Source index

Topics 111-120 | 201 records

This index preserves the source records and the claims supported by them from the corrected Day 12 content. Source identifiers restart within each topic. Current-data cut-off: 16 October 2026. Historical statistics keep their stated reference periods.

111 | Ashoka: dhamma, edicts and inscriptions

111-S1 NCERT, *Our Pasts I* (Class VI, history), Chapter 8, "Ashoka, the Emperor Who Gave Up War" (copy of the NCERT chapter hosted by a school site, the same copy as in Topic 102).
https://ssgopalganj.in/online/Class VI\S Sc\Our Past I\ch7.pdf

Supports: The lions on notes and coins from the Sarnath pillar (p. 75); most inscriptions in Prakrit in Brahmi (p. 79); dhamma did not involve worship of a god or performance of a sacrifice; "just as a father tries to teach his children"; dhamma mahamatta; roads, wells, rest houses, medical treatment for human beings and animals; messengers to Syria, Egypt, Greece and Sri Lanka (p. 80); gentleness to slaves and servants, respect for elders, compassion for all creatures, gifts to brahmins and monks, the wrong of praising one's own religion or criticising another's; modern scripts from Brahmi (p. 81)

111-S2 Ven. S. Dhammika, *The Edicts of King Asoka: An English Rendering*, The Wheel Publication No. 386/387 (Buddhist Publication Society), on Access to Insight.
https://www.accesstoinsight.org/lib/authors/dhammika/wheel386.html

Supports: Translation of Rock Edicts I, II, III, V, VIII, IX, XII and XIII and Pillar Edict VII: the Kalinga figures and remorse, the five Greek kings, the Cholas, Pandyas and Tamraparni; the ban on slaughter and sacrifice and on festivals, the royal kitchen; medical treatment for humans and animals, wells and trees, the neighbouring peoples; the mahamatras in the thirteenth year; the tour to Sambodhi ten years after coronation; respect for mother and father, generosity, moderation in spending and saving; servants and employees; respect for the doctrines of others; banyan trees, mango groves, wells and rest houses at eight krosas; the Bairat edict line on the Buddha's words; the title Devanampiya Piyadasi and its meaning; Prinsep's decipherment of a Delhi pillar inscription in 1837; confirmation of the name in 1915; more than thirty places; Magadhi in the east and a form closer to Sanskrit in the west; the five groups of edicts

111-S3 Vincent A. Smith, *Asoka: The Buddhist Emperor of India* (Rulers of India series), Oxford: Clarendon Press, 1901; scan in the Gokhale Institute of Politics and Economics digital library.
https://dspace.gipe.ac.in/xmlui/bitstream/handle/10973/29589/GIPE-001257.pdf?sequence=3

Supports: Coronation about 270 BCE; dharma as the "law of piety", drafted to be acceptable to any Indian sect; the censors of the law of piety in the thirteenth year; the Bhabru edict as the only open avowal of devotion to Buddhism, addressed to the clergy; the Third Council resting on the Ceylonese chronicles and Tissa unknown in China, Tibet and Nepal; Mahendra as brother in Xuanzang; the Sri Lankan mission not mentioned by Ashoka; the Kalinga figures

111-S4 Wikipedia, "Ashoka" (citing the Mahavamsa, Thapar and others).
https://en.wikipedia.org/wiki/Ashoka

Supports: Reign c. 268 to 232 BCE, coronation c. 269 BCE, death 232 BCE; consecration four years after becoming sovereign in the Mahavamsa; Devanampiya and Priyadarshi, shown by the Maski and Gujarra inscriptions; Kalinga in the 8th regnal year, c. 260 BCE; the Kalinga versions leaving out the remorse; Minor Rock Edict I and the lay follower; the Third Council under Moggaliputta Tissa in the 17th regnal year in Sri Lankan tradition, doubted by some historians; missions in the 18th year; Mahinda as son, and as younger brother in Xuanzang; Sanghamitta as daughter with a Bodhi sapling; dhamma mahamattas in the 13th year

111-S5 Wikipedia, "Edicts of Ashoka" (citing E. Hultzsch, *Inscriptions of Asoka*, 1925; Richard Salomon, *Indian Epigraphy*, 1998). https://en.wikipedia.org/wiki/Edicts_of_Ashoka

Supports: Classification and sites; Prakrit in Brahmi, Kharosthi in the north-west, Greek and Aramaic at Kandahar; Prakrit, not Dravidian, in the south; Lassen in 1836 and Prinsep's publication in March 1838, Kharosthi deciphered from bilingual coins; Maski found in 1915 by C. Beadon; Gujarra's "Devanampiya Piyadasi Asoka raja"; the regnal years of each group (Minor Rock Edicts, the first edicts in an Indian language, from year 11, Barabar and the Major Rock Edicts from year 12, Edict XIII in year 14, Rummindei and Nigali Sagar in years 19 to 20 and "anointed twenty years", the Pillar Edicts in years 26 to 27); Aramaic at Taxila and Laghman; Amaravati in the table of pillar inscriptions

111-S6 Wikipedia, "Major Rock Edicts" (citing Hultzsch 1925; Thapar; D. C. Sircar, *Asokan Studies*, 1979). https://en.wikipedia.org/wiki/Major_Rock_Edicts

Supports: The subject of each of the fourteen edicts: festive gatherings banned (I), medical care and roads (II), officials touring every five years (III), Dhamma Mahamatras for all sects (V), all sects to live everywhere (VII), the moral tours replacing pleasure tours (VIII), elaborate ceremonies (IX); sites and their states; Kharosthi at Shahbazgarhi and Mansehra; XI to XIII left out at Dhauli and Jaugada and replaced by two Separate Edicts; the Greek edict at Kandahar

111-S7 Wikipedia, "Minor Rock Edicts" (citing Thapar; Hultzsch 1925; Sircar; Chakrabarty; Charles Allen). https://en.wikipedia.org/wiki/Minor_Rock_Edicts

Supports: Sites and districts; Maski's "Devanampriya Asoka" and Gujarra's "Devanampiya Piyadasi Asokaraja"; Minor Rock Edict I (lay follower for more than two and a half years, little progress in the first year, closer to the Sangha); the Calcutta-Bairat (Bhabru) edict found by Captain Burt in 1840, in the Asiatic Society, "Piyadasi Raja Magadhe", faith in the Buddha, Dhamma and Sangha, seven texts; the edicts from the 11th regnal year; Rajula Mandagiri in Kurnool district

111-S8 Wikipedia, "List of edicts of Ashoka". https://en.wikipedia.org/wiki/List_of_edicts_of_Ashoka

Supports: Yerragudi near Gooty, Kurnool district, with Major and Minor Rock Edicts; Rajula Mandagiri near Pattikonda, Kurnool district; Sopara's fragments of VIII and IX; Sannati's Separate Edicts; pillar sites and edicts (Delhi-Topra I to VII, the others I to VI); the Delhi pillars moved by Firoz Shah and the Allahabad pillar from Kausambi probably moved by Jahangir; Rummindei and Nigali Sagar in Nepal; the Schism Edict at Sanchi, Sarnath and Allahabad and the Queen's Edict at Allahabad; Barabar gifts to the Ajivikas

111-S9 D. C. Sircar, "Erragudi Edicts of Asoka", *Epigraphia Indica*, Vol. XXXII (1957-58), No. 1 (first part of the article, on The Indian Analyst).
https://whatisindia.com/inscriptions/epigraphica_indica/vol32_1957-1958/sircar.html

Supports: Erragudi in the Pattikonda taluk of Kurnool district; inscriptions on six large boulders; found at the end of 1928 by A. Ghose of the Geological Survey of India; announced on 11 February 1929

111-S10 Saurabh Saxena, "Edicts of Ashoka: Minor Rock Edicts", Puratattva.
https://puratattva.in/the-mauryas-3/

Supports: Maski found by C. Beadon in 1915, the first edict found with the personal name; Gujarra and Nittur with the personal name; Rajula Mandagiri found in 1953-54, about 35 km from Yerragudi, approached from Pattikonda; Yerragudi beside the Gooty to Adoni road

111-S11 Andhra Pradesh Capital Region Development Authority (APCRDA), "History of Amaravati" (historical timeline). https://crda.ap.gov.in/APCRDADOCS/DataModuleFIles/History/01~10531.Historical timeline.pdf

Supports: A broken pillar with an edict of Asoka close to the Amaravati stupa

111-S12 Wikipedia, "Third Buddhist council" (citing the Mahavamsa; Snellgrove; Dhammajoti).
https://en.wikipedia.org/wiki/Third_Buddhist_council

Supports: Held at Pataliputra in Ashoka's reign under Moggaliputta Tissa, in the Theravada commentaries and chronicles; the Kathavatthu added to the canon; the missions in the Mahavamsa (Majjhantika, Maharakkhita, Sona and Uttara, Mahinda); scholars' doubts

111-S13 Wikipedia, "Kandahar Bilingual Rock Inscription" (citing Scerrato 1958; Sircar 1979; Carratelli's translation). https://en.wikipedia.org/wiki/Kandahar_Bilingual_Rock_Inscription

Supports: Greek and Aramaic; Chehel Zina near Kandahar; found in 1958; "ten years having been completed"; eusebeia (piety) for dhamma; the king abstains from killing living beings, hunters and fishermen stop hunting; "Piodasses"

111-S14 Wikipedia, "State Emblem of India". https://en.wikipedia.org/wiki/State_Emblem_of_India

Supports: Adopted on 26 January 1950; an adaptation of the Lion Capital of Ashoka; three lions visible; wheel in the centre of the abacus, bull and horse; Satyameva Jayate from the Mundaka Upanishad in Devanagari; the capital carved from a single block of sandstone and erected at Sarnath

111-S15 National Institute of Open Schooling (NIOS), Senior Secondary History (315), Lesson 5, "From Janapadas to Empire". https://digital.nios.ac.in/content/315en/315_History_Eng_Lesson5.pdf

Supports: The Mauryan kings donated several caves to Ajivika monks (p. 64)

111-S16 Encyclopaedia Britannica, "Ashoka". https://www.britannica.com/biography/Ashoka

Supports: Ashoka as the last major emperor of the Mauryan dynasty; "conquest by dharma" after Kalinga; death given as 238 BCE with a query

111-S17 NCERT, *Themes in Indian History Part I* (Class XII), Theme Two, "Kings, Farmers and Towns: Early States and Economies (c. 600 BCE-600 CE)". https://www.ncert.nic.in/textbook/pdf/lehs102.pdf

Supports: Prinsep, an officer in the East India Company's mint, deciphered Brahmi and Kharosthi (p. 28) and deciphered Asokan Brahmi in 1838 (p. 46); dhamma as respect towards elders, generosity towards Brahmanas and those who renounced worldly life, and respect for religions and traditions other than one's own; Prakrit in Brahmi, Kharosthi in the north-west, Aramaic and Greek in Afghanistan (p. 32); principles "simple and virtually universally applicable" and the dhamma mahamatta (p. 34); Edict XIII in translation: eight years, one hundred and fifty thousand deported, a hundred thousand killed (p. 48)

