UPSC Civil Services (Preliminary) Examination 2018

General Studies Paper I

Answer Key and Explanations · Set A

Answer Key

1	(b)	**21**	(b)	**41**	(c)	**61**	(a)	**81**	(b)
2	(d)	**22**	(b)	**42**	(d)	**62**	(d)	**82**	(b)
3	(c)	**23**	(a)	**43**	(c)	**63**	(b)	**83**	(b)
4	(b)	**24**	(b)	**44**	(b)	**64**	(b)	**84**	(d)
5	(a)	**25**	(b)	**45**	(c)	**65**	(a)	**85**	(a)
6	(c)	**26**	(d)	**46**	(b)	**66**	(b)	**86**	(b)
7	(a)	**27**	(d)	**47**	(c)	**67**	(d)	**87**	(d)
8	(d)	**28**	(a)	**48**	(c)	**68**	(d)	**88**	(c)
9	(c)	**29**	(a)	**49**	(c)	**69**	(c)	**89**	(b)
10	(a)	**30**	(a)	**50**	(d)	**70**	(d)	**90**	(c)
11	(c)	**31**	(c)	**51**	(c)	**71**	(b)	**91**	(b)
12	(d)	**32**	(a)	**52**	(c)	**72**	(d)	**92**	(c)
13	(a)	**33**	(a)	**53**	(b)	**73**	(b)	**93**	(b)
14	(d)	**34**	(c)	**54**	(a)	**74**	(c)	**94**	(a)
15	(c)	**35**	(b)	**55**	(d)	**75**	(c)	**95**	(a)
16	(a)	**36**	(b)	**56**	(c)	**76**	(d)	**96**	(b)
17	(c)	**37**	(b)	**57**	(c)	**77**	(a)	**97**	(c)
18	(d)	**38**	(b)	**58**	(c)	**78**	(c)	**98**	(a)
19	(a)	**39**	(a)	**59**	(c)	**79**	(a)	**99**	(d)
20	(b)	**40**	(b)	**60**	(d)	**80**	(b)	**100**	(b)

Answers follow the UPSC final answer key (Sets A, B, C and D). Each explanation gives the answer, the reasoning for every statement and option, how to crack the question and the sources.

1. Answer: (b) 2 only

Statement 1 is wrong. In the first general election (1951-52) the Congress won 364 seats and the Communist Party of India came second with 16. The Swatantra Party did not even exist then; it was founded in 1959.

Statement 2 is correct. The office of Leader of the Opposition in the Lok Sabha dates from 1969, and its first holder was Ram Subhag Singh.

Statement 3 is wrong. The rule is not a fixed 75 members; the largest opposition party is recognised only if it holds at least 10 per cent of the seats of the Lok Sabha. Answer (b), 2 only.

How to crack it: Swatantra was born in 1959, so it could not lead the opposition in the first Lok Sabha; and the recognition rule is a percentage, not 75. Only statement 2 survives.

Remember: Leader of the Opposition: The leader of the largest party not in government, provided it holds at least 10 per cent of the seats.

Sources : 1951-52 Indian general election (Wikipedia); Swatantra Party (Wikipedia); Leader of the Opposition in Lok Sabha (Wikipedia)

---

2. Answer: (d) 1, 2 and 3

Desert plants (xerophytes) cut water loss through their leaves in several ways. Waxy, thick-skinned leaves slow the loss of moisture (1). Many have fewer and smaller leaves, which reduces the surface for transpiration (2). In cacti the leaves are reduced to spines or are absent altogether, and the stem takes over photosynthesis (3).

All three are leaf modifications that inhibit water loss. Answer (d), 1, 2 and 3.

How to crack it: Each item reduces either the leaf area or the leaf surface's permeability, both of which cut transpiration. Nothing in the list is wrong.

Remember: Other xerophyte features: Deep-spreading roots and the capacity to store water.

Sources : Xerophyte (Wikipedia)

---

3. Answer: (c) 1 and 3 only

Statement 1 is correct. In the NSS 70th round (2013), among the major States Rajasthan had the highest percentage of agricultural households among its rural households, 78.4 per cent.

Statement 2 is wrong. About 45 per cent of agricultural households in the country belonged to Other Backward Classes, not a little over 60 per cent.

Statement 3 is correct. Agricultural activity was the principal source of income for most agricultural households in every major State except Kerala, where about 61 per cent reported earning their maximum income from sources other than agriculture. Answer (c), 1 and 3 only.

How to crack it: Statements 1 and 3 are the survey's headline findings for two States; statement 2 inflates the OBC share. Pick (c).

Remember: The same survey found Kerala with the lowest share of agricultural households among rural households (27.3 per cent).

Sources : NSSO, Key Indicators of Situation of Agricultural Households in India (NSS 70th round)

---

4. Answer: (b) 2 only

Statement 1 is wrong. The NGT was indeed set up by an Act (the National Green Tribunal Act, 2010), but the CPCB was not created by an executive order; it is a statutory body, established in 1974 under the Water (Prevention and Control of Pollution) Act, 1974.

Statement 2 is correct. The NGT's dedicated jurisdiction is meant to provide speedy environmental justice and help reduce the burden of litigation in the higher courts. The CPCB's principal functions under the Water and Air Acts are to promote cleanliness of streams and wells and to improve the quality of air. Answer (b), 2 only.

How to crack it: Both bodies are statutory, so the contrast in statement 1 fails. Statement 2 quotes each body's own stated purpose.

Remember: The NGT is to dispose of cases within six months of filing; the CPCB runs the National Air Monitoring Programme.

Sources : National Green Tribunal, About us; Central Pollution Control Board, Introduction; Central Pollution Control Board (Wikipedia); National Green Tribunal (Wikipedia)

---

5. Answer: (a) 1 only

Statement 1 is correct. Parliament places a law in the Ninth Schedule (added with Article 31B by the First Amendment, 1951) by amending the Constitution.

Statement 2 is wrong. Placing a law in the Ninth Schedule does not give it blanket immunity, because the Supreme Court has held that laws placed there after 24 April 1973 are open to challenge if they violate the basic structure, since judicial review is itself a basic feature of the Constitution. Answer (a), 1 only.

How to crack it: 'Cannot be examined by any court' is an absolute claim; judicial review survives even for the Ninth Schedule.

Remember: 24 April 1973 is the date of the Kesavananda Bharati judgment, which laid down the basic structure doctrine.

---

6. Answer: (c) The charge to a merchant by a bank for accepting payments from his customers through the bank's debit cards.

The merchant discount rate is the charge a merchant pays to its bank (and through it the card network) for accepting payments by debit and credit cards. It is made up of fees, network charges and mark-ups that the merchant bears for each card payment. That is option (c).

Option (a) reverses the direction, since the bank charges the merchant, it does not pay an incentive. Option (b) is wrong, because it is not money paid back to customers. Option (d) is wrong, because it is not a government incentive. Answer (c).

How to crack it: 'Discount' here is what the merchant gives up from each sale to the bank. Only (c) has money flowing from merchant to bank.

Remember: The discount rate covers dues, fees, network charges and mark-ups that the merchant pays for each card payment accepted.

Sources : Merchant account (Wikipedia, redirected from Merchant discount rate)

---

7. Answer: (a) 1 only

The Nuclear Suppliers Group is a group of nuclear supplier countries that coordinates the export and transfer of nuclear equipment, materials and technology. A member takes part in setting those export rules and in trade among the members, which UPSC's key treats as access to the latest and most efficient nuclear technologies. Statement 1 is correct.

Statement 2 is wrong. NSG membership does not make a country an NPT member; the group was set up partly to bring in a non-NPT supplier, France. Answer (a), 1 only.

How to crack it: Joining a suppliers' club cannot automatically sign a country up to a separate treaty. Statement 2 goes, leaving (a).

Remember: The NSG first met in November 1975, after India's 1974 nuclear test showed how civil nuclear technology could be turned to weapons.

Sources : Nuclear Suppliers Group (Wikipedia)

---

8. Answer: (d) Neither 1 nor 2

Statement 1 is wrong. The 6 per cent equalisation levy on online advertisement services was introduced through a new chapter titled 'Equalisation Levy' in the Finance Bill, 2016, not as part of the Income-tax Act; the Income-tax Act only exempts the income on which the levy is charged.

Statement 2 is wrong. Because it is a separate levy outside income tax, it is not a tax covered by the Double Taxation Avoidance Agreements, so a non-resident cannot count on a credit for it in its home country under them. Answer (d), Neither 1 nor 2.

How to crack it: The levy was designed to sit outside the income tax system, which is why it escapes the tax treaties; both statements assume the opposite.

Remember: The levy applies to payments over one lakh rupees a year to non-residents without a permanent establishment in India.

Sources : Finance Bill 2016, Memorandum explaining the provisions

---

9. Answer: (c) 1 and 3 only

Statement 1 is correct. The FRBM Review Committee chaired by N. K. Singh recommended debt as the primary target of fiscal policy, aiming at a general government debt to GDP ratio of 60 per cent, with a 40 per cent limit for the Centre and 20 per cent for the States, to be achieved by 2023.

Statement 2 is wrong. It reverses the two shares; the Centre carries the much larger part of government debt, as the committee's own 40:20 split reflects.

Statement 3 is correct. Article 293(3) says a State may not, without the consent of the Government of India, raise any loan if any part of a loan made to it by the Government of India is still outstanding. Answer (c), 1 and 3 only.

How to crack it: Statement 1 is the committee's headline target and statement 3 is Article 293(3); statement 2 flips the Centre and the States.

Remember: The committee expected the debt to GDP ratio to be around 70 per cent in 2017.

Sources : PRS Legislative Research, FRBM Review Committee Report Summary; Fiscal Responsibility and Budget Management Act, 2003 (Wikipedia); Constitution of India, Article 293(3)

---

10. Answer: (a) 1 only

Statement 1 is correct. India imports more edible oil than it produces. In 2015-16 domestic availability was 86.30 lakh tonnes against imports of 148.50 lakh tonnes, in 2016-17 100.99 against 153.17, and in 2017-18 103.80 against 154.00. Imports met about 60 per cent of consumption.

Statement 2 is wrong. Imported edible oils do carry customs duty, and the government raises or lowers it to manage imports and support domestic oilseed farmers; one later revision, for example, raised the effective duty on crude palm, sunflower and soybean oils from 5.5 to 16.5 per cent. Answer (a), 1 only.

