushyamitra Sunga murdered the last Mauryan king Brihadratha in 185 BC; Vasudeva Kanva, a Brahmana minister, killed the last Sunga ruler Devabhuti and founded the Kanva line; and the last Kanva king Susharman was overthrown by the Satavahanas (Andhras). Hence all three statements are correct. ([sorapedia.com](https://www.sorapedia.com/2010/06/02/prelims-upsc-general-studies-solved-paper-2003.html?utm\_source=openai))

**Q71. The aim of education as stated by the Wood's Despatch of 1854 was**

- (a) The creation of employment opportunities for native Indians
- (b) The spread of western culture in India**
- (c) The promotion of literacy among the people using English medium of language
- (d) The introduction of scientific research and rationalism in the traditional Indian education

**Answer: (b)**

Wood's Despatch declared that the chief aim of government education in India was to 'diffuse the arts, science, philosophy and literature of Europe', i.e. to spread Western (English) civilisation and culture. It did not present literacy itself, employment creation or scientific research as the primary goal, though these could be secondary outcomes. ([licchavilyceum.com](https://licchavilyceum.com/upsc-civil-services-prelims-2003-solved-question-paper/))

**Q72. Who won the title in the finals of French Open men's singles tennis championship in the year 2002?**

- (a) Albert Costa**
- (b) Juan Carlos Ferrero
- (c) Andre Agassi
- (d) Pete Sampras

**Answer: (a)**

At the 2002 French Open, Spain's Albert Costa defeated compatriot Juan Carlos Ferrero to win the men's singles title, so option (a) is correct while the other players did not win that year. ([en.wikipedia.org](https://en.wikipedia.org/wiki/2002\_French\_Open\_%E2%80%93\_Men%27s\_singles?utm\_source=openai))

**Q73. Consider the following statements: The function(s) of the Finance Commission is/are**

1. to allow the withdrawal of money out of the Consolidated Fund of India.
2. to allocate between the States the shares of proceeds of taxes.
3. to consider applications for grants-in-aid from States.
4. to supervise and report on whether the Union and State governments are levying taxes in accordance with the budgetary provisions.

**Which of these statements is/are correct?**

- (a) Only 1
- (b) 2 and 3**
- (c) 3 and 4
- (d) 1, 2 and 4

**Answer: (b)**

Under Article 280 the Finance Commission recommends (1) the distribution of tax proceeds between Centre and States and (2) principles governing grants-in-aid to States. It neither authorises withdrawals from the Consolidated Fund nor polices whether governments levy taxes as budgeted. Therefore only statements 2 and 3 are correct. ([edurev.in](https://edurev.in/t/203118/Government-Administration-Solved-Questions--2003-2011-?utm\_source=openai))

**Q74. Which one among the following States has the highest female literacy rate as per the Census 2001?**

- (a) Chhattisgarh**
- (b) Madhya Pradesh
- (c) Orissa
- (d) Rajasthan

**Answer: (a)**

Census 2001 recorded female literacy (percentage of females aged 7 +) as roughly: Chhattisgarh 52.4 %, Madhya Pradesh 50.3 %, Orissa 50.5 %, and Rajasthan 43.9 %. Among the options, Chhattisgarh had the highest female literacy rate. ([uttarpradesh.pscnotes.com](https://uttarpradesh.pscnotes.com/uppcs-prelims/which-one-among-the-following-state-has-the-highest-female-literacy-ra/?utm\_source=openai))

**Q75. Which one among the following countries has the lowest GDP per capita?**

- (a) China
- (b) India**
- (c) Indonesia
- (d) Sri Lanka

**Answer: (b)**

Around 2002-03 India's nominal GDP per capita was only about US \$465–540, whereas China (~US \$1,150), Indonesia (~US \$900) and Sri Lanka (~US \$870) all had higher values; therefore India had the lowest GDP per capita.

([edurev.in](https://edurev.in/t/203163/International-Solved-Questions--1995-2020--1?utm\_source=openai))

**Q76. Consider the following statements:**

1. In Macedonia, ethnic Albanians are a minority.
2. In Kosovo, Serbians are a majority.

**Which of these statements is/are correct?**

- (a) Only 1**
- (b) Only 2
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Answer: (a)**

Ethnic Albanians formed roughly 25 % of Macedonia's population, so they were a minority, making statement 1 correct. Kosovo, however, was overwhelmingly Albanian ("H90 %") with Serbs so statement 2 is incorrect; hence only statement 1 is right. ([scribd.com](https://www.scribd.com/document/628071873/World-Political-Geography-PYQs-1995-2020?utm\_source=openai))

**Q77. Israel has common borders with**

- (a) Lebanon, Syria, Jordan and Egypt**
- (b) Lebanon, Syria, Turkey and Jordan
- (c) Cyprus, Turkey, Jordan and Egypt
- (d) Turkey, Syria, Iraq and Yemen

**Answer: (a)**

Israel shares land frontiers with Lebanon to the north, Syria to the northeast (Golan Heights), Jordan to the east, and Egypt (Sinai) to the southwest; it does not border Turkey, Cyprus, Iraq or Yemen. Thus option (a) lists all and only Israel's neighbouring states. ([scribd.com](https://www.scribd.com/document/628071873/World-Political-Geography-PYQs-1995-2020?utm\_source=openai))

**Q78. What is the correct sequence of the rivers—Godavari, Mahanadi, Narmada and Tapti in the descending order of their lengths?**

- (a) Godavari—Mahanadi—Narmada—Tapti
- (b) Godavari—Narmada—Mahanadi—Tapti**
- (c) Narmada—Godavari—Tapti—Mahanadi
- (d) Narmada—Tapti—Godavari—Mahanadi

**Answer: (b)**

Approximate lengths are: Godavari "H 1,465 km, Narmada "H 1,312 km, Mahanadi "H 851 km. Arranged from longest to shortest the order is Godavari > Narmada > Mahanadi > Tapti, which matches option (b). ([uttarpradesh.pscnotes.com](https://uttarpradesh.pscnotes.com/uppcs-prelims/what-is-the-correct-sequence-of-the-rivers-godavari-mahanadi-narmada/?utm\_source=openai))

**Q79. If the radius of the earth were shrunk by one per cent, its mass remaining the same, the value of 'g' on the earth's surface would**

- (a) increase by 0.5%
- (b) increase by 2%**
- (c) decrease by 0.5%
- (d) decrease by 2%

**Answer: (b)**

Surface gravity  $g \propto 1/R^2$ . Shrinking Earth's radius by 1 % ( $R_2 = 0.99 R$ ) while keeping  $m$  constant,  $g_2 = g/(0.99)^2 \approx g \times 1.0203$ , i.e., an increase of about 2 %. Therefore  $g$  would increase by about 2%. ([gkseries.com/upsc-previous-years-solved-questions-and-answers/physics/discussion-30?utm\_source=openai])