111-S18 Lok Sabha, Unstarred Question No. 2122, answered on 9 December 2024 by the Minister of Culture, annexure of ASI-protected sites linked to Chandragupta Maurya and Ashoka. https://eparlib.sansad.in/bitstream/123456789/2985119/1/AU2122_1h07JO.pdf

Supports: Asokan inscription at Rajulamandagiri, Kurnool district; Ashokan edict at Maski, Raichur district; Gujjara (Datia), Rupnath, Nittur, Udegolam, Brahmagiri, Siddapura, Jatinga-Rameshwara, Sasaram, Ahraura, Kalsi and Dhauli as ASI-protected Ashokan inscription sites

111-S19 UNESCO World Heritage Centre, Tentative List, "Ashokan Edict Sites along the Mauryan Routes", submitted by the Permanent Delegation of India on 11 February 2025. https://whc.unesco.org/en/tentativelists/6803

Supports: Erragudi with both Major and Minor Rock Edicts, in Andhra Pradesh; Rajula Mandagiri (Minor); Maski (Minor, Karnataka); Jaugada, Dhauli, Girnar, Kalsi, Sopara (Major)

111-S20 UNESCO World Heritage Centre, Tentative List, "Shahbazgarhi Rock Edicts", submitted by Pakistan's Department of Archaeology and Museums on 30 January 2004. https://whc.unesco.org/en/tentativelists/1880

Supports: Fourteen major edicts of Asoka at Shahbazgarhi, written from right to left in the Kharosthi script

111-S21 Indira Gandhi National Centre for the Arts (IGNCA), documentation of the Asokan Rock Edicts at Jaugada, Ganjam district, Odisha (an ASI-protected monument). https://ignca.gov.in/asi_reports/organjam001.pdf

Supports: Eleven of the fourteen rock edicts at Jaugada; Edicts XI, XII and XIII left out and two Separate Edicts in their place, addressed to the Mahamatras of Samapa in the newly conquered Kalinga

111-S22 *Mahavamsa*, Chapter V, "The Third Council", English translation hosted by lakdiva.org.lk. https://lakdiva.org.lk/mahavamsa/chap005.html

Supports: Consecration four years after Asoka won the sovereignty; the council under the thera Moggaliputta Tissa, the Kathavatthu, closed in the seventeenth year of the reign; Mahinda as the king's son and Sanghamitta as his daughter

111-S23 NCERT Class VI, Chapter 7, “From a Kingdom to an Empire”, reproduced by IIT Kanpur SATHEE. https://sathee.iitk.ac.in/sathee-railway-exams/student-corner/ncert-books/class-06/social-science/history-our-past-1/chapter-07-from-a-kingdom-to-an-empire/ ; independently readable NCERT chapter reproduction (Rationalised 2023-24, printed page 67): https://cdn1.byjus.com/wp-content/uploads/2023/05/ncert-textbook-for-class-6-social-science-history-chapter-7.pdf

Supports: Direct chapter text confirming the scope of dhamma in Q1 statement 4

112 | Supreme Court and High Courts

112-S1 Government of India, Ministry of Law and Justice, Legislative Department, *The Constitution of India* [As on 1st May, 2024], official text (Contents only; the body text was cut off before Part V). https://cdnbbsr.s3waas.gov.in/s380537a945c7aaa788ccfcdf1b99b5d8f/uploads/2024/07/20240716890312078.pdf

Supports: Headings of Articles 124 to 147 and of Articles 124A to 124C in the Contents, for the table in 2.1

112-S2 Ministry of External Affairs, *The Constitution of India*, Part V (text with amendments up to 2003). https://www.mea.gov.in/Images/pdf1/Part5.pdf

Supports: Article 112(3)(d)(i) and (iii); Article 124(1) "not more than seven", with its footnote on the 1986 Act; 124(2), (3)(c), (4) and (7); 125(1); 127(1); 128; 129; 130; 131; 132(1), 133(1), 134(1); 134A; 136(1); 137; 139A(1) and (2); 141; 142(1); 143(1) and (2); 145; 146(3); 147

112-S3 Ministry of External Affairs, *The Constitution of India*, Part VI (text with amendments up to 2006). https://www.mea.gov.in/Images/pdf1/Part6.pdf

Supports: Article 202(3)(d); Articles 214, 215, 216, 217(1) and (2), 218, 221(1), 222(1), 223, 224, 224A, 226(1) and (2), 227(1), 228, 230, 231(1); the recasting of Articles 230 to 232

112-S4 constitutionofindia.net, "Article 124: Establishment and constitution of Supreme Court". https://www.constitutionofindia.net/articles/article-124-establishment-and-constitution-of-supreme-court/

Supports: Clauses (2) (age 65, resignation, CJI always consulted), (2A), (3) (a) to (c), (4), (5), (6) (oath before the President, Third Schedule) and (7)

112-S5 constitutionofindia.net, "Article 217: Appointment and conditions of the office of a Judge of a High Court". https://www.constitutionofindia.net/articles/article-217-appointment-and-conditions-of-the-office-of-a-judge-of-a-high-court/

Supports: Age 62 (sixty in 1950); provisos on resignation, removal and vacancy on appointment to the Supreme Court or transfer; 217(2) qualifications with no jurist route; 217(3) age question decided by the President after consulting the CJI; the consultation words of 1950

112-S6 Supreme Court of India, "Chief Justice and Judges" (page as on 16 October 2026). https://www.sci.gov.in/chief-justice-judges/

Supports: Justice Surya Kant "Sworn in as the Chief Justice of India on 24th November, 2025"; 36 other Judges listed, the latest appointed on 6 October 2026

112-S7 LiveLaw, "President Grants Assent To Law Increasing Strength Of Supreme Court Judges To 38", 12 August 2026. https://www.livelaw.in/amp/top-stories/president-grants-assent-to-law-increasing-strength-of-supreme-court-judges-to-38-545405

Supports: Supreme Court (Number of Judges) Amendment Act 2026; "33" replaced by "37"; 38 including the CJI; replaced the Ordinance of May 2026; Lok Sabha passed the Bill on 3 August 2026

112-S8 SCC Online blog (SCC Times), "Four More Judges for the Supreme Court: President's Ordinance Responds to India's Mounting Case Backlog", 18 May 2026. https://www.scconline.com/blog/?p=384446

Supports: Supreme Court (Number of Judges) Amendment Ordinance, 2026, under Article 123; 33 to 37 Judges besides the CJI; 34 to 38 in all

112-S9 Wikipedia, "Supreme Court of India" (citing the Court's own history pages and the Judges (Inquiry) Act, 1968). https://en.wikipedia.org/wiki/Supreme_Court_of_India

Supports: Inauguration on 28 January 1950; strength history 8, 11, 14, 18, 26, 31, 34, 38 (1950, 1956, 1960, 1978, 1986, 2009, 2019, 2026); retirement at 65; collegium of the CJI and the four senior-most Judges; notice of removal signed by 100 Lok Sabha or 50 Rajya Sabha members; Justice Surya Kant in office since 24 November 2025

112-S10 High Court of Andhra Pradesh, official website, home page. https://aphc.gov.in/

Supports: "Smt. Justice Lisa Gill" as Chief Justice; address Nelapadu, Amaravati, Guntur District

112-S11 Wikipedia, "Andhra Pradesh High Court" (citing The Hindu, "Lisa Gill appointed Chief Justice of A.P. High Court", 23 April 2026; The Hindu, 2 February 2019; The New Indian Express, 3 February 2019). https://en.wikipedia.org/wiki/Andhra_Pradesh_High_Court

Supports: Established on 1 January 2019 by a Presidential order under the Andhra Pradesh Reorganisation Act, 2014; the High Court of Judicature at Hyderabad as the earlier common High Court; 37 Judges, 28 permanent and 9 additional; Justice Lisa Gill from 25 April 2026; Justice Dhiraj Singh Thakur, 28 July 2023 to 24 April 2026

112-S12 Wikipedia, "High courts of India". https://en.wikipedia.org/wiki/High_courts_of_India

Supports: 25 High Courts; High Courts with jurisdiction over more than one State or Union territory (Punjab and Haryana, Gauhati and others); Andhra Pradesh row 37, 28, 9

112-S13 Wikipedia, "Collegium system" (citing the judgments on Indian Kanoon and The Hindu, 17 October 2015). https://en.wikipedia.org/wiki/Collegium_system

Supports: First Judges Case 1981; Second Judges Case 1993 and the collegium in use since then; reference by President K.R. Narayanan in July 1998 (Third Judges Case); 16 October 2015, 4 to 1, 99th Amendment and NJAC Act struck down, "restoring the previous collegium system"

112-S14 PRS Legislative Research, "Legislative Brief: The Constitution (One Hundred and Twentieth Amendment) Bill, 2013 and The Judicial Appointments Commission Bill, 2013", 26 March 2014. https://prsindia.org/files/bills_acts/bills_parliament/2013/Legislative_Brief--_Constitution_120th_Amendment_and_JAC_Bill,_2013.pdf

Supports: Holdings of the First (given as 1982), Second (1994) and Third (1999) Judges Cases; collegium of the CJI and four senior-most Judges for the Supreme Court and of the CJI and two senior-most Judges for the High Courts, with the Governor and the High Court Chief Justice consulted; Memoranda of Procedure prepared by the Department of Justice, covering appointments and transfers

112-S15 Earlier topics of this programme, read for consistency: Topic 42, "Salient features of the Constitution"; Topic 104, "Amendment procedure: Article 368"

Supports: Topic 42: integrated judiciary; Articles 124A to 124C still printed; Articles 32 and 226 for the Fundamental Rights. Topic 104: the NJAC case of 16 October 2015 (4 to 1; 99th Amendment Act, 2014 and NJAC Act, 2014 struck down); Chapter IV of Part V and Chapter V of Part VI

112-S16 Ministry of Law and Justice, Legislative Department, *The Supreme Court (Number of Judges) Amendment Ordinance, 2026* (No. 1 of 2026), Gazette of India Extraordinary, Part II, Section 1, 16 May 2026. https://www.legislative.gov.in/static/uploads/2026/05/43403bd5a664399763a253a82fdc9377.pdf

Supports: Promulgated on 16 May 2026; "thirty-three" replaced by "thirty-seven" in section 2 of the 1956 Act

112-S17 *The Supreme Court (Number of Judges) Amendment Act, 2026* (No. 14 of 2026), Gazette of India Extraordinary, Part II, Section 1, 11 August 2026 (Gazette copy hosted by LiveLaw). https://www.livelaw.in/pdf_upload/2026/08/12/sc-number-of-judges-act-693336.pdf ; Gazette identifier CG-DL-E-11082026-275379, official URL: https://egazette.gov.in/WriteReadData/2026/275379.pdf

Supports: Act 14 of 2026; assent 11 August 2026; "thirty-three" replaced by "thirty-seven"; Ordinance repealed; deemed in force from 16 May 2026