How to crack it: 'Does not impose any customs duty on all' is an absolute; duty on edible oil is a standard policy lever.

Remember: India is the world's largest importer of edible oils; palm oil is the biggest share of the imports.

Sources : Ministry of Agriculture, Operational Guidelines of the National Mission on Edible Oils-Oil Palm (2022); PIB, background note on edible oils and oilseeds (December 2025)

---

11. Answer: (c) Lala Lajpat Rai

Lala Lajpat Rai wrote biographies of Mazzini, Garibaldi, Shivaji and Shri Krishna. He went to the United States in 1917, founded the Indian Home Rule League of America in New York that October and stayed there until 1920. He was later a member of the Central Legislative Assembly. Every clue fits him. Answer (c).

Aurobindo Ghosh (a), Bipin Chandra Pal (b) and Motilal Nehru (d) do not match the set of biographies together with the American stay. Answer (c), Lala Lajpat Rai.

How to crack it: Biographies of Italian nationalists, a stay in America and the Central Assembly together point to Lala Lajpat Rai.

Remember: Lajpat Rai's books include 'The United States of America: A Hindu's Impression' (1916), written from his stay there.

Sources : Lala Lajpat Rai (Wikipedia)

---

12. Answer: (d) Neither 1 nor 2

Statement 1 is wrong. Section 9 of the Aadhaar Act, 2016 says the Aadhaar number or its authentication shall not, by itself, confer any right of, or be proof of, citizenship or domicile.

Statement 2 is wrong. Section 23(2)(g) of the same Act lists among UIDAI's functions the omitting and deactivating of an Aadhaar number, in the manner specified by regulations. So an Aadhaar number can be deactivated or omitted. Answer (d), Neither 1 nor 2.

How to crack it: Aadhaar identifies a resident; it proves neither citizenship nor domicile, and the Act itself provides for deactivation.

Remember: Aadhaar is issued to residents, not only citizens, which is why it cannot prove citizenship.

Sources : The Aadhaar Act, 2016 (UIDAI); Aadhaar (Wikipedia)

---

13. Answer: (a) 1 only

The Aral Sea, once the third-largest lake in the world, began shrinking in the 1960s after the rivers feeding it were diverted by Soviet irrigation projects; by 2007 it had shrunk to 10 per cent of its original size. That is a human-caused drying up (1).

The Black Sea (2) has not shrunk in that way, and Lake Baikal (3) remains the deepest lake in the world. Answer (a), 1 only.

How to crack it: Only one of the three is famous for disappearing, the Aral Sea, drained when Soviet irrigation projects diverted its rivers.

Remember: The Aral Sea disaster is the standard example of a water body destroyed by irrigation diversion of its feeder rivers.

Sources : Aral Sea (Wikipedia); Lake Baikal (Wikipedia)

---

14. Answer: (d) World Justice Project

The Rule of Law Index is published by the World Justice Project, an independent organisation that ranks countries on the rule of law. Answer (d).

Amnesty International (a) reports on human rights violations, the International Court of Justice (b) decides disputes between States, and the Office of the UN High Commissioner for Human Rights (c) works on human rights; none of them publishes this index. Answer (d), World Justice Project.

How to crack it: The publisher's name says 'Justice Project'; the index is its flagship product.

Remember: Match the index to its publisher: Rule of Law Index, World Justice Project.

Sources : World Justice Project (Wikipedia)

---

15. Answer: (c) National Payments Corporation of India

The National Financial Switch, the largest network of shared ATMs in India, is owned and run by the National Payments Corporation of India. It is what lets a card of one bank work at another bank's ATM. Answer (c).

The Indian Banks' Association (a) is a body of bank managements, NSDL (b) is a securities depository, and the RBI (d) regulates payment systems but does not itself run the ATM switch. Answer (c).

How to crack it: Linking all ATMs is a retail payments switch, the core business of NPCI.

Remember: NPCI's systems include the National Financial Switch (ATMs), RuPay, IMPS and UPI.

Sources : National Financial Switch (Wikipedia)

---

16. Answer: (a) 1 only

Statement 1 is correct. The capital adequacy ratio is a bank's capital as a share of its risk-weighted assets; regulators track it to make sure a bank can absorb a reasonable amount of loss, such as defaults on loans, without collapsing.

Statement 2 is wrong. The minimum CAR is not decided by each bank; it is set by the national banking regulator (in India, the Reserve Bank), following the Basel norms. Answer (a), 1 only.

How to crack it: A safety buffer that each bank set for itself would be meaningless; the regulator sets the floor.

Remember: CAR = (Tier 1 capital + Tier 2 capital) / risk-weighted assets.

Sources : Capital adequacy ratio (Wikipedia)

17. Answer: (c) Both 1 and 2

An open API is a publicly available application programming interface that gives developers programmatic access to a software service. Aadhaar's authentication service being offered through open APIs means any application, on any electronic device, can be built to call it. Statement 1 is correct.

Statement 2 is correct. Aadhaar holds biometric information that includes the iris scan, and authentication can be done by fingerprint, iris or, since 2018, face. Answer (c), Both 1 and 2.

How to crack it: Open APIs are device-neutral by design, and the iris is part of Aadhaar's biometrics. Both hold.

Remember: Aadhaar biometric information, as defined in the Act: Photograph, fingerprint and iris scan.

Sources : Open API (Wikipedia); The Aadhaar Act, 2016 (UIDAI); Aadhaar (Wikipedia)

---

18. Answer: (d) Yemen and South Sudan

Yemen and South Sudan both faced war-driven famine at the time. In Yemen, the war and blockade since 2015 led to famine conditions, with millions in need and very large numbers of deaths from hunger and preventable disease. In South Sudan, the civil war that began in December 2013 disrupted farming and displaced millions, and food insecurity deepened into famine. Answer (d).

Angola and Zambia (a), Morocco and Tunisia (b), and Venezuela and Colombia (c) were not the countries where lakhs died of war-caused famine in that period. Answer (d).

How to crack it: Look for countries at war around 2016-17: Yemen and South Sudan.

Remember: Both famines were driven by conflict rather than drought alone.

Sources : Famine in Yemen (2016–present) (Wikipedia); Food insecurity and famine in South Sudan (Wikipedia)

---

19. Answer: (a) 1 and 2 only

Wood's Despatch of 1854 recommended a system of grants-in-aid to encourage private enterprise in education (1 correct). It laid out a hierarchy from vernacular primary schools up to affiliating universities in the presidency towns of Calcutta, Bombay and Madras; those universities were set up in 1857 (2 correct).

Statement 3 is wrong. It recommended English as the medium of instruction for higher studies and the vernaculars at the school level, not English at all levels. Answer (a), 1 and 2 only.

How to crack it: 'At all levels' is the trap, because the Despatch kept the vernaculars at the school stage.

Remember: Wood's Despatch is called the 'Magna Carta of English Education in India'.

---

20. Answer: (b) Committee on Subordinate Legislation

The Committee on Subordinate Legislation examines and reports to the House whether the powers to make regulations, rules, sub-rules and bye-laws, delegated by Parliament or conferred by the Constitution, are being properly exercised by the Executive. That is exactly the function in the question. Answer (b).

The Committee on Government Assurances (a) checks whether ministers keep promises made on the floor. The Rules Committee (c) deals with the procedure of the House. The Business Advisory Committee (d) allots time for business. Answer (b).

How to crack it: Rules made by the executive under a law are 'subordinate' or delegated legislation; the committee is named for it.

Remember: The Committee on Subordinate Legislation has 15 members in each House and dates from 1953.

21. Answer: (b) 2 only

Statement 1 is wrong. Under Section 23(1) of the RTE Act, the minimum qualifications for teachers are laid down by an academic authority authorised by the Central Government, and that authority is the National Council for Teacher Education (NCTE), not a State Council of Teacher Education.

Statement 2 is correct. To meet those minimum qualifications, the NCTE introduced the Teacher Eligibility Test under the RTE Act; a candidate for primary and upper primary classes must pass a TET conducted in line with the NCTE's guidelines.

Statement 3 is wrong. Teacher education institutions are recognised and regulated by the NCTE, a central statutory body that coordinates and monitors teacher education across the country; they are not, as the statement claims, more than 90 per cent directly under the State Governments. Answer (b), 2 only.

How to crack it: The RTE Act hands teacher qualifications to one national academic authority, the NCTE. Statements 1 and 3 give that role to the States.

Remember: The NCTE lays down the minimum qualifications for teachers and regulates teacher education institutions.

Sources : Teacher Eligibility Test (Wikipedia); National Council for Teacher Education (Wikipedia)

---

22. Answer: (b) 1 and 2

Pair 1 is correct. Chapchar Kut is the Mizo spring festival of Mizoram.

Pair 2 is correct. Khongjom Parba (also spelt Parva) is the traditional ballad of Manipur that carries the memory of the warriors of the Anglo-Manipur War of 1891 and the battle of Khongjom.

Pair 3 is wrong. Thang-Ta is the traditional Meitei martial art of Manipur, practised with weapons; it does not belong to Sikkim. Answer (b), 1 and 2.

How to crack it: Thang-Ta and Khongjom both belong to Manipur's Meitei tradition; Sikkim is the odd one out.

Remember: Manipur observes Khongjom Day on 23 April in memory of the 1891 battle.

Sources : Chapchar Kut (Wikipedia); MyGov blog, The Legacy of Khongjom War; Thang-Ta (Wikipedia)

---

23. Answer: (a) 1 only

Statement 1 is correct. The Food Safety and Standards Act, 2006 brought seven older laws under one umbrella, among them the Prevention of Food Adulteration Act, 1954.

Statement 2 is wrong. FSSAI is a statutory body under the administration of the Ministry of Health and Family Welfare, headed by its own Chairperson with a Chief Executive Officer; it is not under the charge of the Director General of Health Services. Answer (a), 1 only.

How to crack it: A statutory food regulator has its own chairperson and CEO; it does not sit under a department's director general.

Remember: FSSAI regulates the manufacture, storage, distribution, sale and import of food and sets food standards.

Sources : Food Safety and Standards Authority of India (Wikipedia)

---

24. Answer: (b) Israel

The two-state solution is the proposal to settle the Israeli-Palestinian conflict by creating an independent State of Palestine alongside the State of Israel. Answer (b).

It has no connection with China (a), Iraq (c) or Yemen (d). Answer (b), Israel.