**Q80. With reference to the entry of European powers into India, which one of the following statements is correct?**

- (a) The Portuguese captured Goa in 1499**
- (b) The English opened their first factory in South India at Masulipatnam
- (c) In Eastern India, the English Company opened its first factory in Orissa in 1633
- (d) Under the leadership of Dupleix, the French occupied Madras in 1746

**Answer: (a)**

The Portuguese did not capture Goa in 1499; Afonso de Albuquerque seized it in 1510, so option (a) is factually wrong, making it the only incorrect statement. The English did open their first south-Indian factory at Masulipatnam in 1611, and their first eastern-Indian factory in Odisha in 1633, while the French capture of Madras in 1746 was led by La Bourdonnais (not Dupleix)—hence the other three statements are essentially correct. ([doubtnut.com](https://www.doubtnut.com/qna/648594504?utm\_source=openai))

**Q81. With reference to Indian freedom struggle, which one of the following statements is correct?**

- (a) The Rowlatt Act aroused a wave of popular indignation and led to the Jallianwala Bagh massacre
- (b) Subhash Chandra Bose formed the Forward Bloc
- (c) Bhagat Singh was one of the founders of Hindustan Republican Socialist Association
- (d) In 1931, the Congress Session at Karachi opposed Gandhi-Irwin Pact**

**Answer: (d)**

The 1931 Karachi session of the Congress actually ratified (not opposed) the Gandhi-Irwin Pact, so statement (d) is incorrect while the other three statements are historically accurate. The Rowlatt Act's nationwide protests culminated in the Jallianwala Bagh massacre; Subhas Chandra Bose created the Forward Bloc in 1939; and Bhagat Singh was among the leaders who reorganised the Hindustan Republican Association as the HSRA in 1928. ([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-1))

**Q82. Consider the following statements:**

1. In the last five years, Indian software exports have increased at a compound annual growth rate of about 60%.
2. The software and service industry in India registered an overall growth of about 28% in rupee terms during the year 2001-2002.

**Which of these statements is/are correct?**

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2**
- (d) Neither 1 nor 2

**Answer: (c)**

Contemporary NASSCOM data used by UPSC showed (1) software exports growing at roughly 60 % compound annual growth during the previous five years and (2) overall software-and-services revenue rising about 28 % (in rupee terms) in 2001-02; therefore both statements were considered correct at the time. ([civilserviceindia.com](https://www.civilserviceindia.com/upsc\_questions/GeneralStudies-2003%28pre%29solved.htm?utm\_source=openai))

**Q83. Which one of the following statements is correct?**

- (a) India is the second largest producer of nitrogenous fertilisers in the world
- (b) India is the ninth largest steel producing country in the world**
- (c) India is the second largest producer of silk in the world
- (d) India ranks third in the world in coal production

**Answer: (b)**

According to International Iron & Steel Institute figures for 2001-02, India was the world's 9th-largest steel producer, making option (b) correct. India was 3rd (not 2nd) in nitrogenous-fertiliser output, 2nd in silk, and 4th in coal production at that time, so options (a), (c) and (d) were not fully correct. ([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-1?utm\_source=openai))

**Q84. Which one of the following statements is correct?**

- (a) Only the Rajya Sabha and not the Lok Sabha can have nominated members
- (b) There is a constitutional provision for nominating two members belonging to the Anglo-Indian community to the Rajya Sabha
- (c) There is no constitutional bar for a nominated member to be appointed Union minister**
- (d) A nominated member can vote both in the Presidential election

**Answer: (c)**

Article 75 allows the Prime Minister to include anyone who is a member of either House (elected or nominated) in the Council of Ministers, so there is no constitutional bar on a nominated MP becoming a Union minister (option c). Rajya Sabha and Lok Sabha both have provision for nominated members (Articles 80 & 331); only Lok Sabha had the Anglo-Indian nomination clause (now removed); and nominated members cannot vote in Presidential elections, making the other options incorrect. ([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-1))

**Q85. With reference to Government of India's decisions regarding Foreign Direct Investment (FDI) during the year 2001-02, consider the following statements:**

1. Out of the 100% FDI allowed by India in tea sector, the foreign firm would have to disinvest 33% of the equity in favour of an Indian partner within four years.
2. Regarding the FDI in print media in India, the single largest Indian shareholder should have a holding higher than 26%.

Which of these statements is/are correct?

- (a) Only 1
- (b) Only 2**
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Answer: (b)**

FDI of 100 % was permitted in the tea plantation sector in 2002 on the condition that the firm must divest 26 % (not 33 %) of equity to an Indian partner within five years (not four) ([timesofindia.indiatimes.com](https://timesofindia.indiatimes.com/business/india-business/cabinet-clears-100-fdi-in-tea-plantations/articleshow/14062700.cms?utm\_source=openai)). For print media, the 2002 guidelines capped foreign equity in news/current-affairs publications at 26 % and required that the single largest Indian shareholder hold 'significantly more than 26 %'—at least 51 %—thus exceeding 26 % as stated in the question ([timesofindia.indiatimes.com](https://timesofindia.indiatimes.com/business/india-business/fdi-norms-for-print-media-announced/articleshow/28993522.cms)). Hence only Statement 2 is correct.

**Q86. The leader of the Bardoli Satyagraha (1928) was**

- (a) Sardar Vallabhbhai Patel**
- (b) Mahatma Gandhi
- (c) Vithalbhai J Patel
- (d) Mahadev Desai

**Answer: (a)**

The peasants' tax-resistance at Bardoli in 1928 was led by Sardar Vallabhbhai Patel, whose successful leadership earned him the title 'Sardar' ([en.wikipedia.org](https://en.wikipedia.org/wiki/Bardoli\_Satyagraha?utm\_source=openai)). Gandhi, Vithalbhai Patel and Mahadev Desai were supporters but not the movement's leader.

**Q87. The Kelkar proposals which were in the news recently were the**

- (a) recommendations for reforms in the power sector
- (b) recommendations for tax reforms**
- (c) guidelines for the privatisation
- (d) guidelines for reducing vehicular pollution, and the promotion of CNG use

**Answer: (b)**

The 'Kelkar proposals' refer to the Vijay Kelkar Task-Force reports (2002) recommending sweeping direct- and indirect-tax reforms, such as raising the income-tax exemption limit and rationalising customs and excise duties ([timesofindia.indiatimes.com](https://timesofindia.indiatimes.com/business/india-business/highlights-of-the-kelkar-panel-reports/articleshow/32606842.cms?utm\_source=openai)). They had nothing to do with power-sector reform, privatisation guidelines or CNG pollution norms.

**Q88. Consider the following statements:**

1. The joint sitting of the two Houses of the Parliament in India is sanctioned under Article 108 of the Constitution.
2. The first joint sitting of Lok Sabha and Rajya Sabha was held in the year 1961.
3. The second joint sitting of the two Houses of Indian Parliament was held to pass the Banking Service Commission (Repeal) Bill.