112-S18 Department of Justice, statement of sanctioned and working strength of the High Courts as on 1 November 2025 (copy hosted by Supreme Court Observer). https://www.scobserver.in/wp-content/uploads/2025/11/High-Court-Vacancies_November-2025.pdf

Supports: Andhra Pradesh: sanctioned 37 (28 permanent, 9 additional); 25 High Courts listed

112-S19 High Court of Andhra Pradesh, "Chief Justice and Sitting Judges" (page as on 16 October 2026). https://aphc.gov.in/profiles.php

Supports: Justice Lisa Gill "sworn in as such on 25.04.2026" as Chief Justice

112-S20 High Court of Andhra Pradesh, "Former Chief Justices". https://aphc.gov.in/formerjudges.php?type=former_cj

Supports: Justice Dhiraj Singh Thakur sworn in as Chief Justice on 28 July 2023; laid down office on 24 April 2026

112-S21 High Court of Andhra Pradesh, "About Us: High Court". https://aphc.gov.in/aboutus.php?abt=hc

Supports: Order dated 26 December 2018; functioning from 1 January 2019, principal seat at Amaravati; the Hyderabad court as the common High Court from 2 June 2014

112-S22 *The Constitution (Ninety-ninth Amendment) Act, 2014*, text as hosted by PRS Legislative Research. https://prsindia.org/files/bills_acts/acts_parliament/2014/the-constitution-(99th-amendment)-act,-2014.pdf

Supports: Sections amending Articles 124(2), 127(1), 128, 217(1), 222(1), 224, 224A and 231(2), and inserting Articles 124A to 124C

112-S23 Supreme Court of India, S.P. Gupta v. President of India and Others, judgment of 30 December 1981, AIR 1982 SC 149, text on Indian Kanoon. https://indiankanoon.org/doc/1294854/

Supports: Date of the First Judges Case judgment and its AIR citation of 1982

112-S24 Wikipedia, "In re: Assent, Withholding or Reservation of Bills by the Governor and the President of India" (citing the Court's opinion in Special Reference No. 1 of 2025, 2025 INSC 1333, and The Hindu). https://en.wikipedia.org/wiki/In_re:_Assent,_Withholding_or_Reservation_of_Bills_by_the_Governor_and_the_President_of_India

Supports: Reference by President Droupadi Murmu under Article 143; five-Judge Bench; opinion of 20 November 2025; no court-fixed timelines; "deemed assent" rejected

112-S25 *The Judges (Inquiry) Act, 1968* (No. 51 of 1968), bare text hosted by the Ministry of Railways (Railway Board). https://indianrailways.gov.in/railwayboard/uploads/directorate/security/rpf/Files/law/BareActs/judges1968.html

Supports: Section 3(1): notice signed by not less than 100 Lok Sabha or 50 Rajya Sabha members; admission by the Speaker or the Chairman; section 3(2): committee of a Supreme Court Judge, a High Court Chief Justice and a distinguished jurist

112-S26 Prime Minister's Office (pmindia.gov.in), "Cabinet approves increase in the Judge strength of the Supreme Court of India by Four to 37 from 33", 5 May 2026. https://www.pmindia.gov.in/en/news_updates/cabinet-approves-increase-in-the-judge-strength-of-the-supreme-court-of-india-by-four-to-37-from-33/

Supports: History of the 1956 Act: Judges other than the CJI raised to 17 "by The Supreme Court (Number of Judges) Amendment Act, 1977" (year of the 1977 row in Section 3)

112-S27 Legislative Department, official Constitution of India (2025 publication). https://www.legislative.gov.in/static/uploads/2025/08/7af1daa22d65f9d04c00ae9b9aa5a799.pdf

Supports: Articles 136(2), 139A(1), 227(4): Armed Forces exceptions and case-transfer conditions

113 | Human Development Index

113-S1 UNDP, Human Development Reports, "Human Development" (about the approach). https://hdr.undp.org/about/human-development

Supports: "Expanding the richness of human life"; more freedom to live lives people value; more choice; Mahbub ul Haq; Amartya Sen's work on capabilities; the first HDR in 1990 introduced the approach and the HDI

113-S2 UNDP, Human Development Reports, "Human Development Index (HDI)". https://hdr.undp.org/data-center/human-development-index

Supports: HDI created to make people and their capabilities the ultimate criteria; summary measure of average achievement; three dimensions and their indicators; geometric mean of normalised indices; logarithm of income for its diminishing importance; does not reflect inequalities, poverty, human security, empowerment

113-S3 UNDP, Human Development Report 2025, Technical Notes. https://hdr.undp.org/sites/default/files/2025_HDR/HDR25_Technical_Notes.pdf

Supports: Goalposts (20 and 85; 0 and 18; 0 and 15; 100 and 75,000 in 2021 PPP dollars); dimension index formula; arithmetic mean of the two education indices; natural logarithm for income; geometric mean; four group cut-offs; IHDI with the Atkinson measure and the loss; GDI as the ratio of female to male HDI and its five groups; GII dimensions and indicators; PHDI adjustment factor from carbon dioxide emissions and material footprint per capita

113-S4 UNDP, "Human Development Report 2025: A matter of choice: People and possibilities in the age of AI" (report page). https://hdr.undp.org/content/human-development-report-2025

Supports: Title and release date (6 May 2025)

113-S5 UNDP India, press release "India's human development continues to make progress, ranks 130 out of 193 countries", 6 May 2025. https://www.undp.org/node/521916

Supports: India's rank 130 of 193 and HDI 0.685 for 2023; 0.676 and rank 133 for 2022; life expectancy, expected and mean years of schooling, GNI per capita in 2021 PPP dollars for 2022 and 2023; medium group, near the 0.700 threshold; loss of 30.7 per cent to inequality; rise of over 53 per cent since 1990; 1990 figures for life expectancy, expected schooling and GNI per capita

113-S6 UNDP India, press release "India shows progress in Human Development Index, ranks 134 out of 193 countries", 14 March 2024. https://www.undp.org/node/453371

Supports: HDR 2023/24 title and release date; rank 134 of 193 and HDI 0.644 for 2022; medium group; GII 0.437, rank 108 of 166; loss of 31.1 per cent; 0.434 in 1990 and a rise of 48.4 per cent; the editor's note that values and ranks from different editions should not be compared

113-S7 UNDP, Human Development Reports, "Reports and Publications" (opened 16 October 2026). https://hdr.undp.org/reports-and-publications

Supports: HDR 2025 as the latest global report listed; titles of HDR 2023/24 and earlier reports; the 2026 Global MPI as a separate statistical update

113-S8 UNDP, Human Development Reports, "Documentation and downloads". https://hdr.undp.org/data-center/documentation-and-downloads

Supports: HDR 2025 statistical annex tables for the HDI, IHDI, GDI, GII and PHDI, with time series from 1990 to 2023

113-S9 NCERT, *Understanding Economic Development* (Class X), Chapter 1, "Development", reprint 2026-27. https://ncert.nic.in/textbook/pdf/jess201.pdf

Supports: HDR compares countries by education, health and per capita income; the meaning of prefixing "Human"; Table 1.6 from HDR 2025 (India 9,047 dollars, 72 years, 6.9 years, rank 130; Sri Lanka 89; Bangladesh 130; rank column headed 2021-22); PPP dollars defined; mean years of schooling for age 25 and above

113-S10 Global Data Lab, Subnational Human Development Index, version 10.2, table for India. https://globaldatalab.org/shdi/table/shdi/IND/?levels=1+4&interpolation=0&extrapolation=0

Supports: Andhra Pradesh 0.681 (2023), 0.673 (2022) and 0.439 (1990); India total 0.685, 0.676 and 0.446

113-S11 Wikipedia, "Human Development Index" (citing UNDP, HDR 2010; Wolff, Chong and Auffhammer, *Economic Journal*, 2011; Harttgen and Klasen, 2012; Kovacevic, 2011; WWF, *Living Planet Report 2014*; Leiwakabessy and Amaluddin, 2020).
https://en.wikipedia.org/wiki/Human_Development_Index

Supports: The change of indicators in the 2010 report; the pre-2010 indicators (adult literacy with two-thirds weight, gross enrolment with one-third, GDP per capita in PPP) and equal weights of one third; criticisms: misclassification from data errors and formula changes, inequality, sustainability, quantity not quality of schooling, unemployment and democracy

113-S12 Wikipedia, "List of countries by inequality-adjusted Human Development Index" (citing UNDP, HDR 2025, pp. 283-287).
https://en.wikipedia.org/wiki/List_of_countries_by_inequality-adjusted_Human_Development_Index

Supports: India's IHDI 0.475 for 2023, HDI 0.685 and loss 30.7 per cent

113-S13 Wikipedia, "Gender Inequality Index" (citing UNDP, HDR 2010, *The Real Wealth of Nations*).
https://en.wikipedia.org/wiki/Gender_Inequality_Index

Supports: GII introduced in the 2010 HDR to reform the GDI and the Gender Empowerment Measure of 1995

113-S14 Wikipedia, "Gender Development Index" (citing Klasen, *Journal of Human Development*, 2006). https://en.wikipedia.org/wiki/Gender_Development_Index

Supports: Earlier gender-related development index introduced in 1995; not the current ratio-based GDI, introduced in 2014 (see S16)

113-S15 Ritimo, catalogue entry "India Human Development Report 2011: Towards Social Inclusion".
https://www.ritimo.org/India-Human-Development-Report-2011-Towards-Social-Inclusion

Supports: Title, Planning Commission as author, Oxford University Press, 2011; HDI and profile for India and its States

113-S16 UNDP, issue paper on gender indices.
https://hdr.undp.org/system/files/documents/hdroissuepaperongenderindices.pdf

Supports: Table 1: old GDI (1995-2009) and new ratio-based GDI (2014 onward)

113-S17 UNDP, Human Development Report 2025, Overview, “Human development indices”, India row (printed page 16).
https://hdr.undp.org/system/files/documents/global-report-document/hdr2025overviewen.pdf

Supports: IHDI 0.475; loss 30.7%; GDI 0.874, group 5; GII 0.403, rank 102; 2023 data

DAY 12 · SOURCES AND REFERENCES

Balance of Payments: current account and capital account

114-S1

NCERT, Introductory Macroeconomics (Class XII), Chapter 6 "Open Economy Macroeconomics", section 6.1 "The Balance of Payments". https://ncert.nic.in/textbook/pdf/leec106.pdf
IMF, Balance of Payments and International Investment Position Manual, sixth edition (BPM6), paragraph 13.2: current plus capital-account balance.