How to crack it: 'Two states' on one piece of disputed land: Israel and Palestine.

Remember: The idea goes back to UN partition proposals and runs through UN Security Council Resolution 242 and later peace talks.

Sources : Two-state solution (Wikipedia)

---

25. Answer: (b) 2 only

Statement 1 is wrong. The Act does not limit food grains to 'below poverty line' families; the Targeted Public Distribution System covers up to 75 per cent of the rural and 50 per cent of the urban population, with a uniform entitlement of 5 kg per person per month.

Statement 2 is correct. Section 13 says the eldest woman of at least eighteen years in every eligible household shall be the head of the household for the issue of ration cards.

Statement 3 is wrong. Schedule II sets the take-home ration for pregnant women and lactating mothers at 600 calories and 18 to 20 grams of protein, not 1600 calories. Answer (b), 2 only.

How to crack it: Statement 2 is the Act's women-empowerment clause; 'BPL only' and '1600 calories' are the traps.

Remember: The Act also gives pregnant women and lactating mothers a maternity benefit of not less than Rs 6,000.

Sources : National Food Security Act, 2013 (Gazette text, PRS copy); National Food Security Act, 2013 (Wikipedia)

---

26. Answer: (d) WTO

India, as a member of the World Trade Organization, enacted the Geographical Indications of Goods (Registration and Protection) Act, 1999 to comply with the WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), which requires members to protect geographical indications. Answer (d).

The ILO (a) deals with labour standards, the IMF (b) with monetary cooperation and UNCTAD (c) with trade and development research; none of them imposes the GI obligation. Answer (d), WTO.

How to crack it: GIs are intellectual property; India's IP laws of the late 1990s were brought into line with the WTO's TRIPS agreement.

Remember: TRIPS Article 22.1 defines geographical indications; Darjeeling tea is a well-known Indian example.

Sources : Geographical Indications of Goods (Registration and Protection) Act, 1999 (Wikipedia); Geographical indication (Wikipedia)

---

27. Answer: (d) 3 only

Statement 1 is wrong. Since the 2015 amendment to the Mines and Minerals (Development and Regulation) Act, mining leases are allotted by auction, and for non-coal minerals it is the State Governments that conduct the auctions (Odisha, for instance, decided in January 2015 to auction its non-coal leases).

Statement 2 is wrong. Both Andhra Pradesh and Jharkhand have gold; the Indian Bureau of Mines lists them among the States holding gold ore resources, and in metal content Andhra Pradesh ranks third.

Statement 3 is correct. Rajasthan has iron ore; it holds about 6 per cent of India's magnetite resources and is among the States that report iron ore production. Answer (d), 3 only.

How to crack it: Two absolute denials (States have no power; no gold in two States) are both false. Keep 3.

Remember: Karnataka holds about 72 per cent of India's magnetite iron ore; in gold, Karnataka leads in metal content.

Sources : Mines and Minerals (Development and Regulation) Act, 1957 (Wikipedia); Indian Bureau of Mines, Indian Minerals Yearbook 2018: Gold; Indian Bureau of Mines, Indian Minerals Yearbook 2018: Iron Ore

---

28. Answer: (a) 1 only

Statement 1 is correct. BHIM, built by NPCI on the Unified Payments Interface, transfers money between any two bank accounts; the app is only a mechanism for moving money from one bank account to another.

Statement 2 is wrong. A chip-and-PIN debit card used at an ATM is the textbook case of two-factor authentication, the card (something the user has) and the PIN (something the user knows), not four factors. Answer (a), 1 only.

How to crack it: Count the factors on a card payment: Card plus PIN makes two. 'Four factors' is the error.

Remember: Authentication factors: Something you have (card, phone), something you know (PIN, password), something you are (biometrics).

Sources : BHIM (Wikipedia); Multi-factor authentication (Wikipedia)

---

29. Answer: (a) Bengaluru

Delhi lies at about 77.21° E. Bengaluru is at about 77.59° E, less than half a degree east of it. Hyderabad (78.47° E) and Nagpur (79.08° E) are more than a degree east, and Pune (73.86° E) is more than three degrees west. Bengaluru is closest. Answer (a).

The question is about longitude only, so the large north-south distance between Delhi and Bengaluru does not matter.

How to crack it: Picture the 77° E line, which runs close to both Delhi and Bengaluru.

Remember: Compare only the east-west position (degrees east); latitude does not enter a longitude question.

Sources : New Delhi (Wikipedia); Bangalore (Wikipedia); Hyderabad (Wikipedia); Nagpur (Wikipedia); Pune (Wikipedia)

---

30. Answer: (a) Child labour

ILO Convention 138, the Minimum Age Convention of 1973, requires States to pursue a policy for the effective abolition of child labour and to raise the minimum age for work progressively. Convention 182 deals with the worst forms of child labour. Both concern child labour. Answer (a).

Climate adaptation in agriculture (b), food prices (c) and gender parity at work (d) are not the subject of these two conventions. Answer (a).

How to crack it: Remember 138 (minimum age) and 182 (worst forms); both are about children at work.

Remember: Convention 138 is one of the eight ILO fundamental conventions; it sets 15 years as the general minimum age for work.

Sources : Minimum Age Convention, 1973 (Wikipedia); Worst Forms of Child Labour Convention (Wikipedia)

---

31. Answer: (c) A Money Bill is concerned with the appropriation of moneys out of the Contingency Fund of India.

Article 110(1) lists what a Money Bill may contain: The imposition, abolition, remission, alteration or regulation of any tax (a); the regulation of borrowing or the giving of any guarantee by the Government of India (d); the custody of the Consolidated Fund or the Contingency Fund of India (b); and the appropriation of moneys out of the Consolidated Fund of India.

Option (c) is the statement that is not correct, because appropriation in a Money Bill is out of the Consolidated Fund of India, not out of the Contingency Fund. Answer (c).

How to crack it: Recall Article 110's wording: Appropriation is always 'out of the Consolidated Fund'. The option that swaps in the Contingency Fund is the wrong one.

Remember: Article 110 also covers the receipt of money on account of the Consolidated Fund or the public account of India, and the audit of the Union's or a State's accounts.

Sources : Constitution of India, Article 110

---

32. Answer: (a) 1 only

Statement 1 is correct. The value of an MLA's vote depends on the population of the State divided by the number of elected members of its Assembly, so it differs from State to State.

Statement 2 is wrong. Every elected member of either House of Parliament has the same vote value, which is the total value of all MLAs' votes divided by the total number of elected members of both Houses. A Lok Sabha MP and an elected Rajya Sabha MP carry equal weight. Answer (a), 1 only.

How to crack it: One formula gives one value for every MP, whichever House. MLAs differ because State populations differ.

Remember: The President is elected by the elected members of both Houses, of the State Assemblies, and of the Assemblies of Delhi and Puducherry.

33. Answer: (a) The civilian nuclear reactors come under IAEA safeguards.

India separated its nuclear sites into a civilian and a military sector. Its safeguards agreement with the IAEA (in force from May 2009) covers the civilian nuclear facilities, and the Additional Protocol to that agreement, which entered into force in 2014, strengthens the IAEA's safeguards over those civilian facilities. So ratifying it means the civilian reactors come under IAEA safeguards, option (a).

Option (b) is wrong; the military facilities stay outside. Options (c) and (d) are wrong; the protocol neither buys uranium nor makes India an NSG member. Answer (a).

How to crack it: The full title says it: 'Application of Safeguards to Civilian Nuclear Facilities'.

Remember: Safeguards checks ensure that material or technology traded with India for peaceful use is not diverted to the military sector.

Sources : IAEA, INFCIRC/754/Add.6 (Additional Protocol, India); World Nuclear News, Additional Protocol for India

---

34. Answer: (c) 1, 3, 4 and 5

ASEAN's free trade agreements with outside partners are the ASEAN-Australia-New Zealand FTA, the ASEAN-India FTA, the ASEAN-China FTA, the ASEAN-Korea FTA and the ASEAN-Japan partnership. So Australia (1), China (3), India (4) and Japan (5) are free-trade partners.

Canada (2) and the USA (6) are ASEAN dialogue partners but have no FTA with ASEAN. Answer (c), 1, 3, 4 and 5.

How to crack it: Think of RCEP: ASEAN plus its FTA partners. Canada and the USA were never part of it.

Remember: These ASEAN FTA partners (with South Korea and New Zealand) are the 'Plus Six' behind the RCEP talks, which India later left.

Sources : Regional Comprehensive Economic Partnership (Wikipedia); ASEAN (Wikipedia)

---

35. Answer: (b) 2 only

Statement 1 is wrong. GACSA was launched by the UN Secretary-General in New York during the Climate Summit on 24 September 2014, not at the Paris summit of 2015.

Statement 2 is correct. GACSA is a voluntary coalition, and membership does not create any binding obligations; each member decides the nature of its own participation.

Statement 3 is wrong. GACSA's founding record credits the UN Secretary-General's New York summit; India is not named as instrumental in creating it. Answer (b), 2 only.

How to crack it: A voluntary alliance creates no binding obligations, which makes 2 safe; recall the 2014 New York launch to drop 1.

Remember: GACSA's Facilitation Unit is hosted by FAO; it has more than 400 member entities.

Sources : FAO, GACSA in a Nutshell

---

36. Answer: (b) 3 only

Digital India, launched on 1 July 2015, aims to deliver government services electronically, to expand broadband connectivity to rural India, and to improve digital literacy and inclusion. Connecting villages to the Internet and bringing Wi-Fi to schools and public places fall within this (3 correct).

Statement 1 is wrong. Forming national Internet companies on China's model is not an aim of the programme. Statement 2 is wrong. A framework to make foreign Big Data firms build data centres inside India is not among its stated pillars. Answer (b), 3 only.

How to crack it: Digital India is about connectivity and services for citizens; statements 1 and 2 describe industrial strategy, not the programme.

Remember: Digital India is administered mainly by the Ministry of Electronics and Information Technology (MeitY).

Sources : Digital India (Wikipedia)

37. Answer: (b) 1 and 4

Pair 1 is correct: Aleppo is a city in Syria. Pair 4 is correct: Mazar-i-Sharif is in Afghanistan.

Pair 2 is wrong: Kirkuk is a city in Iraq, not Yemen. Pair 3 is wrong: Mosul is also in Iraq (Nineveh Governorate), not Palestine. Answer (b), 1 and 4.