Which of these statements are correct?

- (a) 1 and 2
- (b) 2 and 3
- (c) 1 and 3
- (d) 1, 2 and 3**

**Answer: (d)**

Article 108 empowers the President to summon a joint sitting of Lok Sabha and Rajya Sabha to resolve a legislative deadlock; this is affirmed by practice ([timesofindia.indiatimes.com](https://timesofindia.indiatimes.com/anti-terror-law/history-of-joint-sessions-of-parliament/articleshow/4916708.cms?utm\_source=openai)). The first joint sitting (May 1961) passed the Dowry Prohibition Bill, and the second (May 1978) passed the Banking Service Commission (Repeal) Bill, confirming Statements 2 and 3. Therefore all three statements are correct.

**Q89. Life expectancy is highest in the world in**

- (a) Canada
- (b) Germany
- (c) Japan**
- (d) Norway

**Answer: (c)**

In 2003 Japan recorded the world's highest average life expectancy ("H 82 years), ahead of Germany and Norway ([nationmaster.com](https://www.nationmaster.com/country-info/stats/Health/Life-expectancy-at-birth/Years/Total-population?utm\_source=openai)). Thus option (c) Japan is correct.

**Q91. Octopus is**

- (a) an arthropod
- (b) an echinoderm
- (c) a hemichordate
- (d) a mollusc**

**Answer: (d)**

Octopus belongs to phylum Mollusca (class Cephalopoda); it lacks the jointed appendages/exoskeleton of arthropods, the water vascular system of echinoderms and the rudimentary notochord of Hemichordata. Hence option (d) is correct while the other three phyla do not include octopus. ([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-1?utm\_source=openai))

**Q92. Consider the following conditions of sick human body**

1. Swollen lymph nodes
2. Sweating at night
3. Loss of memory
4. Loss of weight

**Which of these are the symptoms of AIDS?**

- (a) 1 and 2
- (b) 2, 3 and 4
- (c) 1, 2 and 3
- (d) 1, 2, 3 and 4**

**Answer: (d)**

Advanced HIV infection commonly presents with persistent generalized lymphadenopathy, drenching night sweats, HIV-associated neurocognitive disorders (memory loss) and unexplained weight loss. All four listed features therefore characterize AIDS, making option (d) correct; any subset would omit a recognised symptom. ([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-1?utm\_source=openai))

**Q93. Emperor Harsha's southward march was stopped on the Narmada River by**

- (a) Pulakesin-I
- (b) Pulakesin-II**
- (c) Vikramaditya-I
- (d) Vikramaditya-II

**Answer: (b)**

Harsha's attempt to extend his empire southwards was checked at the Narmada by Chalukya ruler Pulakesin II (c. 610-642 CE), as recorded in the Aihole inscription and Xuanzang's account. Pulakesin I and both Vikramadityas ruled either earlier or later and were not involved in this confrontation. ([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-1?utm\_source=openai))

**Q94. Under which Article of the Indian Constitution did the President give his assent to the ordinance on electoral reforms when it was sent back to him by the Union Cabinet without making any changes (in the year 2002)?**

- (a) Article 121
- (b) Article 122
- (c) Article 123**
- (d) Article 124

**Answer: (c)**

Article 123 empowers the President to promulgate an ordinance when Parliament is not in session; if the Cabinet advises re-promulgation, the President is constitutionally bound to assent. The 2002 electoral-reforms ordinance was thus cleared under Article 123, not under Articles 121, 122 or 124 which deal with other parliamentary matters. ([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-1?utm\_source=openai))

**Q95. Dilip Kaur Tiwana is well known as a**

- (a) litterateur**
- (b) musician
- (c) scientist
- (d) sports person

**Answer: (a)**

Dilip Kaur Tiwana (b. 1935) is an eminent Punjabi novelist and short-story writer, winner of the Sahitya Akademi Award; she is neither a musician, scientist nor sportsperson. Hence option (a) is correct. ([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-1?utm\_source=openai))

**Q96. Consider the following statements:**

- 1. The maximum limit of shareholding of Indian promoters in private sector banks in India is 49 per cent of the paid-up capital.**
- 2. Foreign Direct Investment up to 49 per cent from all sources is permitted in private sector banks in India under the automatic route.**

**Which of these statements is/are correct?**

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2**
- (d) Neither 1 nor 2

**Answer: (c)**

RBI's press release of June 8 2002 revised the earlier 40 % ceiling and 'allowed promoters of private banks to hold up to 49 % stake', matching the FDI limit already fixed at 49 % from February 2002. Hence both statements 1 and 2 are correct and the right option is (c).

**Q97. Match List I (Cricketer) with List II (Country) and select the correct answer using the codes given below the lists:**

**List I (Cricketer)**

- A. Barry Richards
- B. Ted Dexter
- C. Alan Davidson
- D. Charlie Griffith

**List II (Country)**

- 1. England
- 2. West Indies
- 3. South Africa
- 4. New Zealand
- 5. Australia

**Codes:**

- (a) A B C D 3 2 5 1
- (b) A B C D 5 1 4 2
- (c) A B C D 3 1 5 2**
- (d) A B C D 5 2 4 1

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**Answer: (c)**

Barry Richards played Test cricket for South Africa, Ted Dexter captained England, Alan Davidson was a legendary Australian all-rounder, and Charlie Griffith was a fast bowler from the West Indies. Thus the correct matching is 3-1-5-2, i.e. option (c). ([en.wikipedia.org](https://en.wikipedia.org/wiki/Barry\_Richards))

**Q98. Regarding the atom of a chemical element, the magnetic quantum number refers to**

- (a) orientation**
- (b) shape
- (c) size
- (d) spin

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**Answer: (a)**

The magnetic quantum number ( $m_l$ ) specifies the orientation of an atomic orbital in space (possible orientations for a given subshell). It does not determine the orbital's shape, size, or the electron's spin. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Magnetic\_quantum\_number?utm\_source=openai))

**Q99. Consider the following statements:**

**1. The common blue green algae Spirogyra and Ulothrix are found in both fresh water ponds and oceans.**

**2. The chameleon can look ahead with one eye, and at the same time look behind with another.**

**Which of these statements is/are correct?**

- (a) Only 1
- (b) Only 2**
- (c) Both 1 and 2
- (d) Neither 1 nor 2

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**Answer: (b)**

Spirogyra is a filamentous green alga found exclusively in freshwater habitats, so it is not common to both ponds and oceans, making statement 1 incorrect. Chameleons can move their two eyes independently and view different directions simultaneously, so statement 2 is correct; therefore only statement 2 is right.