Used for: BoP as the record of transactions in goods, services and assets between residents and the rest of the world over a period; current account as trade in goods and services and transfer payments; trade in services including factor income; transfers as receipts for "free" (gifts, remittances, grants); balance of trade as exports minus imports of goods; net invisibles; with a zero capital-account balance, current-account surplus as net lending and deficit as net borrowing; in general the combined current and capital-account balance determines net lending/borrowing; CAD financed by a capital account surplus, by selling assets or borrowing abroad; capital account as all international transactions in assets, purchases as debits and sales as credits, FDIs, FIIs, external borrowings and assistance; autonomous and accommodating transactions, above and below the line; official reserve sale; "The decrease (increase) in official reserves is called the overall balance of payments deficit (surplus)"; BoP equilibrium; errors and omissions; Table 6.1 heads (non-factor services, income, transfers; external assistance, ECBs, short-term debt, banking capital of which non-resident deposits, foreign investment, other flows, reserves change)

114-S2

Reserve Bank of India, press release 2026-2027/412, "Developments in India's Balance of Payments during the Fourth Quarter (January-March) of 2025-26" (8 June 2026), with Table 1. https://rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=62890

Used for: CAD of US$ 25.2 billion (0.6 per cent of GDP) in 2025-26 and US$ 22.9 billion (0.6 per cent) in 2024-25; net invisibles of US$ 312.0 billion and US$ 264.0 billion; net FDI US$ 6.9 billion and US$ 1.0 billion; FPI outflow US$ 16.4 billion and inflow US$ 3.6 billion; reserves depleted by US$ 23.6 billion and US$ 5.0 billion; annual rows for goods, POL, services, primary income, secondary income, capital and financial account, NRI deposits, ECBs, reserve assets [increase (-), decrease (+)], errors and omissions; current account surplus of US$ 7.1 billion (0.7 per cent of GDP) in Q4 2025-26; computer services and other business services; primary income outgo mainly reflecting investment income; personal transfers mainly remittances by Indians employed overseas; footnote "Net invisibles receipts comprise services, primary income and secondary income accounts"

114-S3

Reserve Bank of India, press release 2026-2027/1015, "Developments in India's Balance of Payments during the First Quarter (April-June) of 2026-27" (1 September 2026), with Table 1. https://rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=63493

Used for: CAD of US$ 4.2 billion (0.5 per cent of GDP) in Q1 2026-27; goods, services, primary income and secondary income balances; personal transfers of US$ 42.9 billion against US$ 33.2 billion; net FDI US$ 6.1 billion; FPI outflow US$ 9.6 billion; NRI deposits US$ 2.8 billion; ECBs US$ 3.3 billion; reserves depleted by US$ 8.1 billion; capital and financial account US$ 2.6 billion; errors and omissions US$ 1.6 billion; the layout A, B, C and the label "Errors & Omissions (-) (A+B)"; data first released as preliminary

114-S4

Reserve Bank of India, press release 2026-2027/457, "Developments in India's Balance of Payments for the Month of April 2026" (15 June 2026). https://rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=62935

Used for: The RBI's monthly BoP statement for April 2026 and its date of release

114-S5

Reserve Bank of India, National Summary Data Page, published 16 October 2026. https://rbi.org.in/Scripts/BS_NSDPDisplay.aspx

Used for: Reserves on 9 October 2026 (US$ million): total 726,027.44; FCA 597,605.42; gold 105,094.23; SDRs 18,547.92; IMF reserve position 4,779.87. Also cross-checks Q1 2026-27 BoP totals.

114-S6

Government of India, Economic Survey 2025-26, Chapter 4 "External Sector: Playing the Long Game". https://www.indiabudget.gov.in/economicsurvey/doc/eschapter/echap04.pdf

Used for: BoP as "a consolidated record of India's transactions with the rest of the world"; remittance inflows of US$ 55.6 billion in FY11 and US$ 135.4 billion (provisional) in FY25

114-S7

Wikipedia, "Balance of payments" (citing IMF, Balance of Payments Manual, Chapter 2 "Overview of the Framework", para. 2.15; J. Orlin Grabbe, International Financial Markets, 3rd edition, 1996, pp. 430-452; John Sloman, Economics, 2004). https://en.wikipedia.org/wiki/Balance_of_payments

Used for: Title of the sixth edition of the IMF manual; the IMF's current, capital and financial accounts; the IMF capital account recording mainly capital transfers; double entry accounting and the balancing item, positive or negative; surplus and deficit as accumulation or decumulation of reserves

114-S8

Reserve Bank of India, press release, "RBI releases Report of the Committee on Fuller CAC" (1 September 2006). https://www.rbi.org.in/scripts/BS_PressReleaseDisplay.aspx?prid=15329

Used for: Committee on Fuller Capital Account Convertibility chaired by S.S. Tarapore, set up by the RBI in consultation with the Government of India; report submitted on 31 July 2006

114-S9

Reserve Bank of India, Foreign Exchange Department, Citizens' Charter (preface dated 10 December 2012). https://www.rbi.org.in/scripts/PublicationsView.aspx?id=12251

Used for: India accepted the move towards full current account convertibility in August 1994, under its Article VIII obligations as a member of the IMF; the Committee on Fuller Capital Account Convertibility constituted in 2006

114-S10

The 1991 Project, public repository, "Report of the Committee on Capital Account Convertibility (1997), chaired by S. S. Tarapore". https://drupal.the1991project.com/public-repository/committee-reports/report-committee-capital-account-convertibility-1997-chaired-s

Used for: Committee on Capital Account Convertibility set up by the RBI in 1997 under S.S. Tarapore; the 1990-91 balance-of-payments crisis

114-S11

Government of India, Budget 1991-92, speech of Manmohan Singh, Minister of Finance (24 July 1991). https://www.indiabudget.gov.in/doc/bspeech/bs199192.pdf

Used for: Foreign exchange reserves "in the range of Rs.2500 crores", which "would suffice to finance imports for a mere fortnight"; "large borrowings from the International Monetary Fund in July 1990 and January 1991"

114-S12

Wikipedia, "Capital account convertibility" (citing Vijay Joshi and I.M.D. Little, India's Economic Reforms, 1991-2001, Oxford University Press). https://en.wikipedia.org/wiki/Capital_account_convertibility

Used for: Meaning of capital account convertibility: converting local financial assets into foreign financial assets freely, at market-determined exchange rates

114-S13

IMF, Balance of Payments and International Investment Position Manual, sixth edition (BPM6), Chapter 11 "Primary Income Account". https://www.imf.org/external/pubs/ft/bop/2007/pdf/chap11.pdf

Used for: Primary income account shows primary income flows between residents and nonresidents; investment income as "the return for providing financial assets", made up of dividends, reinvested earnings and interest; title of the manual

114-S14

IMF, BPM6, Chapter 12 "Secondary Income Account". https://www.imf.org/external/pubs/ft/bop/2007/pdf/chap12.pdf

Used for: "The secondary income account shows current transfers between residents and nonresidents"; personal transfers as current transfers between resident and nonresident households, part of secondary income

114-S15

IMF, BPM6, Chapter 13 "Capital Account". https://www.imf.org/external/pubs/ft/bop/2007/pdf/chap13.pdf

Used for: Capital account shows capital transfers and the acquisition and disposal of nonproduced, nonfinancial assets; current and capital accounts show nonfinancial transactions, the financial account shows how net lending or borrowing is financed

114-S16

Reserve Bank of India, Report of the Committee on Capital Account Convertibility (1997), Introduction. https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?ID=170

Used for: Committee on Capital Account Convertibility appointed by the RBI on 28 February 1997, chaired by S.S. Tarapore; CAC as the freedom to convert local financial assets into foreign financial assets; current account convertibility established with India's acceptance of Article VIII obligations of the IMF in August 1994

114-S17

IMF, BPM6 complete manual, especially Appendix 5 and Chapter 12. https://data.imf.org/-/media/iData/External-Storage/Documents/73FBCD5B6CDE4D289C60B9B0CAA40622/en/2-bpm6.pdf

Used for: BoP economic residence; personal transfers versus compensation of short-term workers; current/capital/financial account distinctions

115 | Air masses and fronts

115-S1 NCERT, *Fundamentals of Physical Geography* (Class XI), Chapter 9, "Atmospheric Circulation and Weather Systems", reprint 2026-27. https://www.ncert.nic.in/textbook/pdf/kegy209.pdf

Supports: Air with distinctive characteristics of temperature and humidity called an air mass; "a large body of air having little horizontal variation in temperature and moisture"; vast ocean surface or vast plains; source regions as the homogenous surfaces over which air masses form; classification by source region; the five source regions and the five types (mT, cT, mP, cP, cA); tropical air masses warm and polar cold; front as the boundary zone between two air masses; frontogenesis; the four types of fronts and how each is named; "If an air mass is fully lifted above the land surface, it is called the occluded front."; fronts in the middle latitudes with a steep gradient in temperature and pressure, abrupt changes in temperature, clouds and precipitation; warm air gliding over cold air and a sequence of clouds ahead of the warm front; the cold front pushing the warm air up, cumulus clouds along the cold front; the front occluded and the cyclone dissipating; extra-tropical cyclones forming along the polar front and moving west to east; the clear frontal system not present in tropical cyclones

115-S2 Encyclopaedia Britannica, "air mass". https://www.britannica.com/science/air-mass

Supports: Definition: a large body of air having nearly uniform conditions of temperature and humidity at any given level of altitude

115-S3 Encyclopaedia Britannica, "front" (meteorology), revised by John P. Rafferty. https://www.britannica.com/science/front-meteorology

Supports: Front as the interface or transition zone between two air masses of different density and temperature; the name given by Norwegian meteorologists during World War I after a battle line; cold air undercutting warm air; cold-front slope of about 1/50 to 1/100; warm front riding over cold air, moving more slowly, much gentler slope, about 320 km ahead of the surface position at 1.5 km; showers and thunderstorms at a cold front ending abruptly; more uniform and widespread precipitation at a warm front; stationary front with little or no horizontal motion of the colder air; occluded front; polar front poleward of about 30° latitude, thermal contrast supplying energy for cyclones

115-S4 NOAA, JetStream, "Air Masses" (updated 5 June 2023). https://www.noaa.gov/jetstream/synoptic/air-masses

Supports: Continental (c) dry and maritime (m) moist; arctic (A), polar (P) and tropical (T) by temperature; cA very cold and dry, cP dry and cold but less so than cA, cT hot and dry; Canada as a source of cP air for North America; air masses acquiring the properties of the surface below and changing as they move

115-S5 NOAA, JetStream, "How to read Surface Weather Maps" (updated 23 September 2025). https://www.noaa.gov/jetstream/wxmaps

Supports: Symbols of the cold, warm, stationary and occluded fronts; weather after the passage of cold and warm fronts; a cold or warm front that stops moving becoming a stationary front; occluded front formed when a cold front catches up with a warm front, signalling a mature, weakening system

115-S6 NOAA, JetStream, "Norwegian Cyclone Model" (updated 8 September 2023). https://www.noaa.gov/jetstream/synoptic/norwegian-cyclone-model

Supports: The life cycle: a front, often stationary, between warm and cold air; a wave and kink; the stationary front becoming a cold front and a warm front; the faster cold front overtaking the warm front to form an occluded front; the occlusion cutting off warm, moist air and the low weakening

115-S7 Met Office, "Weather fronts". https://weather.metoffice.gov.uk/learn-about/weather/atmosphere/weather-fronts

Supports: Cold air pushing under warm air and warm air rising over cold air; occlusion when a cold front catches up with a warm front, warm air lifted off the surface, characteristics of both warm and cold fronts; map symbols and colours