How to crack it: Both Mosul and Kirkuk are Iraqi cities; any option with 2 or 3 is out.

Remember: For place-and-country pairs, fix each city to its country first; two Iraqi cities paired with other countries settle this one.

Sources : Kirkuk (Wikipedia); Mosul (Wikipedia); Aleppo (Wikipedia); Mazar-i-Sharif (Wikipedia)

---

38. Answer: (b) Governor General

The Government of India Act, 1935 divided powers between the Centre and the units through three lists, a Federal List, a Provincial List and a Concurrent List, and gave the residuary powers to the Viceroy, that is, the Governor-General. Answer (b).

They were not given to the Federal Legislature (a), the Provincial Legislatures (c) or the Provincial Governors (d). Answer (b), Governor General.

How to crack it: Unlike the 1950 Constitution, which gives residuary power to Parliament, the 1935 Act kept it with the Viceroy.

Remember: The federation planned by the 1935 Act never came into being, because the princely states did not join it.

---

39. Answer: (a) 1 only

Statement 1 is correct. Under Article 179, the Speaker of a Legislative Assembly shall vacate the office if he or she ceases to be a member of the Assembly.

Statement 2 is wrong. The same article provides that whenever the Assembly is dissolved, the Speaker shall not vacate the office until immediately before the first meeting of the Assembly after the dissolution. Answer (a), 1 only.

How to crack it: The Speaker stays on after dissolution so that the office is never empty; 'immediately' in statement 2 is the trap.

Remember: Article 94 lays down the same rule for the Speaker of the Lok Sabha.

Sources : Constitution of India, Articles 94 and 179

---

40. Answer: (b) If there are no laws, there is no liberty.

Any form of social living needs rules, and the constraints that law imposes can free people from insecurity and give them the conditions to develop themselves. Without law there is no protection for anyone's freedom, so liberty depends on law: 'if there are no laws, there is no liberty', option (b).

Option (a) treats every law as a loss of liberty, which ignores the protection law gives. Option (c) is about who makes laws, not their relation to liberty. Option (d) is a claim about the frequency of change, not the basic relationship. Answer (b).

How to crack it: The most basic relationship is that liberty needs the protection of law; the other options are narrower claims.

Remember: Political theory distinguishes socially necessary constraints, which protect liberty, from other restrictions.

Sources : NCERT Class 11, Political Theory, Freedom

---

41. Answer: (c) Both 1 and 2

Statement 1 is correct. Article 361(2) says no criminal proceedings whatsoever shall be instituted or continued against the President or the Governor of a State in any court during the term of office.

Statement 2 is correct. Article 158(4) says the emoluments and allowances of the Governor shall not be diminished during the term of office. Answer (c), Both 1 and 2.

How to crack it: Both statements copy the Constitution's own protections for the Governor.

Remember: Article 361(3) adds that no process for the arrest or imprisonment of the President or a Governor can issue during the term of office.

Sources : Constitution of India, Articles 158 and 361

42. Answer: (d) Kishangarh school

Bani Thani was a singer and poet at the court of Kishangarh in Rajasthan in the time of Raja Sawant Singh (1748-1764), and her famous portrait is a Kishangarh miniature of about 1750, now in the National Museum, New Delhi. Answer (d).

Bundi (a), Jaipur (b) and Kangra (c) are other schools of Rajasthani and Pahari painting; the Bani Thani portrait belongs to none of them. Answer (d), Kishangarh school.

How to crack it: The painting is named after a woman of the Kishangarh court; the school is named after the same court.

Remember: Bani Thani is sometimes called the 'Indian Mona Lisa'; her elongated eyes and profile are the hallmark of the Kishangarh style.

Sources : Bani Thani (Wikipedia)

---

43. Answer: (c) An American anti-missile system

THAAD (Terminal High Altitude Area Defense) is an American anti-ballistic missile defence system, deployed since 2008, designed to intercept short, medium and intermediate range ballistic missiles in their terminal phase. Answer (c).

It is not an Israeli radar (a), not India's programme (b) and not a Japan-South Korea collaboration (d), although it has been deployed in South Korea and Israel. Answer (c), An American anti-missile system.

How to crack it: The name 'Terminal High Altitude Area Defense' is US military language; it intercepts missiles in their final, descending phase.

Remember: THAAD destroys incoming missiles by direct impact ('hit-to-kill').

Sources : Terminal High Altitude Area Defense (Wikipedia)

---

44. Answer: (b) 2 and 4 only

Statement 1 is wrong. Tyagaraja's songs are mainly an appeal to his deity of worship, primarily Rama, not Krishna. Statement 2 is correct. He is credited with music newly created, and with introducing the sangati into the kriti, changing Carnatic music.

Statement 3 is wrong. Annamacharya lived from 1408 to 1503, and Tyagaraja from 1767 to 1847; they were centuries apart.

Statement 4 is correct. Annamacharya composed devotional sankirtanas in praise of Venkateswara, a form of Vishnu. Answer (b), 2 and 4 only.

How to crack it: Tyagaraja is Rama's devotee, which rules out 1; the dates of the two composers rule out 3.

Remember: Annamacharya (Telugu sankirtanas to Venkateswara) is an early composer; Tyagaraja, Muthuswami Dikshitar and Syama Sastri form the later Carnatic trinity.

Sources : Tyagaraja (Wikipedia); Annamacharya (Wikipedia)

---

45. Answer: (c) 1, 2 and 4 only

A. V. Dicey's Rule of Law has three elements: Absence of arbitrary power, so that no one is punished except for a breach of law (a limitation of power, 1); equality before the law, the equal subjection of all to the ordinary law (2); and the primacy of the rights of the individual, as defined and enforced by the courts (liberty and civil rights, 4).

Statement 3, the people's responsibility to the Government, is not a feature of the Rule of Law; the doctrine binds the government and officials to law, not the people to the government. Answer (c), 1, 2 and 4 only.

How to crack it: The Rule of Law limits the State; 'people's responsibility to the Government' reverses the direction.

Remember: Dicey: 'No man is above the law'; every official, from the Prime Minister to a constable, is under the same law as any citizen.

46. Answer: (b) The money which a creditor is under compulsion to accept in settlement of his claims

Legal tender is money issued by the monetary authority or the government that cannot be refused by anyone in settlement of a transaction. Currency notes and coins are legal tender, so a creditor must accept them in settlement of a claim. Answer (b).

Option (a) is wrong; it has nothing to do with court fees. Option (c) is wrong; cheques and drafts drawn on deposits can be refused, so demand deposits are not legal tender. Option (d) is wrong; legal tender is not limited to metallic money, and paper currency is legal tender too. Answer (b).

How to crack it: 'Tender' means to offer in payment; 'legal' means the law forces the other side to accept it.

Remember: Notes and coins are fiat money; they have no intrinsic value but are accepted because the law makes them legal tender.

Sources : NCERT Class 12, Introductory Macroeconomics, Money

---

47. Answer: (c) the opportunity cost is transferred from the consumers of the product to the tax-paying public.

Opportunity cost is the amount of another good that has to be given up to have more of one good; it applies to society as well as to individuals. A good given free still uses resources that could have produced something else, so its opportunity cost is not zero (a) and is not ignored (b).

When the Government provides it free, the consumers pay nothing at the point of use; the cost is met from public revenue, that is, by taxpayers. The opportunity cost is therefore transferred from the consumers of the product to the tax-paying public. Option (d) is wrong because the Government only collects and spends tax money; it does not itself bear the cost. Answer (c).

How to crack it: Ask who finally pays for a 'free' good. The taxpayer does.

Remember: 'There is no free lunch', because free provision moves the cost from users to taxpayers.

Sources : NCERT Class 12, Introductory Microeconomics

---

48. Answer: (c) poverty and unemployment increase.

Growth is a quantitative increase in income, but development means quantitative as well as qualitative progress in people's lives. If poverty and unemployment rise while real GNP and per capita income grow, the growth is not improving people's lives, so it does not mean a higher level of development. Answer (c).

Options (a), (b) and (d) describe changes in the structure of output or trade; they can happen in a developing economy and do not in themselves mean that development has failed. Answer (c).

How to crack it: Development is about people's welfare; rising poverty and unemployment are the clearest sign that growth has not become development.

Remember: High growth with low development finally results in a fall in growth; the two are linked in a circular relationship.

---

49. Answer: (c) 2 and 4

Human capital is the stock of knowledge, skill and ability built into people through education, health, on-the-job training, migration and information. Human capital formation is therefore the process of increasing the knowledge, skill levels and capacities of the people (2).

Human capital is intangible; it is built into the body and mind of its owner, unlike physical capital, which is tangible and can be sold. So the process is an accumulation of intangible wealth (4), not of tangible wealth (3), and it is not about individuals accumulating more capital in the financial sense (1). Answer (c), 2 and 4.

How to crack it: Human capital is skills and knowledge, and it is intangible. Keep 2 and 4.

Remember: Sources of human capital: Education, health, on-the-job training, migration and information.

Sources : NCERT Class 11, Indian Economic Development, Human Capital Formation

---

50. Answer: (d) high capital-output ratio

The capital-output ratio is the amount of extra capital needed to produce each extra unit of output; it shows how efficiently new investment adds to growth. A ratio of 3:1 is better than 4:1, because the economy needs less capital for each extra unit of output.

A high-saving economy turns savings into investment, but if the capital-output ratio is high, that investment yields only a small increase in output. So a high capital-output ratio explains why capital formation may not raise output much, option (d). Weak administration (a), illiteracy (b) and population density (c) may slow an economy, but they are not the direct link between capital formation and output. Answer (d).

How to crack it: The link between capital formation and output is exactly what the capital-output ratio measures.

Remember: The incremental capital-output ratio (ICOR) is the ratio of investment to growth; lower is more efficient.

---

51. Answer: (c) Both 1 and 2

Statement 1 is correct. The Santhal rebellion of 1855-56 was followed by the creation of the Santal Parganas district in 1855, under the Sonthal Parganas Act (Act 37 of 1855).

Statement 2 is correct. As a consequence of the uprising the British passed the Santhal Parganas Tenancy Act, 1876, which prohibits the sale of Adivasi land to non-Adivasis in the region, so a Santhal could not transfer land to a non-Santhal. Answer (c), Both 1 and 2.

How to crack it: Both measures are the standard colonial response to tribal revolts, a separate administrative area and protection of tribal land.