([britannica.com](https://www.britannica.com/science/Spirogyra?utm\_source=openai))

**Q100. Which among the following countries has the largest population?**

- (a) Indonesia**
- (b) Japan
- (c) Pakistan
- (d) Sudan

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**Answer: (a)**

Around 2003 Indonesia's population was about 223 million, far higher than Pakistan (~167 million), Japan (~127 million) and Sudan (~28 million). Hence Indonesia was the most populous among the four countries listed. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Demographics\_of\_Indonesia?utm\_source=openai))

**Q101. Assertion (A): Emperor Akbar marched towards Afghanistan in 1581 with a huge army.**

**Reason (R): He was on his way to reclaim his ancestral country of Ferghana in Central Asia.**

- (a) Both A and R are individually true and R is the correct explanation of A
- (b) Both A and R are individually true but R is NOT the correct explanation of A
- (c) A is true but R is false**
- (d) A is false but R is true

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**Answer: (c)**

Akbar did advance with a large force toward Afghanistan in 1581 to subdue the revolt of his half-brother Mirza Hakim and secure Kabul, so the Assertion is correct. Ferghana (in present-day Uzbekistan) had long been lost to the Mughals and Akbar never sought to 'reclaim' it, making the Reason false; hence A is true but R is false (option c). ([aspireias.com](https://www.aspireias.com/upsc-general-study-10years-paper/medievalhistory?utm\_source=openai))

**Q102. Assertion (A):** During the year 2001-02, the value of India's total exports declined, registering a negative growth of 2.17%.

**Reason (R):** During the year 2001-02, negative growth in exports was witnessed in respect of iron and steel, coffee, textiles and marine products.

- (a) Both A and R are individually true and R is the correct explanation of A
- (b) Both A and R are individually true but R is NOT the correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true**

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**Answer: (d)**

DGCI&S/RBI data show India's merchandise exports actually recorded a small positive growth (about 1–2 %) in 2001-02, not a –2.17 % decline; therefore the Assertion is wrong. The listed items (iron & steel, coffee, textiles, marine products) did register negative growth that year, so the Reason is factually correct, giving option (d) A false, R true. ([iasexamportal.com](https://iasexamportal.com/IAS/IAS-Prelims-Previous-Year-Paper-General-Studies-2003-2))

**Q103. Assertion (A):** The eastern coast of India produces more rice than the western coast.

**Reason (R):** The eastern coast receives more rainfall than the western coast.

- (a) Both A and R are individually true and R is the correct explanation of A
- (b) Both A and R are individually true but R is NOT the correct explanation of A
- (c) A is true but R is false**
- (d) A is false but R is true

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**Answer: (c)**

River-deltaic plains along the east coast (Mahanadi, Godavari, Krishna, Cauvery) provide fertile alluvium and extensive irrigation, so this zone grows far more rice than the narrow, lateritic west-coast strip—making the Assertion true. However, the western (Konkan–Malabar) coast actually receives heavier orographic rainfall ("H 3 000–4 000 mm) than most of the east coast, so the Reason is false; hence portal.com](https://iasexamportal.com/IAS/IAS-Prelims-Previous-Year-Paper-General-Studies-2003-2))

**Q104. Assertion (A):** The new EXIM Policy is liberal, market-oriented and favours global trade.

**Reason (R):** GATT has played a significant role in the liberalisation of economy.

- (a) Both A and R are individually true and R is the correct explanation of A
- (b) Both A and R are individually true but R is NOT the correct explanation of A
- (c) A is true but R is false**
- (d) A is false but R is true

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**Answer: (c)**

India's post-1991 EXIM policies were indeed framed to be more liberal and market-oriented, supporting freer global trade—so the Assertion is true. But the General Agreement on Tariffs and Trade (GATT) ceased to function as the chief multilateral institution after the WTO replaced it on 1 Jan 1995; thus citing GATT as the driver of India's 2000-era liberalisation is inaccurate, making the Reason false and not the explanation. Therefore option (c). ([iasexamportal.com](https://iasexamportal.com/IAS/IAS-Prelims-Previous-Year-Paper-General-Studies-2003-2))

**Q105. Assertion (A):** In the periodic table of chemical elements, electron affinity is always found to increase from top to bottom in a group.

**Reason (R):** In a group, the atomic radius generally increases from top to bottom.

- (a) Both A and R are individually true and R is the correct explanation of A
- (b) Both A and R are individually true but R is NOT the correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true**

**Answer: (d)**

Electron affinity generally becomes less (energy released decreases) as we move down a group because added electrons are farther from the nucleus and more shielded; hence the Assertion that it 'always increases' down a group is wrong. Atomic radius does increase down a group, so the Reason is correct, giving option (d) A false, R true. ([iasexamportal.com](https://iasexamportal.com/IAS/IAS-Prelims-Previous-Year-Paper-General-Studies-2003-2))

**Q106. Assertion (A):** Coal-based thermal power stations contribute to acid rain.

**Reason (R):** Oxides of carbon are emitted when the coal burns.

- (a) Both A and R are individually true and R is the correct explanation of A
- (b) Both A and R are individually true but R is NOT the correct explanation of A**
- (c) A is true but R is false
- (d) A is false but R is true

**Answer: (b)**

Burning coal in thermal power plants releases large amounts of SO<sub>2</sub> and NO<sub>x</sub> that react with water to form sulphuric and nitric acids, the chief constituents of acid rain, so the assertion is true. The reason is true in itself—coal combustion also emits CO<sub>2</sub> and CO—but oxides of carbon are not the primary cause of acid rain; therefore R does not explain A. ([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-1))

**Q107. Assertion (A):** The weight of a body decreases with the increase of latitude on earth.

**Reason (R):** The earth is not a perfect sphere.

- (a) Both A and R are individually true and R is the correct explanation of A
- (b) Both A and R are individually true but R is NOT the correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true**

**Answer: (d)**

Because Earth is an oblate spheroid that bulges at the equator and rotates, the distance from the centre is greatest at the equator; hence gravitational acceleration (and weight) actually increases toward the poles, so the assertion is false. The reason correctly states that Earth is not a perfect sphere, which is precisely why  $g$  varies with latitude. ([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-1))

**Q108. Assertion (A): Unsaturated fats are more reactive compared with the saturated fats.**

**Reason (R): Unsaturated fats have only single bonds in their structure.**

- (a) Both A and R are individually true and R is the correct explanation of A
- (b) Both A and R are individually true but R is NOT the correct explanation of A
- (c) A is true but R is false**
- (d) A is false but R is true

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**Answer: (c)**

Unsaturated fats contain one or more C=C double bonds; these sites of unsaturation make them chemically more reactive than fully saturated fats, so A is true. R is false because it says unsaturated fats have only single bonds, which contradicts the very definition of 'unsaturated'.

([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-1))

**Q109. Assertion (A): The amount of moisture in the atmosphere is related to latitude.**

**Reason (R): The capacity to hold moisture in the form of water vapour is related to temperature.**

- (a) Both A and R are individually true and R is the correct explanation of A**
- (b) Both A and R are individually true but R is NOT the correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true

---

**Answer: (a)**

Low-latitude zones are warmer, allowing air to retain much more water vapour, so atmospheric moisture generally declines pole-ward; thus A is true. This relationship exists because the capacity of air to hold water vapour increases exponentially with temperature (Clausius-Clapeyron relationship), so R is also true and correctly explains A.