115-S8 MetLink (Royal Meteorological Society), "Air masses and fronts", reproduced with the permission of the Met Office. https://www.metlink.org/resource/air/

Supports: Nearly stagnant air in source regions; subtropical high pressure belts and polar regions as the main sources; modification by sea and land tracks and by heating or cooling from below; the air masses that reach Britain, their sources and weather; Vilhelm Bjerknes and Bergen; Jacob Bjerknes and the fronts in 1919; the passage of a mature depression (cirrus, cirrostratus up to 600 miles ahead, altostratus, nimbostratus, warm sector, cumulonimbus, pressure and temperature changes)

115-S9 India Meteorological Department, *MAUSAM*, Vol. 77, No. 3 (July 2026), pp. 745-762: Shashi Kant, Krishna Mishra, Naveen Kumar, R. K. Jenamani and Vivek Kumar, "Assessment of wet spell over Northwest India during the first week of March 2024". https://metnet.imd.gov.in/docs/mausamdocs/17732.pdf

Supports: Western disturbances originating in the Mediterranean; winter precipitation over the Western Himalayan Region and the plains of north-west India, mainly as snowfall in the higher reaches and as rain on the plains

115-S10 American Meteorological Society, *Glossary of Meteorology*, "airmass classification". https://glossary.ametsoc.org/wiki/Airmass_classification

Supports: The Bergeron classification as the most widely accepted; T, P and A; c and m; k and w for air colder or warmer than the surface beneath it, showing low-level stability and the weather; some authors adding equatorial (E)

115-S11 American Meteorological Society, *Glossary of Meteorology*, "source region". https://glossary.ametsoc.org/wiki/Source_region

Supports: Source region as an extensive region with essentially uniform surface conditions, placed in the general circulation so that air stays in contact with the surface long enough to acquire the properties of an air mass

115-S12 American Meteorological Society, *Glossary of Meteorology*, "polar-front theory". https://glossary.ametsoc.org/wiki/Polar-front_theory

Supports: A theory of the Scandinavian school of meteorologists; a polar front separating polar and tropical air masses, on which cyclonic disturbances form and move through a life cycle; reference to J. Bjerknes and H. Solberg, 1922

115-S13 Wikipedia, "Air mass" (citing the AMS *Glossary of Meteorology*, entries "Airmass classification", "Arctic air", "Superior air", "Trade air" and "Tropical air"). https://en.wikipedia.org/wiki/Air_mass

Supports: cA over ice and snow-covered ground, northern Siberia in winter, shallow in summer and modifying quickly as it moves equatorward; cT with the Sahara as the main source, also the Arabian Peninsula and central arid Australia; mT from the Caribbean Sea and the southern Gulf of Mexico

115-S14 UCAR Center for Science Education (University Corporation for Atmospheric Research), "Weather Fronts". https://scied.ucar.edu/learning-zone/how-weather-works/weather-fronts

Supports: Cold fronts moving up to twice as fast as warm fronts; cumulus or cumulonimbus clouds at a cold front; warm fronts moving more slowly; stationary front: often cloudy, rain or snow often falling, staying put for days, breaking apart or becoming a cold or warm front; occluded front: precipitation from cumulonimbus or nimbostratus clouds, clearer and drier skies after it passes; map symbols

115-S15 Robert Marc Friedman and David M. Schultz, "Bergeron, Tor Harold Percival", *Complete Dictionary of Scientific Biography*, on Encyclopedia.com. https://www.encyclopedia.com/science/dictionaries-thesauruses-pictures-and-press-releases/bergeron-tor-harold-percival

Supports: Bergeron credited with discovering the occlusion process; by 1922 he had convinced Jacob Bjerknes of its importance to the evolution of extratropical cyclones

116 | Continents and oceans

116-S1 Wikipedia, "Continent" (its area table credits Encyclopaedia Britannica). https://en.wikipedia.org/wiki/Continent

Supports: Areas of the seven continents (Asia 44,614,000; Africa 30,365,000; North America 24,230,000; South America 17,814,000; Antarctica 14,200,000; Europe 10,000,000; Oceania/Australia 8,510,926 km²) and their shares of world land; total land area of 149,733,926 km²; Africa and Asia joined by the Isthmus of Suez, the Nile as the earlier boundary; North and South America joined by the Isthmus of Panama; the Bering Land Bridge in the ice ages, on the shelf in and around the Bering Sea

116-S2 Encyclopaedia Britannica, "continent". https://www.britannica.com/science/continent

Supports: Order of the continents by size (Asia, Africa, North America, South America, Antarctica, Europe, Australia); Europe and Asia sometimes considered a single continent, Eurasia

116-S3 NOAA, National Ocean Service, "How many oceans are there?" (page updated 23 September 2026). https://oceanservice.noaa.gov/facts/howmanyoceans.html

Supports: The ocean covering 71 percent of the earth; four historically named oceans; the Southern Ocean as the newest named ocean, recognised by most countries including the United States; the US Board on Geographic Names definition, from the coast of Antarctica to 60° S; boundaries proposed to the IHO in 2000 and not yet ratified

116-S4 Wikipedia, "Ocean" (its size table credits the Encyclopedia of Earth, the IHO, Tomczak 2005, Encyclopaedia Britannica and the ITU; Challenger Deep from Greenaway and others, "Revised depth of the Challenger Deep"). https://en.wikipedia.org/wiki/Ocean

Supports: Areas and shares of the five oceans and their order by size; about 71 per cent of the surface and about 361 million km²; the US Board on Geographic Names recognising the Southern Ocean since 1999; every ocean basin having a mid-ocean ridge; Challenger Deep about 10,935 m

116-S5 Wikipedia, "Southern Ocean" (citing W. Wong, "National Geographic adds 5th ocean to world map", ABC News, 10 June 2021; IHO, *Limits of Oceans and Seas*, 3rd edition, 1953; IHO draft 4th edition, 2002). https://en.wikipedia.org/wiki/Southern_Ocean

Supports: National Geographic Society recognition in June 2021; the Southern Ocean omitted from the IHO's 1953 edition; the 2000 definition (south of 60° S) not formally adopted; deepest point 7,434 m (Factorian Deep, 2019) and the other figure of 7,236 m at the southern end of the South Sandwich Trench; the second smallest ocean

116-S6 Wikipedia, "Five Deeps Expedition" (citing the expedition's press releases; The Guardian, 22 December 2018; BBC News, 9 September 2019). https://en.wikipedia.org/wiki/Five_Deeps_Expedition

Supports: The deepest point of each ocean: Challenger Deep, Mariana Trench (10,928 m dive, 2019); Brownson Deep, Puerto Rico Trench (8,376 m); southern end of the South Sandwich Trench; Sunda (Java) Trench; Molloy Deep (5,550 m)

116-S7 Wikipedia, "Seven Summits" (citing 8000ers.com for Mont Blanc and the Australian Universities' Expedition, 1976, for Puncak Jaya). https://en.wikipedia.org/wiki/Seven_Summits

Supports: Highest peak of each continent with height and range: Everest 8,849 m (Himalayas), Aconcagua (Andes), Denali (Alaska Range), Kilimanjaro 5,895 m, Elbrus 5,642 m (Caucasus), Vinson 4,892 m (Sentinel Range), Puncak Jaya 4,884 m (Sudirman Range); Kosciuszko 2,228 m (Great Dividing Range) as the highest on the Australian mainland; Mont Blanc 4,810 m (Alps); Elbrus's European status depending on the Europe-Asia boundary

116-S8 Wikipedia, "Extreme points of Earth". https://en.wikipedia.org/wiki/Extreme_points_of_Earth

Supports: Everest 8,848.86 m, set in 2020 by Nepali and Chinese authorities; Challenger Deep 11,034 m as another figure; the Dead Sea shore as the lowest point on dry land; the Denman Glacier canyon as the lowest point on land not covered by liquid water

116-S9 Wikipedia, "List of places on land with elevations below sea level" (citing J. Amos, BBC, 12 December 2019, and Morlighem and others, *Nature Geoscience* 13, 2019, for the Denman Glacier; USGS, "Highest and Lowest Elevations"). https://en.wikipedia.org/wiki/List_of_places_on_land_with_elevations_below_sea_level

Supports: Lowest point of each continent: Dead Sea 430 m, Lake Assal 153 m, Badwater Basin 86 m, Laguna del Carbon 105 m, Caspian Sea shore 28 m, Lake Eyre 16 m below sea level; Denman Glacier canyon bedrock about 3,500 m below sea level

116-S10 Wikipedia, "List of river systems by length" (citing Encyclopaedia Britannica, "Nile River" and "Amazon River", 2020; Liu and others, "Pinpointing the sources and measuring the lengths of the principal rivers of the world", *International Journal of Digital Earth* 2(1), 2009; Murray Darling Basin Authority, 2015). https://en.wikipedia.org/wiki/List_of_river_systems_by_length

Supports: Lengths of the Nile (6,650 km), Amazon (6,400 km), Yangtze (6,300 km), Mississippi-Missouri system (6,275 km), Volga (3,645 km), Murray-Darling system (3,672 km); the Nile and Amazon dispute, the 2007 and 2008 claims, the 2009 study and Britannica's 2020 view, the channel south of Marajo Island; the Amazon's average discharge of 230,000 cubic metres per second, the largest in the list

116-S11 Wikipedia, "List of deserts by area" (citing the CIA World Factbook and Geoscience Australia, "Areas of Australian and territory deserts"). https://en.wikipedia.org/wiki/List_of_deserts_by_area

Supports: Areas and types of deserts: Antarctic 14.2, Arctic 13.9, Sahara 9.2, Arabian 2.33, Great Australian 1.371, Gobi 1.295, Patagonian 0.673, Great Basin 0.492 million km²; Great Victoria Desert as a part of the Great Australian Desert (348,750 km²); the Arctic Desert in northern North America and northern Europe

116-S12 Wikipedia, "Land and water hemispheres" (citing S. W. Boggs, "This Hemisphere", *Journal of Geography* 44(9), 1945; A. Berget, 1913; J.-G. Affholder, 2002). https://en.wikipedia.org/wiki/Land_and_water_hemispheres

Supports: Definition of the two hemispheres; land hemisphere centred in Nantes (1945), 53 per cent water and 47 per cent land, 80.1 per cent of the world's land; water hemisphere near the Bounty Islands, about 89 per cent water, 6 per cent dry land and 5 per cent polar ice; other centres of 1913 and 2002

116-S13 Wikipedia, "Lake". https://en.wikipedia.org/wiki/Lake

Supports: The Caspian Sea as the largest lake by surface area (371,000 km²), regarded by geographers as a huge inland salt lake; Lake Baikal as the deepest lake (1,637 m) and the largest freshwater lake by volume (23,600 km³)

116-S14 Wikipedia, "Plateau" (citing Huggett, *Fundamentals of Geomorphology*, 2011, and Leong, *Certificate Physics and Human Geography*, 1995, p. 17). https://en.wikipedia.org/wiki/Plateau