Remember: The Santhal Hul (1855-56) was led by the brothers Sidhu and Kanhu Murmu.

Sources : Santhal rebellion (Wikipedia); Santal Pargana division (Wikipedia)

---

52. Answer: (c) commercialization of Indian agriculture

In the latter half of the nineteenth century agriculture began to be influenced by commercial considerations, and specialised crops such as cotton were grown not for consumption in the village but for sale in national and international markets. This commercialisation of Indian agriculture was one of the economic results of British rule. Answer (c).

Option (a) is wrong; British rule brought deindustrialisation, the ruin of artisans and handicraftsmen, not more handicraft exports. Option (d) is wrong; deindustrialisation brought the decline of many cities and a ruralisation of India, as artisans moved to villages. Option (b), Indian-owned factories, describes a later and small development, not a principal economic result of the century. Answer (c).

How to crack it: Deindustrialisation and ruralisation rule out (a) and (d); commercialisation of agriculture is the textbook result.

Remember: The main economic effects of British rule: Deindustrialisation, impoverishment of the peasantry and ruralisation, new land relations, stagnation of agriculture, commercialisation of agriculture.

---

53. Answer: (b) the powers of the Legislature of that State shall be exercisable by or under the authority of the Parliament.

Under Article 356(1)(b), when the President proclaims that the government of a State cannot be carried on in accordance with the Constitution, he may declare that the powers of the Legislature of the State shall be exercisable by or under the authority of Parliament. That is option (b).

Option (a) is wrong; the Assembly is suspended or dissolved, but dissolution is not automatic. Option (c) is wrong; Article 19 is suspended only during a national emergency on grounds of war or external aggression, not under President's Rule. Option (d) is wrong; it is Parliament, not the President, that gets the State's legislative power (though Parliament may delegate it). Answer (b).

How to crack it: Article 356 shifts the State legislature's power to Parliament; nothing in it is automatic or touches Article 19.

Remember: Under President's Rule the Parliament passes the State's bills and budget, or delegates that power to the President.

Sources : Constitution of India, Article 356

---

54. Answer: (a) 1 only

Pair 1 is correct. Puthukkuli (poothukuli) is the embroidered shawl of the Toda people of the Nilgiris, and Toda embroidery is a registered geographical indication of Tamil Nadu.

Pair 2 is wrong. Sujini embroidery is registered as a GI of Bihar, not Maharashtra. Pair 3 is wrong. Uppada Jamdani saris are woven in Uppada in Kakinada district of Andhra Pradesh, not Karnataka. Answer (a), 1 only.

How to crack it: Place each craft: Toda (Nilgiris, Tamil Nadu), Sujini (Bihar), Uppada (Andhra Pradesh).

Remember: Toda embroidery received GI status in 2013; the Todas are one of the oldest indigenous tribes of the Nilgiris.

Sources : The Hindu, 21 May 2024, 'How Ooty's Todas capture flowers, hills, and streams on a shawl' (reprint); List of geographical indications in India (Wikipedia); Uppada Jamdani saree (Wikipedia)

---

55. Answer: (d) 1, 2 and 3

GPS gives accurate time as well as position. Its time signal supports everyday activities such as banking, mobile phone operations and even the control of power grids, by allowing well-synchronised hand-off switching. In cellular telephony, clock synchronisation from GPS lets base stations hand calls over between cells.

So all three uses are real. Answer (d), 1, 2 and 3.

How to crack it: Each item needs precise time synchronisation, which GPS provides. All three.

Remember: Positioning is only half of GPS; precise timing is the other half, and much of the infrastructure depends on it.

Sources : Global Positioning System (Wikipedia)

---

56. Answer: (c) 2 and 3 only

Statement 1 is wrong. Government securities include those of the State Governments (State Development Loans), and government securities are issued through auctions conducted by the RBI; the RBI handles State loans too, not only the Centre's.

Statement 2 is correct. In India the Central Government issues both treasury bills and dated bonds, while the State Governments issue only bonds (SDLs); there are no State treasury bills.

Statement 3 is correct. Treasury bills are zero-coupon securities issued at a discount and redeemed at face value; a 91-day bill of ₹100 may be issued at, say, ₹98.20. Answer (c), 2 and 3 only.

How to crack it: Remember 'T-bills: Centre only, issued at a discount' and 'RBI runs the auctions for Centre and States'.

Remember: T-bills are issued in three tenors: 91 days, 182 days and 364 days.

Sources : RBI, FAQs on Government Securities Market

---

57. Answer: (c) 1 and 3 only

Statement 1 is correct. The Earth's magnetic field has reversed at least 183 times in the last 83 million years, on average about once every 450,000 years.

Statement 2 is wrong. The earliest atmosphere consisted of hydrogen and helium and was stripped away by the solar winds; it did not hold 54 per cent oxygen.

Statement 3 is correct. The composition of the atmosphere was later modified by the living world through photosynthesis, which added oxygen. Answer (c), 1 and 3 only.

How to crack it: Free oxygen came from life (photosynthesis), so an early atmosphere rich in oxygen is impossible. Drop 2.

Remember: The atmosphere evolved in three stages: Loss of the primordial atmosphere, degassing from the hot interior, and modification by life through photosynthesis.

Sources : Geomagnetic reversal (Wikipedia); NCERT Class 11, Fundamentals of Physical Geography, Evolution of the atmosphere

---

58. Answer: (c) Cyber attacks

WannaCry was the worldwide ransomware cyberattack of 2017, which encrypted data on Windows computers and demanded ransom in bitcoin; it spread using EternalBlue, an exploit developed by the US National Security Agency and leaked by a group called the Shadow Brokers. Petya was the June 2017 ransomware attack that also used EternalBlue. All three terms relate to cyber attacks. Answer (c).

They have nothing to do with exoplanets (a) or mini satellites (d); WannaCry demanded bitcoin, but the terms are not about cryptocurrency itself (b). Answer (c).

How to crack it: 'WannaCry' (as in 'want to cry') is the name of malware; EternalBlue is the exploit it used.

Remember: Ransomware locks a victim's files and demands payment for the key.

Sources : WannaCry ransomware attack (Wikipedia)

---

59. Answer: (c) 2, 4 and 5

FAO describes Conservation Agriculture as resting on three principles: Minimum soil disturbance (no-till farming), maintenance of a permanent soil cover, and diversification of plant species through crop rotations and associations.

So adopting minimum tillage (2), using crop residues to cover the soil (4) and adopting spatial and temporal crop sequencing or rotation (5) fall under it. Items 1 and 3 are framed as things to avoid, not as practices; avoiding plantation crops is no part of conservation agriculture, and the key counts only the three practices that match the principles. Answer (c), 2, 4 and 5.

How to crack it: Match each item to the three CA principles; only 2, 4 and 5 map onto them.

Remember: Conservation agriculture's three principles: Minimum soil disturbance, permanent soil cover, crop diversification.

Sources : Conservation agriculture (Wikipedia, quoting FAO)

---

60. Answer: (d) Mankind's over-exploitation/misuse of natural resources, fragmentation/loss of natural habitats, destruction of ecosystems, pollution and global climate change.

The 'sixth mass extinction' refers to the Holocene extinction, the ongoing extinction of species caused by human activity: Over-exploitation of nature, the loss and fragmentation of habitats, pollution and climate change. Several studies posit that the Earth has entered a sixth mass extinction event. Answer (d).

Options (a) and (c) pick out only farming practices or GM crops, which are parts of the human pressure but not the whole of it. Option (b) is about a meteorite, the cause of the extinction that ended the dinosaurs, not the current one. Answer (d).

How to crack it: The 'sixth' extinction is the present one, and its cause is people. Option (d) lists the human drivers.

Remember: A 2015 study and the 2017 statement 'World Scientists' Warning to Humanity: A Second Notice' both posit that a sixth mass extinction is under way.

Sources : Holocene extinction (Wikipedia)

---

61. Answer: (a) 1 only

Statement 1 is correct. The IRNSS (NavIC) constellation has seven satellites: Three in geostationary orbit (at 32.5° E, 83° E and 131.5° E) and four in inclined geosynchronous orbit.

Statement 2 is wrong. NavIC covers India and a region extending about 1,500 km around it, not '5500 sq. km'. Statement 3 is wrong. NavIC is a regional system; plans to extend it towards global coverage came later, in the 2021 draft policy, and no global system was in place by 2019. Answer (a), 1 only.

How to crack it: NavIC is regional by design; that removes 3, and the coverage is a distance (1,500 km), not an area. Only 1 stands.

Remember: The system was built partly because access to foreign navigation systems is not guaranteed in hostile situations, as during Kargil in 1999.

Sources : Indian Regional Navigation Satellite System (Wikipedia)

---

62. Answer: (d) 1, 2 and 3

General relativity describes gravity as the curvature of spacetime, which is directly related to the matter and energy present, since matter warps the space-time around it (3). It predicts that the path of light follows that curvature as it passes a massive body, so light is affected by gravity (1); gravitational lensing is the observed result.

General relativity also provides the basis for the cosmological models of an expanding universe; Friedmann's expanding solutions of 1922 came from Einstein's equations, and Hubble's observations by 1929 confirmed the expansion (2). Answer (d), 1, 2 and 3.

How to crack it: All three are textbook consequences of Einstein's field equations; none is a later or separate theory.

Remember: Gravitational waves, observed directly by LIGO, are another prediction of the theory.

Sources : General relativity (Wikipedia)

---

63. Answer: (b) 2 only

Statement 1 is wrong. GM mustard (Dhara Mustard Hybrid-11, DMH-11) carries three genes, bar, barnase and barstar, taken from soil bacteria; they control pollination and give tolerance to the herbicide glufosinate, not resistance to pests.

Statement 2 is correct. The barnase gene makes a line male-sterile and barstar restores fertility, so the system allows cross-pollination and the production of hybrid seed, to prevent self-fertilisation and use heterosis.

Statement 3 is wrong. DMH-11 was developed by Deepak Pental and colleagues at the Centre for Genetic Manipulation of Crop Plants, University of Delhi, not by IARI and Punjab Agricultural University. Answer (b), 2 only.

How to crack it: GM mustard is a hybridisation technology (barnase-barstar) from Delhi University; nothing in it is about pests.

Remember: DMH-11 took 14 years and about Rs 700 million to develop; its aim was to cut India's edible oil imports.