([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-1))

**Q110. Assertion (A): Unlike temperate forests, the tropical rain forests, if cleared, can yield productive farm-land that can support intensive agriculture for several years even without chemical fertilizers.**

**Reason (R): The primary productivity of the tropical rain forest is very high when compared to that of the temperate forests.**

- (a) Both A and R are individually true and R is the correct explanation of A
- (b) Both A and R are individually true but R is NOT the correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true**

---

**Answer: (d)**

Most tropical rainforest soils are heavily leached, acidic and nutrient-poor; once forest cover is removed, fertility declines rapidly and the land supports crops for only a short time, so the assertion is false. The reason is true—tropical rainforests have very high primary productivity due to warm, moist conditions—but high biomass production does not translate into long-term soil fertility after clearing.

([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-1))

**Q111. Assertion (A): In 1916, Maulana Mohammad Ali and Abul Kalam Azad resigned from the Legislative Council.**

**Reason (R): The Rowlatt Act was passed by the government in spite of being opposed by all Indian members of the Legislative Council.**

- (a) Both A and R are individually true and R is the correct explanation of A
- (b) Both A and R are individually true but R is NOT the correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true**

---

**Answer: (d)**

Maulana Mohammad Ali and Abul Kalam Azad were never members who resigned from the Imperial Legislative Council in 1916, so the Assertion is incorrect. The Reason is correct because the Anarchical & Revolutionary Crimes (Rowlatt) Act was forced through the Council on 18 March 1919 despite unanimous opposition from the Indian members, which led leaders such as M.M. Malaviya, Mazhar-ul-Haq and M.A. Jinnah to quit the Council.

([en.wikipedia.org](https://en.wikipedia.org/wiki/Rowlatt\_Act?utm\_source=openai))

**Q112. Assertion (A): Shah Alam II spent the initial years as an Emperor far away from his capital.**

**Reason (R): There was always a lurking danger of foreign invasion from the north-west frontier.**

- (a) Both A and R are individually true and R is the correct explanation of A**
- (b) Both A and R are individually true but R is NOT the correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true

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**Answer: (a)**

Shah Alam II spent the first dozen years of his reign away from Delhi—mainly at Allahabad—because the capital and the Indo-Gangetic plain were repeatedly ravaged by the Afghan invasions led by Ahmad Shah Durrani and by Rohilla turbulence. The constant danger from the north-west frontier therefore explains why the emperor kept away from his traditional seat, making both statements true and R the correct explanation of A. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Indian\_campaign\_of\_Ahmad\_Shah\_Durrani?utm\_source=openai))

**Q113. Assertion (A): Areas lying within five to eight degrees latitude on either side of the equator receive rainfall throughout the year.**

**Reason (R): High temperatures and high humidity cause convectional rain to fall mostly in the afternoons near the equator.**

- (a) Both A and R are individually true and R is the correct explanation of A**
- (b) Both A and R are individually true but R is NOT the correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true

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**Answer: (a)**

The belt lying roughly 5°–8° on either side of the equator experiences the wet-equatorial (Af) climate where the ITCZ remains overhead all year, giving high temperature, very high humidity and abundant rainfall in every month. The heating triggers strong afternoon convectional thunderstorms, exactly as described in the Reason; hence both A and R are true and R correctly explains A.

([britannica.com](https://www.britannica.com/science/wet-equatorial-climate?utm\_source=openai))

**Q114. Assertion (A): Saluva Narasimha put an end to the old dynasty and assumed the royal title.**  
**Reason (R): He wanted to save the kingdom from further degeneration and disintegration.**

- (a) Both A and R are individually true and R is the correct explanation of A  
(b) Both A and R are individually true but R is NOT the correct explanation of A  
(c) A is true but R is false  
(d) A is false but R is true

**Answer: (a)**

In 1485 the Vijayanagara general Saluva Narasimha deposed the last Sangama ruler Praudha Raya, assumed the royal title and founded the Saluva dynasty. He took this drastic step to rescue the state from anarchy and external threats that had grown under the later Sangamas, so the Reason correctly explains the Assertion.

([en.wikipedia.org](https://en.wikipedia.org/wiki/Saluva\_Narasimha\_Deva\_Raya?utm\_source=openai))

**Q115. Assertion (A): Marathas emerged as the strongest native power in India after the decline of Mughal empire.**

**Reason (R): Marathas were the first to have clear concept of a united Indian nation.**

- (a) Both A and R are individually true and R is the correct explanation of A  
(b) Both A and R are individually true but R is NOT the correct explanation of A  
(c) A is true but R is false  
(d) A is false but R is true

**Answer: (b)**

Following Aurangzeb's death the Maratha Confederacy expanded from the Deccan to dominate much of north and central India, making it the strongest indigenous power of the 18th century (Assertion true). Maratha leaders did articulate an early idea of an all-India 'Hindavi Swarajya', so the Reason is also true in itself; however, that ideological vision was not the primary cause of their military-political ascendancy, so R does not explain A. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Maratha\_Empire?utm\_source=openai))

**Q116. Which one of the following countries does NOT border the Caspian Sea?**

- (a) Armenia  
(b) Azerbaijan  
(c) Kazakhstan  
(d) Turkmenistan

**Answer: (a)**

The Caspian Sea is bordered only by Russia, Kazakhstan, Turkmenistan, Iran and Azerbaijan; Armenia is land-locked and lies to the west of the sea with no shoreline on it.

([britannica.com](https://www.britannica.com/place/Caspian-Sea?utm\_source=openai))

**Q117. The sportsperson Soma Biswas is associated with**

- (a) Sailing
- (b) Hockey
- (c) Golf
- (d) Athletics**

**Answer: (d)**

Soma Biswas is an Indian heptathlete who won heptathlon silver at the 2002 Asian Games; therefore her sport is athletics, not sailing, hockey or golf.

([en.wikipedia.org](https://en.wikipedia.org/wiki/Soma\_Biswas?utm\_source=openai))

**Q118. Which one of following is produced during the formation of photochemical smog?**

- (a) Hydrocarbons
- (b) Nitrogen Oxides
- (c) Ozone**
- (d) Methane

**Answer: (c)**

Ground-level ozone ( $O_3$ ) is a secondary pollutant generated by the reaction of nitrogen hydrocarbons in sunlight and is the key component of photochemical smog; hydrocarbons and  $NO_x$  are precursors, not main products, and methane is unrelated. ([explore.britannica.com](https://explore.britannica.com/explore/savingearth/air-pollution?utm\_source=openai))

**Q119. Consider the following statement:**

**1. Kitab-I-Nauras, a collection of songs in praise of Hindu deities and Muslim saints, was written by Ibrahim Adil Shah II**

**2. Amir Khusrau was the originator in India of the early form of the musical style known as Qawwali.**

**Which of these statements is/are correct?**

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2**
- (d) Neither 1 nor 2

**Answer: (c)**

Ibrahim Adil Shah II of Bijapur compiled 'Kitab-i-Nauras', which contains songs praising both Hindu deities and Muslim saints, while Amir Khusrau (13th c.) is credited with creating the early form of Qawwali in India; hence both statements are correct.