Supports: Intermontane, lava, continental and piedmont plateaus with their examples; the Tibetan Plateau as the largest and highest (about 2,500,000 km², about 5,000 m); the Altiplano in Bolivia and Peru; the Deccan and Columbia plateaus as lava plateaus; the Antarctic Plateau; the Western Plateau of Australia as an ancient craton, 305 to 460 m; the Ethiopian Highlands as the highest African plateau

116-S15 NCERT, *The Earth Our Habitat* (Class VI), Chapter 5, "Major Domains of the Earth", text as hosted by IIT Kanpur's SATHEE portal: "the greater part of the land mass lies in the Northern Hemisphere"; "Australia is the smallest continent that lies entirely in the Southern Hemisphere"; "Antarctica, completely in the Southern Hemisphere"; "Asia is separated from Europe by the Ural mountains on the west". https://sathee.iitk.ac.in/ncert-books/class-06/social-science/the-earth-our-habitat/chapter-05-major-domains-of-the-earth

Supports: The greater part of the earth's landmass in the Northern Hemisphere; Australia and Antarctica lying entirely in the Southern Hemisphere; the Urals separating Europe and Asia; Europe and Asia together known as Eurasia

116-S16 United States Geological Survey, news release "New elevation for nation's highest peak", 2 September 2015. https://www.usgs.gov/news/national-news-release/new-elevation-nations-highest-peak

Supports: Denali's elevation of 20,310 feet (6,190 m) from the mid-June 2015 summit survey

116-S17 Encyclopaedia Britannica, "Denali". https://www.britannica.com/place/Denali

Supports: Denali in the Alaska Range, south-central Alaska; the highest peak in North America

116-S18 Encyclopaedia Britannica, "Aconcagua". https://www.britannica.com/place/Mount-Aconcagua

Supports: Aconcagua 6,959 m (22,831 feet, the figure of Argentina's Military Geographical Institute), in the Andes of Argentina, on the Chilean border; the highest peak in the Western Hemisphere

116-S19 Encyclopaedia Britannica, "Vinson Massif". https://www.britannica.com/place/Vinson-Massif

Supports: Vinson 4,892 m, in the Sentinel Range of the Ellsworth Mountains; the highest mountain on the continent of Antarctica

116-S20 Encyclopaedia Britannica, "Mount Kosciuszko". https://www.britannica.com/place/Mount-Kosciuszko

Supports: Kosciuszko 2,228 m, in New South Wales; Australia's highest peak

116-S21 Encyclopaedia Britannica, "Arctic Ocean". https://www.britannica.com/place/Arctic-Ocean

Supports: The Arctic as the smallest of the world's oceans

116-S22 Encyclopaedia Britannica, "Southern Ocean". https://www.britannica.com/place/Southern-Ocean

Supports: The Southern (Antarctic) Ocean as the waters surrounding Antarctica south of 60° S

116-S23 Encyclopaedia Britannica, "Puerto Rico Trench". https://www.britannica.com/place/Puerto-Rico-Trench

Supports: The deepest point of the Atlantic Ocean in the Puerto Rico Trench, named the Milwaukee Depth, 8,380 m

116-S24 Encyclopaedia Britannica, "Antarctica". https://www.britannica.com/place/Antarctica

Supports: Antarctica's area of about 14.2 million km²

116-S25 Encyclopaedia Britannica, "Europe". https://www.britannica.com/place/Europe

Supports: Europe as the second smallest continent

116-S26 Encyclopaedia Britannica, "Greenland". https://www.britannica.com/place/Greenland

Supports: Greenland as the world's largest island, in the North Atlantic Ocean

116-S27 Encyclopaedia Britannica, "Mid-Atlantic Ridge". https://www.britannica.com/place/Mid-Atlantic-Ridge

Supports: The ridge along the north-south axis of the Atlantic, from the Arctic Ocean to near the southern tip of Africa, about 16,000 km long

116-S28 Encyclopaedia Britannica, "Bering Strait". https://www.britannica.com/place/Bering-Strait

Supports: The strait separating Asia and North America at their closest point, about 85 km wide, linking the Arctic Ocean with the Bering Sea; a land bridge in the Ice Age

116-S29 Encyclopaedia Britannica, "India: The Deccan". https://www.britannica.com/place/India/The-Deccan

Supports: The Deccan lava plateau, occupying much of the north-western portion of the Indian peninsula

116-S30 Encyclopaedia Britannica, "Deccan Traps". https://www.britannica.com/science/Deccan-Traps

Supports: The Deccan Traps as a large igneous province of lava flows in west-central India

116-S31 Encyclopaedia Britannica, "Atlas Mountains". https://www.britannica.com/place/Atlas-Mountains

Supports: The Atlas Mountains as a series of mountain ranges in north-western Africa (Morocco, Algeria, Tunisia)

116-S32 British Antarctic Survey, Antarctica’s Gamburtsev Province Project.
https://www.bas.ac.uk/project/agap/

Supports: Known subglacial Gamburtsev Mountains beneath the East Antarctic ice sheet; corrects the “no known mountains” claim

116-S33 United States Government Publishing Office, “Denali National Park and Preserve, Alaska”.
https://www.govinfo.gov/features/denali-national-park

Supports: 2025 US federal restoration of Mount McKinley name; same 6,190 m peak

117 | Solar energy and the International Solar Alliance

117-S1 Ministry of New and Renewable Energy (MNRE), "Solar Overview". https://mnre.gov.in/en/solar-overview/

Supports: National Solar Mission launched on 11 January 2010; solar energy's central place in the NAPCC; objective of making India a global leader in solar energy; solar installed capacity around 70.10 GW as on 30 June 2023; NDC target of about 50 per cent and 45 per cent emission intensity cut; list of schemes (Solar Park Scheme, Grid Connected Solar Rooftop Scheme and others)

117-S2 Cabinet decision on the PM India website, "Revision of cumulative targets under National Solar Mission from 20,000 MW by 2021-22 to 1,00,000 MW", 17 June 2015. https://www.pmindia.gov.in/?p=65101

Supports: Original target of 20,000 MW by 2021-22; fivefold rise to 1,00,000 MW by 2022; 40 GW rooftop and 60 GW large and medium scale grid-connected projects; investment of about ₹6,00,000 crore; the release's statement that the Mission was launched in 2009

117-S3 Government of India, Prime Minister's Council on Climate Change, "National Action Plan on Climate Change" (2008; copy hosted by Climate Policy Radar). https://cdn.climatepolicyradar.org/navigator/IND/2008/national-action-plan-on-climate-change_e519421f95914b49614d76d4d62f2456.pdf

Supports: The eight National Missions and their names; the Solar Mission's aim to "significantly increase the share of solar energy in the total energy mix"; at least 1,000 MW of concentrating solar power and 1,000 MW a year of local PV production by 2017

117-S4 Wikipedia, "National Solar Mission" (citing PIB, "Use of Solar and Wind Energy", August 2013, for Phase 1 and the original Phase 3 target; PIB, "MNRE: Year End Review", December 2015, for the revision; Central Electricity Authority, "Installed Capacity Reports", for 100 GW in January 2025). https://en.wikipedia.org/wiki/National_Solar_Mission

Supports: Launch by MNRE on 11 January 2010 as the JNNSM; the three phases and their years; Phase 1 aim of 1,100 MW grid-connected by 2013; 20 GW as the original Phase 3 target; revision to 100 GW; 100 GW milestone independently supported by S27

117-S5 Press Information Bureau (PIB), "National Statement by Prime Minister Shri Narendra Modi at COP26 Summit in Glasgow", 1 November 2021. https://www.pib.gov.in/PressReleasePage.aspx?PRID=1768712

Supports: The five commitments: 500 GW non-fossil capacity by 2030; 50 per cent of energy requirements from renewable energy by 2030; one billion tonnes; net zero by 2070

117-S6 Government of India, "India's Updated First Nationally Determined Contribution Under Paris Agreement (2021-2030)", submitted to the UNFCCC in August 2022. https://unfccc.int/sites/default/files/NDC/2022-08/India%20Updated%20First%20Nationally%20Determined%20Contrib.pdf

Supports: "About 50 percent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030"; emissions intensity of GDP cut by 45 per cent from the 2005 level by 2030

117-S7 PIB (Cabinet), "Cabinet approves India's Nationally Determined Contribution (2031-2035) to be communicated to the United Nations Framework Convention on Climate Change", 25 March 2026. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2245209&reg=3&lang=1

Supports: 52.57 per cent non-fossil capacity in February 2026, target met five years ahead of the timeline; first NDC (2015) targets of 40 per cent and their achievement 9 and 11 years ahead

117-S8 MNRE, "Physical Progress" (page updated 8 October 2026; seen on 16 October 2026). https://mnre.gov.in/en/physical-progress/

Supports: Cumulative capacity as on 30 September 2026: solar 171,051.46 MW, of which ground-mounted 125.65 GW, grid-connected rooftop 33.41 GW, hybrid (solar component) 5.36 GW, off-grid 6.63 GW; renewable energy with large hydro 299,246.53 MW; nuclear 8,780.00 MW; total non-fossil 308,026.53 MW

117-S9 MNRE, "Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM-KUSUM)" (page updated 7 November 2025). https://mnre.gov.in/en/pradhan-mantri-kisan-urja-suraksha-evam-utthaan-mahabhiyaan-pm-kusum/

Supports: Administrative approval of 8 March 2019; Components A (10,000 MW), B (14 lakh standalone pumps) and C (35 lakh grid-connected pumps, feeder-level solarisation); 34,800 MW by March 2026; central support of ₹34,422 crore; historical period stated on scheme page: till 31 March 2026; later orders extend eligible project completion (see S28)

117-S10 PIB (Cabinet), "Cabinet approves PM-Surya Ghar: Muft Bijli Yojana for installing rooftop solar in One Crore households", 29 February 2024. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2010130

Supports: Launch by the Prime Minister on 13 February 2024; outlay of ₹75,021 crore; one crore households; up to 300 units free a month; CFA of 60 per cent up to 2 kW and 40 per cent for 2 to 3 kW, capped at 3 kW; ₹30,000, ₹60,000 and ₹78,000; model solar village in each district

117-S11 MNRE, "Production Linked Incentive (PLI) Scheme: National Programme on High Efficiency Solar PV Modules" (page updated 8 August 2023). https://mnre.gov.in/en/production-linked-incentive-pli/

Supports: Outlay of ₹24,000 crore; Tranche I (₹4,500 crore, approved 7 April 2021, 8,737 MW to three bidders); Tranche II (₹19,500 crore, approved 21 September 2022, 39,600 MW to 11 bidders); incentive for five years after commissioning

117-S12 MNRE, "Green Energy Corridor: Overview" (page updated 21 August 2023) and the "Green Energy Corridors" programme page. https://mnre.gov.in/en/green-energy-corridor-0verview/ ; https://mnre.gov.in/en/green-energy-corridors/

Supports: The 2012 PGCIL study and its report of September 2012; dedicated transmission for large solar and wind plants; work begun in 2015; Intra-State GEC Phase I and Phase II