Sources : DMH-11 Mustard (Wikipedia)

---

64. Answer: (b) 2 only

Pair 1 is wrong. The Belle II experiment is a particle physics experiment in Japan that studies B mesons; it has nothing to do with artificial intelligence. Pair 3 is wrong. CRISPR-Cas9 is a genome-editing technique in biology, not particle physics.

Pair 2 is correct. Blockchain is the distributed ledger technology on which digital currencies such as bitcoin run. Answer (b), 2 only.

How to crack it: Belle II and CRISPR-Cas9 have had their contexts swapped; only the blockchain pair is right.

Remember: Two of the three pairs are swapped: Belle II belongs with particle physics and CRISPR-Cas9 with gene editing.

Sources : Belle II experiment (Wikipedia); CRISPR gene editing (Wikipedia); Blockchain (Wikipedia)

---

65. Answer: (a) Increased plant growth due to increased concentration of carbon dioxide in the atmosphere

The carbon fertilisation effect is the increased rate of photosynthesis, with reduced leaf transpiration, that plants show when the concentration of carbon dioxide in the atmosphere rises; in other words, increased plant growth due to more CO2. Answer (a).

Option (b) describes global warming, option (c) ocean acidification, and option (d) adaptation to climate change; each is a different effect of rising CO2. Answer (a).

How to crack it: 'Fertilisation' means feeding plant growth; the CO2 option about plants is the answer.

Remember: Higher photosynthesis does not raise all plant growth and carbon storage equally; water and nutrients limit the effect.

Sources : CO2 fertilization effect (Wikipedia)

---

66. Answer: (b) Internet of Things

The scene describes everyday physical objects (alarm, geyser, mirror, water tank, refrigerator) connected to the Internet, sensing their state and acting on one another without a person in between. That is the Internet of Things, best known in the consumer market as smart-home devices. Answer (b).

The Border Gateway Protocol (a) and the Internet Protocol (c) are rules for routing and addressing data on networks, and a Virtual Private Network (d) is a secure tunnel over a public network; none describes connected appliances. Answer (b).

How to crack it: Things talking to things: Internet of Things.

Remember: IoT's largest applications are actually in business and industry, such as asset tracking, not only smart homes.

Sources : Internet of things (Wikipedia)

---

67. Answer: (d) Neither 1 nor 2

Statement 1 is wrong. The upstream solar chain of polysilicon and wafers is dominated by China, which holds around 90 per cent of world polysilicon capacity; India's manufacturing has been mainly in cells and modules, and commercial output of wafers and ingots began only in 2024. India was not the third-largest wafer maker in 2018.

Statement 2 is wrong. Solar tariffs are not fixed by the Solar Energy Corporation of India; SECI selects developers through tariff-based competitive bidding, and the tariff is the one discovered in the bids. Answer (d), Neither 1 nor 2.

How to crack it: SECI runs the auctions; the bidders' prices set the tariff. And India's wafer making was negligible in 2018.

Remember: As of December 2023, India's capacity was about 6 GW for solar cells and 37 GW for modules.

Sources : Polysilicon (Wikipedia); Solar power in India (Wikipedia); Solar Energy Corporation of India (Wikipedia)

---

68. Answer: (d) Cotton, silk, saltpetre and opium

Bengal was the great supplier of the European companies; it exported cotton and silk textiles, raw silk and saltpetre, which was shipped to Europe for gunpowder, and opium. The East India Company's own trade list is cotton, silk, indigo, sugar, salt, spices, saltpetre, tea and opium. Cotton, silk, saltpetre and opium is the set that fits Bengal. Answer (d).

Option (a) puts raw cotton and oil-seeds first, which were not Bengal's staples then. Option (b), sugar, salt, zinc and lead, and option (c), copper, silver, gold, spices and tea, do not match the textiles, saltpetre and opium for which Bengal was known. Answer (d).

How to crack it: Bengal meant textiles (cotton, silk), saltpetre and opium; any list with metals or tea is out.

Remember: Saltpetre (potassium nitrate) from the Bengal-Bihar region was the key ingredient of European gunpowder.

Sources : Bengal Subah (Wikipedia); East India Company (Wikipedia)

---

69. Answer: (c) Joining of peasant unrest to India's National Movement

At Champaran in Bihar (1917), European planters forced peasants to grow indigo on 3/20 of their land (the tinkathia system) and later extracted high rents and illegal dues. Gandhi took up the peasants' cause; the enquiry led to the abolition of the tinkathia system. It was his first civil disobedience in India and joined peasant unrest to the national movement. Answer (c).

Option (a) is wrong; there was no all-India participation of lawyers, students and women, since it was a local struggle in one district. Option (b) is wrong; it was a peasant struggle, not one of Dalit and tribal communities. Option (d) is wrong; it did not bring a drastic fall in plantation or commercial crops. Answer (c).

How to crack it: Champaran was about indigo peasants; its significance is bringing peasant grievances into the national movement.

Remember: Gandhi's early struggles: Champaran (1917, first civil disobedience), Ahmedabad mill strike (1918, first hunger strike), Kheda (1918, first non-cooperation).

Sources : Champaran Satyagraha (Wikipedia)

---

70. Answer: (d) Ashok Mehta, T.S. Ramanujam and G.G. Mehta

The Hind Mazdoor Sabha was formed on 29 December 1948 by socialists, Forward Bloc followers and independent unionists. Its founders included Basawon Singh, Ashoka Mehta, R. S. Ruikar, Maniben Kara, T. S. Ramanujam and G. G. Mehta; Ruikar was its first president and Ashok Mehta its general secretary. Answer (d).

None of the names in options (a), (b) and (c) appears among the HMS founders, so none of these sets is right. Answer (d).

How to crack it: Ashok Mehta was the HMS's first general secretary; the option that names him is the answer.

Remember: The HMS absorbed the Royist Indian Federation of Labour and the Hind Mazdoor Panchayat; it is affiliated to the ITUC.

Sources : Hind Mazdoor Sabha (Wikipedia)

---

71. Answer: (b) Jainism

The Sthanakvasi are a sub-tradition of Svetambara Jainism. They perform religious duties in a monks' meeting-house (sthanak) rather than a temple, and differ from the Murtipujaka Jains in rejecting idol worship. Answer (b).

The sect has no place in Buddhism (a), Vaishnavism (c) or Shaivism (d). Answer (b), Jainism.

How to crack it: 'Sthanak' is the meeting-house where these Jains worship instead of a temple.

Remember: Sthanakvasis accept thirty-two of the Jain Agamas of the Svetambara canon.

Sources : Sthanakvasi (Wikipedia)

---

72. Answer: (d) Neither 1 nor 2

Statement 1 is wrong. Fatehpur Sikri was built mainly of red sandstone, and the Buland Darwaza is made of red and buff sandstone; white marble appears there only as framing and inlay, not as the building material.

Statement 2 is wrong. The Rumi Darwaza at Lucknow, built by Nawab Asaf-ud-Daula in 1784, is built of thin burnt clay bricks (lakhori) and lime and crushed-brick mortar (surkhi), the usual materials under the Nawabs, not red sandstone and marble. Answer (d), Neither 1 nor 2.

How to crack it: Akbar's Fatehpur Sikri is a red sandstone city; Nawabi Lucknow built in brick and lime. Neither statement holds.

Remember: Asaf-ud-Daula built both the Bara Imambara and the Rumi Darwaza in 1784; the Rumi Darwaza was modelled on the Sublime Porte in Istanbul.

Sources : Buland Darwaza (Wikipedia); Fatehpur Sikri (Wikipedia); Rumi Darwaza (Wikipedia); Bara Imambara (Wikipedia)

---

73. Answer: (b) Jean-Baptiste Tavernier

Jean-Baptiste Tavernier was a French gem merchant who travelled in India between 1630 and 1668, visited the Kingdom of Golconda and the Kollur diamond mines, and is best known for buying the 116-carat Tavernier Blue diamond, which he sold to Louis XIV. His 'Six Voyages' (1676) describes diamonds and diamond mines at length. Answer (b).

Francois Bernier (a) and Jean de Thevenot (c) were also French travellers in seventeenth-century India, and Abbe Carre (d) is another traveller; but the detailed account of diamonds and their mines is Tavernier's. Answer (b).

How to crack it: A diamond merchant writes about diamond mines: Tavernier.

Remember: Kollur, in the Golconda kingdom, was the source of many famous diamonds.

Sources : Jean-Baptiste Tavernier (Wikipedia); François Bernier (Wikipedia); Jean de Thévenot (Wikipedia)

---

74. Answer: (c) Maitreya

Maitreya is the bodhisattva regarded in all schools of Buddhism as the future Buddha of this world, the direct successor of Gautama Buddha, who will re-establish the Dharma on Earth. Answer (c).

Avalokiteshvara (a), the bodhisattva of compassion, is also called Lokesvara, 'Lord of the World' (b), and is depicted as Padmapani, holding a lotus, as in the Ajanta caves (d). All three name one bodhisattva, not the future Buddha. Answer (c), Maitreya.

How to crack it: The future Buddha is Maitreya; the other three are names of Avalokiteshvara.

Remember: Three of the options are names of the same bodhisattva; that alone leaves Maitreya.

Sources : Maitreya (Wikipedia); Avalokiteshvara (Wikipedia)

---

75. Answer: (c) To secure a fixed income for the Company

Under the Subsidiary Alliance (introduced by Wellesley in 1798, first with the Nizam of Hyderabad), the ruler had to keep the Company's troops in his state and provide money or territory for their upkeep, so the Company kept a large army at others' expense (a). He had to expel all other Europeans from his service, which kept out the French and their Napoleonic designs (b). He accepted the British as the supreme power in external affairs, establishing British supremacy over the states (d).

Securing a fixed income for the Company (c) was not an aim of the system; the payments were tied to the upkeep of the troops, and a ruler who could not pay ceded territory instead. So (c) is the statement that does not apply. Answer (c).

How to crack it: Army at the ally's cost, Europeans expelled, British supremacy; these are the system's features. A 'fixed income' is not.

Remember: Hyderabad, Awadh and the Marathas accepted subsidiary alliances.

Sources : Subsidiary alliance (Wikipedia)

---

76. Answer: (d) 1, 2 and 3

The Charter Act of 1813 incorporated the principle of encouraging learned Indians and promoting modern sciences, and directed the Company to sanction one lakh rupees a year for education (1). The money was not made available till 1823, when the General Committee of Public Instruction was formed to handle it (2).