([en.wikipedia.org](https://en.wikipedia.org/wiki/Kitab-i\_Nauras?utm\_source=openai))

**Q121. Match List I (Distinguished Lady) with List II (Organisation/Industry) and select the correct answer using the codes given below the Lists:**

**List I (Distinguished lady)**

- A. Amrita
- B. Anu Aga
- C. Mallika Srinivasan
- D. Priya Paul

**List II (Organisation/Industry)**

- 1. National Dairy Development Board
- 2. Park Hotels
- 3. Pfizer Limited
- 4. Thermax Limited
- 5. Tractors and Farm Equipment Limited

**Codes:**

**A B C D**

(a) 1 4 5 2

(b) 2 4 1 5

(c) 1 3 5 2

(d) 2 3 1 5

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**Answer: (a)**

Amrita Patel headed the National Dairy Development Board; Anu Aga was chairperson of Thermax Ltd.; Mallika Srinivasan leads Tractors & Farm Equipment Ltd. (TAFE); and Priya Paul is chairperson of The Park Hotels. This matches the code sequence 1-4-5-2, option (a).

([en.wikipedia.org](https://en.wikipedia.org/wiki/Amrita\_Patel?utm\_source=openai))

**Q122. Consider the following statements: In the electoral college for Presidential Election in India.**

- 1. The value of the vote of an elected Member of Legislative Assembly equals
- 2. The value of the vote of an elected Member of Parliament equals
- 3. There were more than 5000 members in the latest election

**Which of these statements is/are correct?**

(a) 1 and 2

(b) Only 2

(c) 1 and 3

(d) Only 3

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**Answer: (b)**

In the Presidential election, the value of one MP's vote is indeed obtained by dividing the total value of all MLAs' votes by the total number of elected MPs (statement 2 correct). The value of an MLA's vote is population-based and divided by 1,000—not a fixed equal number as implied in statement 1; and the total strength of the 2002 electoral college was 4,896, i.e., under 5,000, so statement 3 is wrong. Hence only statement 2 is correct. ([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-2?utm\_source=openai))

**Q123. Which one of the following statements is NOT correct?**

- (a) Ali Mardan Khan introduced the system of revenue farming in Bengal
- (b) Maharaja Ranjit Singh set up modern foundries to manufacture cannons at Lahore
- (c) Sawai Jai Singh of Amber had Euclid's 'Elements of Geometry' translated into Sanskrit
- (d) Sultan Tipu of Mysore gave money for the construction of the idol of Goddess Sarda in the Sringeri temple

**Answer: (a)**

Revenue farming (ijaradari) in Bengal was introduced by Murshid Quli Khan, not by the Mughal noble Ali Mardan Khan; therefore option (a) is the incorrect statement. The other three statements are historically accurate: Ranjit Singh did establish gun foundries at Lahore; Sawai Jai Singh had Euclid's Elements rendered into Sanskrit (as 'Sarvasiddhantasangraha'); and Tipu Sultan donated to rebuild the Sringeri Sharada temple after it was raided. ([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-2?utm\_source=openai))

**Q124. Which of the following Constitutional Amendments are related to raising the number of Members of Lok Sabha to be elected from the States?**

- (a) 6th and 22nd
- (b) 13th and 38th
- (c) 7th and 31st
- (d) 11th and 42nd

**Answer: (c)**

The 7th Constitutional Amendment Act 1956 raised the maximum elected strength of the Lok Sabha from 500 to 525, while the 31st Amendment Act 1973 further raised it to 545. No other pair of amendments relates to this specific increase, so option (c) is correct. ([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-2?utm\_source=openai))

**Q125. How did Sultan Qutb-ud-din Aibak die?**

- (a) He was treacherously stabbed to death by one of his ambitious nobles
- (b) He was killed in a battle with Taj-u-din Yildiz, the ruler of Ghazni who entered into a contest with him over the capture of Punjab
- (c) He sustained injuries while besieging the fortress of Kalinjar in Bundelkhand and succumbed to death later
- (d) He died after a fall from his horse while playing Chaugan

**Answer: (d)**

Qutb-ud-din Aibak, founder of the Slave Dynasty, died in 1210 CE after falling from his horse while playing the polo-like game chaugan, making option (d) correct; the other causes listed are not supported by contemporary chronicles. ([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-2?utm\_source=openai))

UPSC 2003

Science & Technology › Space Technology & Astronomy

easy

**Q126. Among the following which planet takes maximum time for one revolution around the Sun?**

- (a) Earth
- (b) Jupiter**
- (c) Mars
- (d) Venus

**Answer: (b)**

Among the planets listed, Jupiter has the longest orbital period—about 11.86 Earth years—so it takes the maximum time to complete one revolution around the Sun, making option (b) correct; Earth takes 1 year, Mars about 1.88 years, and Venus about 0.62 years. ([iasexamportal.com](https://iasexamportal.com/paper/AS\_General\_Studies\_Prelims\_Paper\_2003\_part-2?utm\_source=openai))

UPSC 2003

Geography › Population & Demography

easy

**Q127. Which one among the following languages has largest number of speakers in the world?**

- (a) Bengali**
- (b) French
- (c) Japanese
- (d) Portuguese

**Answer: (a)**

Among the four languages listed, Bengali has the highest number of native-language speakers (around 200 million around 2003), exceeding Portuguese ("H 200 million), French and Japanese. Hence, option (a) is the correct answer. ([scribd.com](https://www.scribd.com/document/731911847/2003))

UPSC 2003

Modern History › Constitutional Developments & British Plans (1909-1947)

moderate

**Q128. Which one of the following provisions was NOT made in the Charter Act of 1833?**

- (a) The trading activities of the East India Company were to be abolished
- (b) The designation of the supreme authority was to be changed as the Governor General of India in Council
- (c) All law-making powers to be conferred on Governor General in Council
- (d) An Indian was to be appointed as a Law Member in the Governor-General's Council**

**Answer: (d)**

The Charter Act 1833 ended the East India Company's trade (option a), renamed the head as 'Governor-General of India' (option b) and vested all legislative power in his Council (option c). It did add a fourth 'Law Member', but the Act never stipulated that the member must be an Indian; the first appointee was T. B. Macaulay. Therefore statement (d) was NOT provided by the Act. ([scribd.com](https://www.scribd.com/document/731911847/2003))

**Q129. With reference to normal human beings, consider the following statements:**

- 1. In response to the presence of HCl, secretin is produced from the duodenum**
  - 2. Enterogastrone is produced in the small intestine in response to the presence of fatty acids**
- Which of these statements is/are correct?**

- (a) Only 1
- (b) Only 2
- (c) Both 1 and 2**
- (d) Neither 1 nor 2

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**Answer: (c)**

Secretin is released by the duodenal mucosa when acidic chyme containing HCl enters from the stomach, while enterogastrone (gastric inhibitory peptide) is produced by the intestinal mucosa in response to fatty acids; both statements are factually correct.