117-S13 MNRE backgrounder released by PIB, "India Shines Bright! A New Era in Solar Energy: Progress Driven by the International Solar Alliance", 6 November 2024. https://static.pib.gov.in/WriteReadData/specificdocs/documents/2024/nov/doc2024117431401.pdf

Supports: ISA launched in 2015 by India and France at COP21 in Paris; Founding Conference on 11 March 2018; 120 member and signatory countries, 102 ratified; seventh Assembly (3 to 6 November 2024), India President and France Co-President for 2024 to 2026; Ashish Khanna selected as third Director General (see S29 for timing); 'Towards 1000' targets; nine programmes in three areas; STAR-C; Global Solar Facility, viability gap funding, SolarX; third World Solar Report and its four parts; 500 GW and 50 per cent as Panchamrit targets; 90.76 GW of solar in September 2024

117-S14 President of India, address at the "Inaugural Session of the Eighth Session of International Solar Alliance Assembly", New Delhi, 28 October 2025 (PIB document). https://static.pib.gov.in/WriteReadData/specificdocs/documents/2025/oct/doc20251028678801.pdf

Supports: India as the current President of the ISA Assembly; the eighth session in New Delhi; launch in 2015 and Founding Conference in New Delhi in 2018; 500 GW of non-fossil capacity by 2030

117-S15 Wikipedia, "International Solar Alliance" (citing The Economic Times, 30 November 2015, for the launch; The Economic Times, 2016, for the opening for signature at Marrakesh; the ISA's membership list, retrieved 8 October 2025). https://en.wikipedia.org/wiki/International_Solar_Alliance

Supports: Formation on 30 November 2015 at Paris; foundation stone of the headquarters laid by Modi and Hollande in January 2016 at NISE, Gwal Pahari, Gurugram; Framework Agreement opened for signature at Marrakesh in November 2016 at COP22; opening date and place independently supported by S30

117-S16 Netherlands Treaty Database, "Amendment to the Framework Agreement of the International Solar Alliance (ISA)", entry showing the parent treaty. https://treatydatabase.overheid.nl/en/Treaty/Details/013695

Supports: Framework Agreement on the establishment of the ISA concluded at Marrakesh on 15 November 2016; the Amendment concluded at New Delhi on 3 October 2018, in force from 8 January 2021

117-S17 International Solar Alliance, membership country list (seen on 16 October 2026). https://old.isa.int/membership/membership_country_list?type=mcl

Supports: Definition of member countries as those that have signed and ratified the Framework Agreement

117-S18 Indian Infrastructure, "ISA becomes first treaty-based international organisation based in India", 4 December 2017. https://indianinfrastructure.com/2017/12/04/isa-becomes-first-treaty-based-international-organisation-based-in-india/

Supports: First treaty-based international organisation based in India; launch by India and France at COP21

117-S19 Wikipedia, "Solar power in India" (its notes 14 to 17 for the missed rooftop target and the date of 100 GW). https://en.wikipedia.org/wiki/Solar_power_in_India

Supports: Target of 2022 missed mainly because of rooftop solar; 100 GW milestone independently supported by S27; solar parks make land available to developers

117-S20 United Nations Treaty Collection, registration record I-54949, "Multilateral Framework Agreement on the establishment of the International Solar Alliance (ISA)". https://treaties.un.org/doc/Publication/UNTS/No%20Volume/54949/Part/I-54949-08000002804ed824.pdf

Supports: Concluded at Marrakesh on 15 November 2016; entry into force on 6 December 2017; registered with the UN Secretariat by India on 9 February 2018

117-S21 Tractatenblad van het Koninkrijk der Nederlanden 2020, no. 6 (Dutch official treaty series), text of the Amendment to the ISA Framework Agreement. https://zoek.officielebekendmakingen.nl/trb-2020-6.html

Supports: Amendment adopted on 3 October 2018 at the first ISA Assembly in New Delhi; amended Article VII: membership open to States which are members of the United Nations; the ISA a treaty-based international intergovernmental organisation from 6 December 2017

117-S22 PIB (MNRE), release of 14 July 2025 on India reaching 50 per cent non-fossil installed capacity. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2144627

Supports: Non-fossil sources 242.78 GW, 50.08 per cent of 484.82 GW, as on 30 June 2025; five years ahead of the NDC target

117-S23 Government of the United Kingdom, press release "UK and India launch new grids initiative to deliver clean power to the world", 2 November 2021. https://www.gov.uk/government/news/uk-and-india-launch-new-grids-initiative-to-deliver-clean-power-to-the-world

Supports: GGI-OSOWOG jointly launched by Boris Johnson and Narendra Modi at the COP26 World Leaders Summit, Glasgow, 2 November 2021

117-S24 Embassy of India, Manila (MEA), "English translation of Prime Minister's remarks at the session on Accelerating Clean Technology Innovation and Deployment at COP26 Summit in Glasgow". https://eoimanila.gov.in/speeches-details/english-translation-of-prime-ministers-remarks-at-the-session-on-accelerating-clean-technology-innovation-and-deployment-at-cop26-summit-in-glasgow

Supports: OSOWOG: clean energy from a worldwide grid available everywhere at all times; synergy with the UK's Green Grids Initiative; thanks to the ISA

117-S25 MNRE, "GEC Phase-II" (page updated 14 August 2023). https://mnre.gov.in/en/gec-phase-ii/

Supports: Integration of about 20 GW of renewable capacity; seven States; cost ₹12,031.33 crore; 33 per cent central financial assistance from MNRE

117-S26 MNRE, PM Surya Ghar guidelines (2024), printed pages 6-7. https://cdnbbsr.s3waas.gov.in/s3716e1b8c6cd17b771da77391355749f3/uploads/2024/04/2024041621270343 09.pdf

Supports: Benchmark-cost CFA; individual-household 3 kW limit; special-category rates; separate GHS/RWA provisions

117-S27 MNRE/PIB, 7 February 2025. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2100603

Supports: Solar installed capacity of 100.33 GW as on 31 January 2025; observation date, not exact crossing-day proof

117-S28 MNRE, PM-KUSUM Office Memoranda, F.No.32/645/2017-SPV Division: 28 September 2026 and 25 May 2026 clarification (with 28 March order). https://apipmk.mnre.gov.in/api/Master_Document_Landing/SliderImage?docid=207&docspid=41 ; https://apipmk.mnre.gov.in/api/Master_Document_Landing/SliderImage?docid=203&docspid=41

Supports: Conditional completion deadline 31 March 2027 for PPA/NTP on or before 31 December 2025; financial closure for Components A/C by 30 November 2026; clarification covers all components subject to project conditions

117-S29 MNRE/PIB, 4 November 2024 and 12 March 2026. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2070660 ; https://www.pib.gov.in/PressReleasePage.aspx?PRID=2238741

Supports: Khanna selected as DG-designate on 4 November 2024; identified as serving DG in March 2026; historical programme structure should not be treated as current

117-S30 MNRE/PIB, 25 September 2018. https://www.pib.gov.in/PressReleasePage.aspx?PRID=1547184

Supports: ISA Framework Agreement opened for signature on 15 November 2016 at Marrakesh; treaty-based status from 6 December 2017; founding conference on 11 March 2018

117-S31 MNRE, state-wise installed renewable power capacity as on 30 September 2026. https://cdnbbsr.s3waas.gov.in/s3716e1b8c6cd17b771da77391355749f3/uploads/2026/10/20261008207003538.pdf

Supports: Permanent dated table supporting solar total and four subcategories, renewable-energy total including large hydro and Rajasthan/AP solar rankings; S8 supports nuclear and total non-fossil figures

118 | Syllogisms: possibility and either-or

118-S1 Wikipedia, "Square of opposition" (citing Parry and Hacker, *Aristotelian Logic*, SUNY Press, 1990, p. 158; Cohen and Nagel, *Introduction to Logic*, 2nd ed., Hackett, 1993, p. 55; and Parsons, "The Traditional Square of Opposition", *Stanford Encyclopedia of Philosophy*). https://en.wikipedia.org/wiki/Square_of_opposition

Supports: "All" with "Some ... not" and "No" with "Some" are contradictories (one true, the other false); "All" and "No" can both be false; "Some" and "Some ... not" can both be true but not both false; these relations rest on the assumption that the groups named have members

118-S2 Open Exam Prep, SBI PO study guide, "5.1 Syllogisms (Only a few, Some not and Reverse Syllogism)". https://open-exam-prep.com/study-guides/sbi-po/analytical-reasoning/syllogisms-venn

Supports: A possibility conclusion is valid when the relation is not fixed; the guide's rule that a possibility of something already definite is marked false; the three conditions for an either-or answer and the two pairs; "All" with "No" is not a pair; "Only a few A are B" means some A are B and some A are not B, with its possibilities; "Only A is B" means all B are A, and the guide's extra rule on it; "at least" read as "some"

118-S3 SATHEE portal of IIT Kanpur, IBPS PO study material, "Syllogism: Common Mistakes to Avoid". https://ibps.iitk.ac.in/sathee-bank-exam/bank-exams/ibps-po/study-materials/memory-based-questions/syllogism/common-mistakes

Supports: Possible means "can be true in some arrangement", definite means "must be true in all arrangements"; "Some A are B" allows "all A are B"; a complementary pair: one true, the other false; the either-or example from "All A are B; Some B are C" with "Some A are C" and "No A are C"; "Some ... not" cannot be turned round

118-S4 Cracku, "7 Tips and Tricks on how to solve syllogism for SBI Bank PO and Clerk Exams". https://cracku.in/blog/?p=1801

Supports: A complementary pair is mutually exclusive and exhaustive; the either-or answer arises only from such a pair; the "All" with "Some ... not" example; a possibility is tested against all the Venn diagrams and holds if one of them supports it

118-S5 SATHEE portal of IIT Kanpur, railway exams quick revision, "Reasoning: Syllogism Rules". https://rrb.iitk.ac.in/sathee-railway-exams/student-corner/quick-revision/reasoning/reasoning-syllogism-rules

Supports: "Some" with "No" gives an either-or choice; the pair must have one positive and one negative statement with the same subject and predicate; a "can be" conclusion is wrong where a definite conclusion exists

118-S6 Physics Wallah, "Syllogism Reasoning Questions" (banking exams). https://www.pw.live/banking/exams/syllogism-reasoning-questions

Supports: Either-or pairs "All" with "Some not" and "Some" with "No"; a definite conclusion must be true in all scenarios, while a possible one could be true but is not guaranteed

118-S7 PracticeMock, "Syllogism for IBPS RRB PO/Clerk Exam". https://www.practicemock.com/blog/syllogism-ibps-rrb-po-clerk/

Supports: Exam wording of possibility conclusions ("... is a possibility", "can be"); worked answers in which "All X being Y is a possibility" is accepted when one figure shows it

118-S8 AffairsCloud, "To Solve Syllogism Questions with the help of Rules". https://affairscloud.com/to-solve-syllogism-questions-with-the-help-of-rules

Supports: A coaching rule that lists "Some" with "Some ... not" (I, O) among complementary pairs, alongside "All" with "Some ... not" and "Some" with "No"