Within that Committee, the Anglicists wanted spending only on modern studies while the Orientalists wanted traditional learning expanded; Macaulay's Minute of 1835 settled the controversy in favour of the Anglicists and of English as the medium (3). All three led to English education. Answer (d), 1, 2 and 3.

How to crack it: The 1813 grant, the 1823 Committee that spent it, and the controversy inside that Committee form one chain ending in English education.

Remember: Macaulay's Minute (1835) devoted the limited government resources to teaching western sciences and literature through English.

---

77. Answer: (a) Kodaikanal (Tamil Nadu)

Kodaikanal Lake in Dindigul district of Tamil Nadu is a man-made lake, created in 1863 through the efforts of Sir Vere Henry Levinge, then Collector of Madurai. Answer (a).

Naini Lake (c) is a natural freshwater body of tectonic origin. Kolleru (b) is one of India's largest freshwater lakes, lying between the Krishna and Godavari deltas, and Renuka (d) is the largest lake of Himachal Pradesh; neither was built. Answer (a), Kodaikanal.

How to crack it: Kodaikanal was a British hill station, and its lake was dug for the town in 1863.

Remember: Kolleru is a Ramsar wetland, the largest shallow freshwater lake in Asia.

Sources : Kodaikanal Lake (Wikipedia); Naini Lake (Wikipedia); Kolleru Lake (Wikipedia); Renuka Lake (Wikipedia)

---

78. Answer: (c) 2 and 3 only

Statement 1 is wrong. PMKVY is the flagship scheme of the Ministry of Skill Development and Entrepreneurship (MSDE), not of the Ministry of Labour and Employment.

Statement 2 is correct. Apart from training according to the National Skills Qualification Framework (NSQF), training centres also impart training in soft skills, entrepreneurship, financial and digital literacy. Statement 3 is correct. Its Recognition of Prior Learning component aims to align the competencies of the unregulated workforce of the country to the NSQF. Answer (c), 2 and 3 only.

How to crack it: Skills schemes sit with the Skill Development Ministry, created for that purpose; statements 2 and 3 are taken from the scheme's own description.

Remember: PMKVY was launched on 16 July 2015; training under it is free for the candidate.

Sources : District Mandya (NIC), Pradhan Mantri Kaushal Vikas Yojana; Pradhan Mantri Kaushal Vikas Yojana (Wikipedia)

---

79. Answer: (a) All India Home Rule League

In 1920 the All India Home Rule League changed its name to Swarajya Sabha. The League had been founded under Annie Besant and Bal Gangadhar Tilak, and in 1920 it merged into the Congress movement under Gandhi. Answer (a).

The Hindu Mahasabha (b), the South Indian Liberal Federation (c) and the Servants of India Society (d) did not take that name. Answer (a).

How to crack it: 'Swarajya' is the Home Rule demand in Indian words; the Home Rule League simply renamed itself.

Remember: The Home Rule flag had five red and four green horizontal stripes, with the Union Flag in the upper left for the Dominion status the movement sought.

Sources : All India Home Rule League (Wikipedia)

---

80. Answer: (b) Dinabandhu Mitra wrote Neeldarpan.

Dinabandhu Mitra wrote Nil Darpan in 1858-59, and the play was linked to the Indigo Revolt of 1859; this is the earliest of the four events. Answer (b).

Satyendranath Tagore, the first Indian in the Indian Civil Service, joined the service in 1864 (d). Swami Dayanand founded the Arya Samaj in Bombay on 10 April 1875 (a). Bankim Chandra Chattopadhyay's Anandamath appeared in 1882 (c). Order: Nil Darpan, ICS, Arya Samaj, Anandamath. Answer (b).

How to crack it: Nil Darpan belongs to the Indigo Revolt of 1859, before the other three events.

Remember: Nil Darpan was first published anonymously, in Dhaka in 1860.

Sources : Nil Darpan (Wikipedia); Satyendranath Tagore (Wikipedia); Arya Samaj (Wikipedia); Anandamath (Wikipedia)

---

81. Answer: (b) 2 and 3 only

Statement 3 is correct. Heavy extraction lowers the riverbed and the river's water level, and the ground water table in the flood plain falls with it as water drains out of the adjacent areas.

Statement 2 is correct. The sand bed acts as a filter before water recharges the ground water; mining it away exposes the aquifer, which is why the Sustainable Sand Mining Management Guidelines, 2016 aim to prevent ground water pollution by prohibiting mining where the sand works as that filter. Statement 1 is wrong. Removing sand from the bed does nothing to reduce the river's salinity. Answer (b), 2 and 3 only.

How to crack it: Sand is a filter and a store for ground water; removing it lowers and pollutes ground water. It has no link to lower salinity.

Remember: The 2016 guidelines also aim to protect rivers from bank and bed erosion beyond their stable profile.

Sources : MoEFCC, Sustainable Sand Mining Management Guidelines 2016

---

82. Answer: (b) 3 only

Statement 1 is wrong. Organic matter raises a soil's water-holding capacity; humus retains moisture in the topsoil, can hold the equivalent of 80-90 per cent of its weight in moisture, and so increases the soil's capacity to withstand drought.

Statement 2 is wrong. Soil is part of the sulphur cycle; humus contains sulphur, and the sulphate in circulation is produced mostly by the weathering of the continents. Statement 3 is correct. Irrigation has led to the alkalisation and salinisation of soils, the main form of land degradation in irrigated areas; alkalinity and salinity have affected about 8 million hectares in India. Answer (b), 3 only.

How to crack it: Statement 1 reverses the benefit of organic matter and statement 2 denies soil a role it plainly has; only the irrigation statement stands.

Remember: Waterlogging has cost another 7 million hectares their fertility, again mainly in irrigated areas.

Sources : Humus (Wikipedia); Sulfur cycle (Wikipedia); NCERT Class 12, India: People and Economy, Land degradation

---

83. Answer: (b) The United Nations Conference on Sustainable Development 2012, Rio de Janeiro

The Partnership for Action on Green Economy (PAGE) was launched in 2013 as a response to the call at Rio+20, the United Nations Conference on Sustainable Development held at Rio de Janeiro in 2012, to support countries wishing to move to greener and more inclusive growth. Answer (b).

It did not come from the Johannesburg summit of 2002 (a), the Paris climate conference of 2015 (c) or the World Sustainable Development Summit in New Delhi in 2016 (d). Answer (b).

How to crack it: The 'green economy' was the theme of Rio+20 in 2012; PAGE was its follow-up.

Remember: PAGE brings together five UN agencies, funding partners and partner countries.

Sources : UN Partnerships for SDGs, Partnership for Action on Green Economy (PAGE); PAGE

---

84. Answer: (d) 1, 2, 3, 4 and 5

3D printing (additive manufacturing) builds objects layer by layer. Food is printed this way, including chocolate and candy (1). Bioprinters can produce ear cartilage, the basis of printed bionic ears (2). It is used in the automotive industry, including car parts (3), and in medicine, including facial reconstruction surgery (4).

From the 1980s additive manufacturing has also been used in product development and data visualisation (5). All five fit. Answer (d), 1, 2, 3, 4 and 5.

How to crack it: 3D printing builds almost any shape layer by layer, from chocolate to car parts to ear cartilage; each item is a real use.

Remember: Surgeons also use 3D-printed organ replicas to prepare for complex operations.

Sources : Applications of 3D printing (Wikipedia)

---

85. Answer: (a) 1 only

Statement 1 is correct. Barren Island, in the Indian Union territory of Andaman and Nicobar Islands, is the only confirmed active volcano in the Indian subcontinent.

Statement 2 is wrong. Barren Island lies in the Andaman Sea about 138 km north-east of Port Blair, far north of Great Nicobar.

Statement 3 is wrong. The 1991 eruption, after about a century and a half of dormancy, was followed by further eruptions in 2017-18 and later. Answer (a), 1 only.

How to crack it: Barren Island is near Port Blair, not Great Nicobar, and it has erupted repeatedly since 1991.

Remember: Barren Island is the only active volcano along the chain of volcanoes from Sumatra to Myanmar.

Sources : Barren Island (Wikipedia)

---

86. Answer: (b) It tends to reduce the biodiversity in the area in which it grows.

Prosopis juliflora, a mesquite native to Mexico, South America and the Caribbean, has become an invasive weed in India and many other countries. Its aggressive growth forms a monoculture that denies native plants water and sunlight, and it destroys grasslands that are habitats for native plants and animals, so it reduces the biodiversity of the area where it grows. Answer (b).

It is in the news as an invader, not for an extract used in cosmetics (a) or pesticides (c); so 'none of the above' (d) is also wrong. Answer (b).

How to crack it: Prosopis is in the news as an invasive weed; it crowds out native plants and so lowers biodiversity.

Remember: It is hard and expensive to remove because the plant regenerates from its roots.

Sources : Prosopis juliflora (Wikipedia)

---

87. Answer: (d) 1, 2 and 3

Statement 1 is correct. Coral reefs are most commonly found at shallow depths in tropical waters; cold-water reefs exist only on a smaller scale. Statement 2 is correct. By reef area, Australia holds 16.88 per cent, Indonesia 15.26 per cent and the Philippines 9.74 per cent, together 41.88 per cent, more than one-third.

Statement 3 is correct. Coral reefs hold 32 of the 34 recognised animal phyla, against only 9 in tropical rainforests. Answer (d), 1, 2 and 3.

How to crack it: All three are standard coral facts: Tropical, concentrated in Australia and South-East Asia, and richer in phyla than rainforests.

Remember: Reefs occupy less than 0.1 per cent of the ocean area but are home to at least 25 per cent of all marine species.

Sources : Coral reef (Wikipedia); GCRMN/ICRI, Status of Coral Reef Monitoring; ICAR-CMFRI, Scleractinian corals

---

88. Answer: (c) The UNFCCC Secretariat

Momentum for Change is an initiative spearheaded by the UN Climate Change (UNFCCC) secretariat to recognise practical climate solutions, and Climate Neutral Now is an initiative launched by UN Climate Change in 2015 to encourage everyone to work towards a climate-neutral world. Both belong to the UNFCCC secretariat. Answer (c).

Neither initiative belongs to the IPCC (a), UNEP (b) or the WMO (d); both are listed among the UNFCCC's own climate action programmes. Answer (c).

How to crack it: Both names appear under the UNFCCC's own 'climate action' programmes.