([scribd.com](https://www.scribd.com/document/731911847/2003))

**Q130. Survey of India is under the Ministry of**

- (a) Defence
- (b) Environment and Forests
- (c) Home Affairs
- (d) Science and Technology**

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**Answer: (d)**

The Survey of India functions under the Department of Science & Technology, Ministry of Science & Technology, not under Defence, Environment & Forests or Home Affairs.

([scribd.com](https://www.scribd.com/document/731911847/2003))

**Q131. Which among the following countries was the earliest to give women the right to vote?**

- (a) Iceland
- (b) India
- (c) New Zealand**
- (d) USA

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**Answer: (c)**

New Zealand became the first self-governing country to grant women the right to vote in parliamentary elections in 1893—well before the USA (1920), Iceland (1915 full suffrage by 1920) or India (1950).

([scribd.com](https://www.scribd.com/document/731911847/2003))

**Q132. Total time taken by a person in going to a place by walking and returning on cycle is 5 hours 45 minutes. He would have gained 2 hours by cycling both ways. The time taken by him to walk both ways is**

- (a) 6 hours 45 minutes
- (b) 7 hours 45 minutes**
- (c) 8 hours 15 minutes
- (d) 8 hours 30 minutes

**Answer: (b)**

Let the one-way distance be  $d$  km, walking speed  $w$  km/h and cycling speed  $c$  km/h. Given  $d/w + d/c = 5.75$  h and  $2d/c = 3.75$  h (because cycling both ways saves 2 h), we get  $d/c = 1.875$  h. Substituting,  $d/w = 5.75 - 1.875 = 3.875$  h, so walking both ways takes  $2 \times 3.875 = 7.75$  h = 7 h 45 min, i.e. option (b).

**Q133. Sandeep Pandey, the winner of Raman Magsaysay Award, is mainly an activist in**

- (a) Prevention of child marriages
- (b) Promotion of communal harmony
- (c) Environmental protection
- (d) Education and livelihood projects for Dalits**

**Answer: (d)**

The Ramon Magsaysay Foundation's citation notes that Sandeep Pandey founded 'Asha' schools and livelihood initiatives in Dalit villages, working for "education for poor children and socio-economic change among low-caste families and Dalits."

([rmaward.asia](https://rmaward.asia/rmawardees/pandey-sandeep/?utm\_source=openai))

**Q134. What was the main reason for a great civil strife in Argentina recently?**

- (a) Ethnic conflict between the native Red Indian tribes and others
- (b) Economic crisis due to huge public debt**
- (c) The issue of using native languages as medium of instruction in schools
- (d) Clashes between government troops and secessionist groups

**Answer: (b)**

The 'Argentinazo' riots of December 2001 were triggered by the country's deep economic collapse—sovereign-debt default, recession and the 'corralito' bank freeze—leading to widespread civil unrest and political turmoil.

([en.wikipedia.org](https://en.wikipedia.org/wiki/December\_2001\_riots\_in\_Argentina?utm\_source=openai))

**Q135. With reference to colonial rule in India, what was sought by the Ilbert Bill in 1883?**

- (a) To bring Indians and Europeans on par as far as the criminal jurisdiction of courts was concerned**
- (b) To impose severe restrictions on the freedom of the native press as it was perceived to be hostile to colonial rulers
- (c) To encourage the native Indians to appear for civil service examinations by conducting them in India
- (d) To allow native Indians to possess arms by amending the Arms Act

**Answer: (a)**

The Ilbert Bill proposed that senior Indian magistrates be allowed to try Europeans, ending the racial bar that reserved such criminal jurisdiction solely for European judges and thereby placing Indians and Europeans on an equal footing in criminal courts.

([en.wikipedia.org](https://en.wikipedia.org/wiki/Ilbert\_Bill?utm\_source=openai))

**Q136. An important aspect of the Cripps Mission of 1942 was**

- (a) that all Indian States should join the Indian Union as a condition to consider any degree of autonomy for India
- (b) the creation of an Indian Union with Dominion status very soon after the Second World War**
- (c) the active participation and cooperation of the Indian people, communities and political parties in the British war effort as a condition for granting independence with full sovereign status to India after war
- (d) the framing of a constitution for the entire Indian Union, with no separate constitution for any province, and a Union Constitution to be accepted by all provinces

**Answer: (b)**

Stafford Cripps offered that, after World War II, India would become an 'Indian Union' with full Dominion status within the Commonwealth, to be governed by a future constitution framed by a Constituent Assembly—an offer rejected by Congress.

([nextias.com](https://www.nextias.com/blog/cripps-mission-proposals/?utm\_source=openai))

**Q137. When Congress leaders condemned the Montagu-Chelmsford Report, many moderates left party to form the**

- (a) Swarajya Party
- (b) Indian Freedom Party
- (c) Independence Federation of India
- (d) Indian Liberal Federation**

**Answer: (d)**

When the Montagu–Chelmsford Reforms were published in 1918, moderate Congress leaders such as Surendranath Banerjee, favoring the reforms, seceded and in 1919 created the Indian National Liberal Federation (Indian Liberal Federation); hence option (d) is correct, whereas the Swarajya Party and other names arose later or never existed. ([sarthaks.com](https://www.sarthaks.com/60487/when-congress-leader-s-condemned-montagu-chelmsford-report-many-moderates-left-party-form?utm\_source=openai))

**Q138. In the FIFA World Cup Football event in the year 2002, the number of goals scored by Ronaldo of Brazil was**

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

**Answer: (c)**

Brazilian striker Ronaldo captured the Golden Boot at the 2002 FIFA World Cup by scoring eight goals; therefore the correct choice is option (c) 8. The tallies 6, 7, or 9 do not match the official statistics. ([en.wikipedia.org](https://en.wikipedia.org/wiki/2002\_FIFA\_World\_Cup?utm\_source=openai))

**Q139. Which one of the following schedules of the Indian Constitution lists the names of states and specifies their territories?**

- (a) First**
- (b) Second
- (c) Third
- (d) Fourth

**Answer: (a)**

The First Schedule to the Constitution (linked to Articles 1 and 4) lists every State and Union Territory and sets out their territorial limits, so option (a) is correct. The Second Schedule covers salaries, the Third oaths, and the Fourth Raja Sabha seat allocation. ([constitutionofindia.net](https://www.constitutionofindia.net/schedules/i-the-states/?utm\_source=openai))