119 | Data interpretation: tables and calculation

119-S1 Wikipedia, "Relative change" (citing the International Electrotechnical Vocabulary, IEC 60050, entry 112-03-07, for the definition; Bennett and Briggs, *Using and Understanding Mathematics*, 2005, p. 141, for percentage points). https://en.wikipedia.org/wiki/Relative_change

Supports: A relative change is found by dividing by a reference or starting value; it is not defined when the reference value is zero; percentage change expresses the change between the old and the new value; a change in a variable that is itself a percentage is better stated in percentage points (3% to 4% is 1 percentage point); summing percentage changes is only an approximation; a change of +50% followed by -50% gives -25%

119-S2 Vedantu, "Textual and Tabular Presentation of Data" (study page for Class 11 Statistics). https://www.vedantu.com/commerce/textual-and-tabular-presentation-of-data

Supports: The parts of a table: table number, title, headnote (with the unit), stubs as row headings, captions as column headings, body, footnotes, and the source of secondary data; data laid out in rows and columns so that the reader can get what he wants at a single glance

119-S3 Wikipedia, "Indian numbering system" (citing "Knowing our Numbers", National Repository of Open Educational Resources, Department of School Education and Literacy, for lakh and crore; Unicode LDML Part 3: Numbers, 2018, for digit grouping). https://en.wikipedia.org/wiki/Indian_numbering_system

Supports: One lakh is one hundred thousand (10 to the power 5) and one crore is ten million (10 to the power 7), written 1,00,000 and 1,00,00,000; the first three digits to the left of the decimal point form one group, after which the Indian system groups by two digits

119-S4 Wikipedia, "Significant figures" (citing *Chemistry in the Community*, Kendall-Hunt, 1988, for leading zeros; Engelbrecht and others, "Rounding Decimal Numbers to a Designated Precision", U.S. Department of Education, 1990, for rounding). https://en.wikipedia.org/wiki/Significant_figures

Supports: Zeros to the left of the first non-zero digit are not significant; rounding to n significant figures keeps the first n significant digits (1254 to two significant figures is 1300); intermediate results in a calculation of several stages should not be rounded

DAY 12 · SOURCES AND REFERENCES

Current affairs: Ponduru Khadi of Srikakulam gets the GI tag (December 2025)

120-S1

Geographical Indications Registry, public search, application details for application No. 1049 (Ponduru Khadi). https://search.ipindia.gov.in/GIRPublicSearch/Application/Details/1049

Used for: Application number; class 23 and goods (textiles); applicant (Khadi and Village Industries Commission, Mumbai address); date of filing 31 January 2023; Journal No. 203; journal copy dated 4 July 2025; Certificate of Registration dated 5 November 2025; status registered

120-S2

Geographical Indications Registry (Office of the Controller General of Patents, Designs and Trade Marks), "Registration Details of Geographical Indications", list by financial year from April 2004 to March 2026. https://ipindia.gov.in/storage/uploads/docs-operator/aa9ef4c8-ae0e-4717-9181-52b6a9479b82.pdf

Used for: The 22 Andhra Pradesh entries with serial number, application number, goods and year; Ponduru Khadi at serial number 700 under 2025-26; the two shared GIs; Darjeeling tea as entries 1 and 2 in 2004-05; entries numbered up to 822

120-S3

Geographical Indications Registry, public search, application details for application No. 524 (Allagadda Stone Carving). https://search.ipindia.gov.in/GIRPublicSearch/Application/Details/524

Used for: Applicant (Andhra Pradesh Handicrafts Development Corporation Limited); filing 6 March 2015; certificate dated 28 March 2018

120-S4

Intellectual Property India, "The Registration Process" (Geographical Indications). https://ipindia.gov.in/GI/the_registration_process_gi

Used for: Who can apply; Part A and Part B of the register; validity of ten years and renewal on a fee; the Registry at Chennai (Intellectual Property Office Building, Guindy); the Act passed in December 1999

120-S5

United News of India, "AP: Ponduru Khadi from Srikakulam receives prestigious GI tag", 13 December 2025. https://www.uniindia.com/ap-ponduru-khadi-from-srikakulam-receives-prestigious-gi-tag/business-economy/news/3672760.html

Used for: The announcement by Union Civil Aviation Minister Kinjarapu Ram Mohan Naidu on Saturday, 13 December 2025; thanks to the KVIC; "was cherished by Mahatma Gandhi"

120-S6

Rajendra Mohan Gonela and Sudhir Ravindran, "Ponduru Khadi: A Case for Geographical Indication", Altacit Global. https://www.altacit.com/publication/ponduru-khadi-a-case-for-geographical-indication

Used for: Punasa cotton and hill cotton, white and red, short staple, grown without pesticides or fertilisers; cleaning with the jawbone of the valuga fish; single-spindle charkha with 24 spokes; up to 120 counts in white and 60 in red; Gandhi's visit and inspection of the handlooms; the fall in numbers of spinners and weavers

120-S7

MAP Academy, Encyclopedia of Art, "Patnulu Khadi" (https://mapacademy.io/?p=3250 , served at https://imp-art.org/articles/patnulu-khadi/), with its bibliography (Sahapedia 2020; Deccan Chronicle 2021; Open Magazine 2019; and others)
Khadi and Village Industries Commission, Institution Profile: AFKKS, field “Aided by: KVIC”: official institution profile.

Used for: Konda patti and yerra patti cotton; jawbone of the catfish; single-spindle Gandhi charkha, not the Ambar charkha; counts 44 to 100; the AFKKS established in 1949; KVIC institutional aid; numbers of spinners and weavers; Gandhi's visit in the 1920s and Devdas Gandhi

120-S8

Lok Sabha (Seventeenth), speech of Bellana Chandra Sekhar (Vizianagaram), "Regarding issuing a Geographical Indication tag for Ponduru Khadi", Digital Library of Parliament. https://eparlib.nic.in/bitstream/123456789/1047380/1/8853.pdf

Used for: The demand for a GI tag; Padmasali and Devanga weaver families; red and hill cotton; single spindle; the expected benefits

120-S9

Wikipedia, "Ponduru", https://en.wikipedia.org/wiki/Ponduru , citing K. Srinivasa Rao, "Ponduru khadi may become extinct", The Hindu, 7 May 2011, and Census of India 2011, "Srikakulam district mandals"

Used for: Census town and mandal headquarters in Srikakulam district; the dhoti gifted to Gandhi at Dusi railway station in 1942; Devdas Gandhi

120-S10

Wikipedia, "Geographical indications in India", https://en.wikipedia.org/wiki/Geographical_indications_in_India , citing WIPO, "Geographical Indications: Point of View of Governments", for TRIPS Article 22(1), and India Today (22 February 2016) for Darjeeling tea

Used for: Words of TRIPS Article 22(1); the Act in force from 15 September 2003; Darjeeling tea the first GI, 2004-05; the 822 entries of the Registry's list

120-S11

Wikipedia, "Geographical Indications of Goods (Registration and Protection) Act, 1999", https://en.wikipedia.org/wiki/Geographical_Indications_of_Goods_(Registration_and_Protection)_Act,_1999

Used for: Act No. 48 of 1999; assent 30 December 1999; commencement 15 September 2003; agricultural, natural and manufactured goods; registration for ten years, renewable (section 18); no transfer, mortgage, assignment or licence except inheritance (section 24)

120-S12

Wikipedia, "List of geographical indications in India". https://en.wikipedia.org/wiki/List_of_geographical_indications_in_India

Used for: Cross-check of the Andhra Pradesh entries and application numbers; the different years it gives for Srikalahasthi Kalamkari (2004-05) and Kondapalli Bommallu (2007-08)

120-S13

Wikipedia, "Etikoppaka". https://en.wikipedia.org/wiki/Etikoppaka

Used for: Anakapalli district; Varaha river; soft wood, lacquer and natural dyes

120-S14

Wikipedia, "Kondapalli". https://en.wikipedia.org/wiki/Kondapalli

Used for: Ibrahimpatnam mandal, NTR district; tella poniki softwood, vegetable dyes and enamel colours

120-S15

Wikipedia, "Durgi, Palnadu district", citing the District Census Handbook, Guntur (2011). https://en.wikipedia.org/wiki/Durgi,_Palnadu_district

Used for: Durgi mandal headquarters, Gurazala revenue division, Palnadu district; stone carving tradition from the 15th century in soft limestone

120-S16

Wikipedia, "Allagadda", citing the Commissioner and Director of Municipal Administration, Andhra Pradesh, and the Revenue Department (apland.ap.nic.in). https://en.wikipedia.org/wiki/Allagadda

Used for: Nandyal district since April 2022; headquarters of the mandal; stone carving

120-S17

The institute's current affairs file: ForumIAS "Factly Compilation", December 2025, "Ponduru Khadi"

Used for: Selection of the item only. The facts in the notes are taken from the sources listed in this table

120-S18

The Geographical Indications of Goods (Registration and Protection) Act, 1999 (No. 48 of 1999), text on India Code, Legislative Department. https://indiacode.nic.in/bitstream/123456789/1981/5/A1999-48.pdf ; official readable text: https://ipindia.gov.in/page-content/geographical-indications-act-1999

Used for: Act No. 48 of 1999 dated 30 December 1999; commencement 15 September 2003 (S.O. 1051(E)); section 2(1)(e) (agricultural, natural or manufactured goods); section 5 (the Registry); section 7 (Part A and Part B); section 11(1) (who may apply); section 16 (registered as of the date of the application); section 18 (ten years, renewable); section 24 (no assignment, transmission, licensing, pledge or mortgage; devolution on the death of an authorised user)

120-S19

Agreement on Trade-Related Aspects of Intellectual Property Rights, Article 22, text reproduced by the IP Portal (ippt.eu). https://www.ippt.eu/legal-texts/trips/article-22 (official text: https://www.wto.org/english/docs_e/legal_e/27-trips_04b_e.htm)

Used for: Full words of Article 22(1)

120-S20

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Used for: Polavaram and Markapuram districts; final notification to be issued on 31 December 2025, in force from 1 January 2026; 28 districts; Annamayya district headquarters moved from Rayachoti to Madanapalle; Palnadu and NTR districts among those left unchanged

120-S21

Deccan Chronicle, "Andhra new State map 2026 with 28 districts", 4 April 2026. https://www.deccanchronicle.com/southern-states/andhra-pradesh/andhra-new-state-map-2026-with-28-districts-amaravati-capital-in-guntur-dt-marked-1948481

Used for: 28 districts after the creation of Polavaram and Markapuram districts

120-S22

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Used for: Etikoppaka toys and Anakapalli district

120-S23

Government of NTR district, ODOP. https://ntr.ap.gov.in/one-district-one-product/

Used for: Kondapalli toys and NTR district

120-S24

Government of Palnadu district, ODOP. https://palnadu.ap.gov.in/odop/

Used for: Durgi stone carvings and Palnadu district

120-S25

Government of Nandyal district, mandal directory. https://nandyal.ap.gov.in/mandal/

Used for: Allagadda mandal in Nandyal district

120-S26

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Used for: Official corroboration of the 28-district administrative count in 2026