Remember: Climate Neutral Now works through a 3-step method whose first step is to measure one's greenhouse gas emissions, the carbon footprint.

Sources : UNFCCC, Momentum for Change (archived 2018); UNFCCC, Climate Neutral Now (archived 2019)

---

89. Answer: (b) 2 only

Pair 2 is correct. The Calcutta Madrasah was established by Warren Hastings in 1781 for the study of Muslim law.

Pair 1 is wrong. The Sanskrit College at Benaras was established in 1791 by Jonathan Duncan, the Company's resident, not by William Jones. Pair 3 is wrong. Fort William College was founded in 1800 by Lord Wellesley (Richard Wellesley), the Governor-General, not by his younger brother Arthur Wellesley, the future Duke of Wellington. Answer (b), 2 only.

How to crack it: Hastings-Madrasah (1781), Duncan-Sanskrit College (1791), Richard Wellesley-Fort William (1800). Watch the 'Arthur' trap.

Remember: The Madrasah and the Sanskrit College were meant to supply qualified Indians for the administration of law in the Company's courts.

Sources : Richard Wellesley, 1st Marquess Wellesley (Wikipedia)

---

90. Answer: (c) 1 and 3 only

Pair 1 is correct: Catalonia is an autonomous community of Spain. Pair 3 is correct: Mindanao is an island of the Philippines.

Pair 2 is wrong: Crimea is part of Ukraine, under Russian occupation since 2014, not Hungary. Pair 4 is wrong: Oromia is a regional state of Ethiopia, not Nigeria. Answer (c), 1 and 3 only.

How to crack it: Fix each region to its country: Catalonia-Spain, Crimea-Ukraine, Mindanao-Philippines, Oromia-Ethiopia.

Remember: In region-and-country pairs, a single wrong country in a pair is enough to rule that pair out.

Sources : Catalonia (Wikipedia); Crimea (Wikipedia); Mindanao (Wikipedia); Oromia (Wikipedia)

---

91. Answer: (b) 3-2-1-4

Air India was nationalised by the Government of India in 1953 (3). The Imperial Bank of India became the State Bank of India on 1 July 1955 (2). The first E. M. S. Namboodiripad ministry, the first elected communist government in an Indian State, took office in Kerala in 1957 (1). Goa became part of India after the annexation of December 1961 (4).

So the order is 3-2-1-4. Answer (b).

How to crack it: Anchor the two easy dates: Air India 1953 comes first and Goa 1961 last. Only (b) begins with 3 and ends with 4 in the right order.

Remember: Imperial Bank of India (1921) was itself formed from the three presidency banks of Calcutta, Bombay and Madras.

Sources : Air India (Wikipedia); State Bank of India (Wikipedia); First E. M. S. Namboodiripad ministry (Wikipedia); Annexation of Goa (Wikipedia)

---

92. Answer: (c) Article 21 and the freedoms guaranteed in Part III

In Justice K. S. Puttaswamy v. Union of India (2017), a nine-judge bench unanimously held that 'the right to privacy is protected as an intrinsic part of the right to life and personal liberty under Article 21 and as a part of the freedoms guaranteed by Part III of the Constitution.' The question quotes that holding. Answer (c).

Article 14 (equality) with the 42nd Amendment (a), Article 17 (untouchability) with the Directive Principles (b), and Article 24 (child labour) with the 44th Amendment (d) are not the basis the Court gave. Answer (c).

How to crack it: The stem paraphrases the Puttaswamy holding: Article 21 together with Part III.

Remember: The judgment overruled M. P. Sharma and Kharak Singh, which had held that there is no fundamental right to privacy.

Sources : Puttaswamy v. Union of India (Wikipedia)

---

93. Answer: (b) 2, 4, 5 and 6 only

The MSP covers 23 commodities: Cereals (paddy, wheat, maize, sorghum, pearl millet, barley, ragi), pulses, oilseeds (groundnut, rapeseed, soybean, sesame, sunflower, safflower, nigerseed) and commercial crops (copra, sugarcane, cotton, raw jute). So barley (2), finger millet or ragi (4), groundnut (5) and sesamum (6) have an MSP.

Areca nut (1), coffee (3) and turmeric (7) are not in the MSP list. Answer (b), 2, 4, 5 and 6 only.

How to crack it: MSP covers cereals, pulses, oilseeds and a few fibre and commercial crops; plantation crops and spices are outside it.

Remember: The MSP is fixed on the recommendation of the Commission for Agricultural Costs and Prices (CACP).

Sources : Minimum support price (India) (Wikipedia)

---

94. Answer: (a) Arunachal Pradesh

Pakhui Wildlife Sanctuary, now Pakke Tiger Reserve, is in East Kameng district of Arunachal Pradesh. The area was constituted as Pakhui Reserve Forest in 1966, renamed Pakhui Wildlife Sanctuary in 2001, and became Pakhui Tiger Reserve on 23 April 2002. Answer (a).

It is not in Manipur (b), Meghalaya (c) or Nagaland (d). Answer (a), Arunachal Pradesh.

How to crack it: Pakke (Pakhui) is one of Arunachal Pradesh's tiger reserves.

Remember: West of the Kameng river lie the Sessa Orchid Sanctuary and Eaglenest Wildlife Sanctuary.

Sources : Pakke Tiger Reserve (Wikipedia)

---

95. Answer: (a) 1 only

Statement 1 is correct. The PSLV was developed to place India's Indian Remote Sensing (IRS) satellites in sun-synchronous orbits, while the GSLV Mk III (LVM3) was primarily designed to launch communication satellites into geostationary orbit.

Statement 2 is wrong. Only satellites in geostationary orbit appear fixed in the sky; the PSLV places satellites mainly in sun-synchronous polar orbits. Statement 3 is wrong. GSLV Mk III is a three-stage vehicle: Two S200 solid boosters, an L110 liquid core stage and a C25 cryogenic upper stage. Answer (a), 1 only.

How to crack it: PSLV for polar remote sensing, GSLV for geostationary communication. Appearing fixed in the sky is a geostationary trait, and Mk III has three stages, not four.

Remember: GSLV Mk III was renamed LVM3; it launched Chandrayaan-2 and Chandrayaan-3.

Sources : Polar Satellite Launch Vehicle (Wikipedia); LVM3 (Wikipedia)

---

96. Answer: (b) 2 only

Statement 1 is wrong. Government capital infusion into public sector banks has not risen steadily; it was Rs 12,000 crore in 2011-12, Rs 12,517 crore in 2012-13 and Rs 6,990 crore by February 2015, so the amounts went up and down.

Statement 2 is correct. The merger of the five remaining associate banks (of Bikaner and Jaipur, Hyderabad, Mysore, Patiala and Travancore) and Bharatiya Mahila Bank with the State Bank of India took effect on 1 April 2017. Answer (b), 2 only.

How to crack it: 'Steadily increased' is the trap; infusions varied from year to year. The SBI merger is a known fact of 2017.

Remember: The first associate bank to merge with SBI was the State Bank of Saurashtra, in 2008.

Sources : State Bank of India (Wikipedia)

97. Answer: (c) 1, 2 and 4 only

The 2017 GST schedule of goods at nil rate includes cereal grains hulled (heading 1104) (1), birds' eggs in shell, fresh, preserved or cooked (0407) (2), and newspapers, journals and periodicals, whether or not illustrated or containing advertising material (4902) (4).

Prepared or preserved fish (1604), which covers processed and canned fish (3), is in the schedule of goods at 12 per cent, so it is not exempt. Answer (c), 1, 2 and 4 only.

How to crack it: Basic foods and newspapers are nil; processing and canning move fish into a taxed slab.

Remember: Branded flour and cereal groats put up in unit containers fell outside the nil list, while the unbranded forms were nil-rated.

Sources : Goa Commercial Taxes, GST goods rates booklet (3 July 2017)

98. Answer: (a) 1 and 2 only

Statement 1 is correct. Section 2(b) of the Forest Rights Act, 2006 defines 'critical wildlife habitat' as areas of National Parks and Sanctuaries that must be kept inviolate for wildlife conservation. Statement 2 is correct. The Baiga became India's first community to get habitat rights under the Act.

Statement 3 is wrong. Habitat rights for primitive tribal groups are forest rights under Section 3(1)(e) of the Act; they are recognised through the Gram Sabha, which initiates the process, and the District Level Committee, which takes the final decision, not declared by the Union Ministry of Environment. Answer (a), 1 and 2 only.

How to crack it: Habitat rights come from the village up (Gram Sabha), under the Forest Rights Act; the Environment Ministry has no power to grant them.

Remember: The Rules under the Forest Rights Act are framed by the Ministry of Tribal Affairs, the Act's nodal ministry.

Sources : Forest Rights Act, 2006 and Rules (Ministry of Tribal Affairs); Baiga tribe (Wikipedia); Forest Rights Act (Wikipedia)

99. Answer: (d) 1, 2, 3 and 4

Plant pathogens travel by many routes. In chestnut blight, for example, spores are carried by eddies of wind to new hosts (4), are dispersed by rain splash (3), and are spread mechanically when insects, birds or other wildlife touch the cankers (1).

Dust storms also blow bacteria and fungal spores from the ground into the atmosphere, spreading disease across regions (2). All four can spread plant diseases. Answer (d), 1, 2, 3 and 4.

How to crack it: Anything that moves spores (wind, rain, dust, animals) can move a plant disease. All four.

Remember: Wind carries spores over long distances, while rain splash usually spreads them only over short distances.

Sources : Chestnut blight (Wikipedia); Dust storm (Wikipedia)

100. Answer: (b) 2 and 3 only

Statement 1 is wrong. NPOP is not run by the Ministry of Rural Development; its secretariat, APEDA, is a statutory body under the Ministry of Commerce and Industry, and the programme serves organic exports.

Statement 2 is correct. APEDA functions as the secretariat to the National Accreditation Board for accrediting certification bodies under the National Programme for Organic Production. Statement 3 is correct. Sikkim converted its agriculture to fully organic between 2003 and 2016 and became India's first state to do so. Answer (b), 2 and 3 only.

How to crack it: NPOP is an export-certification programme, so it sits with the Commerce Ministry through APEDA, not with Rural Development.

Remember: APEDA was set up in 1986 by an Act of Parliament to promote exports of agricultural and processed food products.

Sources : APEDA (Wikipedia); Sikkim (Wikipedia)