**Q140. In the year 2002, the President of India presented the national award for excellence in public administration and management sciences to**

- (a) Kumar Mangalam Birla
- (b) N. R. Narayana Murthy**
- (c) Rahul Bajaj
- (d) Ratan Tata

**Answer: (b)**

On 1 October 2002 President A. P. J. Abdul Kalam presented the Lal Bahadur Shastri National Award for Excellence in Public Administration and Management Sciences to Infosys chairman N. R. Narayana Murthy; hence option (b) is right. The other business leaders were not recipients that year. ([timesofindia.indiatimes.com](https://timesofindia.indiatimes.com/city/bengaluru/murthy-presented-with-lal-bahadur-shastri-award/articleshw/23894102.cms?utm\_source=openai))

UPSC 2003

Science & Technology › Quantitative Aptitude

moderate

**Q141. 'A' and 'B' are two fixed points in a field. A cyclist C moves such that ACB is always a right angle. In this context, which one of the following statements is correct?**

- (a) The path followed by the cyclist is an ellipse
- (b) The path followed by the cyclist is a circle**
- (c) The path followed by the cyclist is an exponential curve
- (d) This type of motion is not possible

**Answer: (b)**

By Thales' theorem, all points C lying on the circle with AB as diameter subtend a right angle (90°). Thus the cyclist's path is that circle, making option (b) correct; neither an ellipse nor an exponential curve preserves this condition, and the motion is perfectly feasible. ([engineeringtechnology.org](https://engineeringtechnology.org/engineering-graphics/geometry-review/thales-theorem/?utm\_source=openai))

UPSC 2003

Geography › Economic & Mineral Geography

easy

**Q142. The thermal power plant of Bokaro is located in**

- (a) Bihar
- (b) Chhattisgarh
- (c) Jharkhand**
- (d) Orissa

**Answer: (c)**

Bokaro Thermal Power Station (BTPS) is situated at Bokaro (Thermal) in Bokaro district, Jharkhand. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Bokaro\_Thermal\_Power\_Station\_B?utm\_source=openai))

UPSC 2003

Indian Economy › International Trade & WTO

moderate

**Q143. Among the following commodities imported by India during the year 2001-02, which one was the highest in terms of Rupee value?**

- (a) Edible oil**
- (b) Fertilizers
- (c) Organic and inorganic chemicals
- (d) Pearls, precious and semi-precious stones

**Answer: (a)**

According to Government trade statistics used in the 2003 UPSC key, edible oil was the single largest commodity import (in rupee terms) for 2001-02, ahead of fertilizers, chemicals and gems/stones. ([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-1?utm\_source=openai))

**Q144. With reference to ionic compounds, consider the following statements:**

1. Ionic compounds are insoluble in alcohol.
  2. Ionic compounds in the solid state are good conductors of electricity.
- Which of these statements is/are correct?

- (a) Only 1  
(b) Only 2  
(c) Both 1 and 2  
(d) Neither 1 nor 2

**Answer: (a)**

Ionic compounds are generally insoluble in alcohols, but they conduct only when ions are mobile (molten or in solution); in the solid lattice the ions are fixed, so solids are poor conductors. Thus statement 1 is correct and statement 2 is wrong.

([vedantu.com](https://www.vedantu.com/chemistry/silver-oxide?utm\_source=openai))

**Q145. Which one of the following statements is correct?**

- (a) The presence of NaCl increases the rate of setting of Plaster of Paris  
(b) Gypsum is added to the cement to slow down its rate of setting  
(c) All alkaline earth metals form hydrated salts  
(d) Barium and Strontium are found free in nature

**Answer: (d)**

Gypsum is indeed added to clinker to retard (slow) cement setting, and a small amount of NaCl accelerates the setting of Plaster of Paris; many—but not all—alkaline-earth salts are hydrated, while barium and strontium never occur free in nature. Hence the ONLY statement that is NOT correct is "Barium and Strontium are found free in nature."

([doubtut.com](https://www.doubtut.com/qna/30692632?utm\_source=openai))

**Q146. With reference to India, which one of the following statements is NOT correct?**

- (a) IPCL is India's largest petro-chemical company  
(b) RIL is the largest private sector company in India  
(c) MTNL is listed on NYSE  
(d) NSNL is the first telecom service organization in India to launch a nationwide cellular service at one time

**Answer: (c)**

In 2003 IPCL was the largest petro-chemical firm and RIL the largest private-sector company; BSNL (not 'NSNL') rolled out a pan-India cellular network that year. MTNL, however, was NOT listed on the New York Stock Exchange at that time, so option (c) is the incorrect statement asked for. ([iasexamportal.com](https://iasexamportal.com/paper/IAS\_General\_Studies\_Prelims\_Paper\_2003\_part-1?utm\_source=openai))

**Q147. Which amongst the following States has the highest population density as per Census 2001?**

- (a) Kerala
- (b) Madhya Pradesh
- (c) Uttar Pradesh
- (d) West Bengal**

**Answer: (d)**

Census 2001 puts West Bengal's population density at about 903 persons per sq km, higher than Kerala (819), Uttar Pradesh (690) and Madhya Pradesh (~196); therefore West Bengal has the highest density among the given states. ([jagranjosh.com](https://www.jagranjosh.com/general-knowledge/top10-most-densely-populated-states-in-india-1302937163-1?utm\_source=openai))

**Q148. The Ninth Schedule to the Indian Constitution was added by**

- (a) First Amendment**
- (b) Eighth Amendment
- (c) Ninth Amendment
- (d) Forty second Amendment

**Answer: (a)**

The Ninth Schedule was inserted by the Constitution (First Amendment) Act, 1951 to protect land-reform laws from judicial review, so the correct choice is the First Amendment. ([legitquest.com](https://www.legitquest.com/act/constitution-first-amendment-act-1951/2007?utm\_source=openai))

**Q149. Who headed the Interim Cabinet formed in the 1946?**

- (a) Rajendra Prasad
- (b) Jawaharlal Nehru**
- (c) Sardar Vallabhbhai Patel
- (d) Rajagopalachari

**Answer: (b)**

The Interim Government formed on 2 September 1946 was headed by Jawaharlal Nehru, who served as Vice-President of the Executive Council and de facto Prime Minister; none of the other personalities led this cabinet. ([en.wikipedia.org](https://en.wikipedia.org/wiki/Interim\_Government\_of\_India?utm\_source=openai))

**Q150. The waterfall 'Victoria' is associated with the river**

- (a) Amazon
- (b) Missouri
- (c) St Lawrence
- (d) Zambezi**

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**Answer: (d)**

Victoria Falls (Mosi-oa-Tunya) is situated on the Zambezi River along the Zambia–Zimbabwe border, not on the Amazon, Missouri or St Lawrence rivers.

([en.wikipedia.org](https://en.wikipedia.org/wiki/Victoria\_Falls?utm\_source=openai))