

# UPSC Prelims 2016: Answer Key with Explanations

GS Paper I, Series A. Answers follow UPSC's final answer key; explanations by Digitally Learn.

## Answer key, all four sets

### Set A

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

### Set B

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

### Set C

|              |              |              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 1: <b>b</b>  | 2: <b>c</b>  | 3: <b>a</b>  | 4: <b>d</b>  | 5: <b>a</b>  | 6: <b>c</b>  | 7: <b>a</b>  | 8: <b>c</b>  | 9: <b>d</b>  | 10: <b>b</b> |
| 11: <b>a</b> | 12: <b>b</b> | 13: <b>d</b> | 14: <b>d</b> | 15: <b>b</b> | 16: <b>b</b> | 17: <b>b</b> | 18: <b>d</b> | 19: <b>b</b> | 20: <b>a</b> |
| 21: <b>c</b> | 22: <b>d</b> | 23: <b>a</b> | 24: <b>d</b> | 25: <b>b</b> | 26: <b>c</b> | 27: <b>b</b> | 28: <b>d</b> | 29: <b>d</b> | 30: <b>d</b> |
| 31: <b>a</b> | 32: <b>b</b> | 33: <b>c</b> | 34: <b>c</b> | 35: <b>b</b> | 36: <b>b</b> | 37: <b>d</b> | 38: <b>c</b> | 39: <b>d</b> | 40: <b>d</b> |
| 41: <b>c</b> | 42: <b>b</b> | 43: <b>d</b> | 44: <b>c</b> | 45: <b>d</b> | 46: <b>d</b> | 47: <b>b</b> | 48: <b>b</b> | 49: <b>a</b> | 50: <b>b</b> |
| 51: <b>b</b> | 52: <b>c</b> | 53: <b>c</b> | 54: <b>b</b> | 55: <b>c</b> | 56: <b>b</b> | 57: <b>d</b> | 58: <b>c</b> | 59: <b>c</b> | 60: <b>b</b> |

|              |              |              |              |              |              |              |              |              |               |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| 61: <b>a</b> | 62: <b>d</b> | 63: <b>c</b> | 64: <b>d</b> | 65: <b>c</b> | 66: <b>c</b> | 67: <b>c</b> | 68: <b>d</b> | 69: <b>c</b> | 70: <b>b</b>  |
| 71: <b>b</b> | 72: <b>d</b> | 73: <b>a</b> | 74: <b>b</b> | 75: <b>d</b> | 76: <b>c</b> | 77: <b>b</b> | 78: <b>d</b> | 79: <b>a</b> | 80: <b>c</b>  |
| 81: <b>b</b> | 82: <b>a</b> | 83: <b>c</b> | 84: <b>c</b> | 85: <b>b</b> | 86: <b>a</b> | 87: <b>c</b> | 88: <b>d</b> | 89: <b>b</b> | 90: <b>b</b>  |
| 91: <b>d</b> | 92: <b>a</b> | 93: <b>c</b> | 94: <b>a</b> | 95: <b>a</b> | 96: <b>c</b> | 97: <b>a</b> | 98: <b>c</b> | 99: <b>a</b> | 100: <b>b</b> |

### Set D

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

1. Which of the following statements is/are correct?

1. A Bill pending in the Lok Sabha lapses on its prorogation.
2. A Bill pending in the Rajya Sabha, which has not been passed by the Lok Sabha, shall not lapse on dissolution of the Lok Sabha.

Select the correct answer using the code given below.

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

**Answer: (b) 2 only**

Statement 1 is wrong. Article 107(3) of the Constitution says a Bill pending in Parliament shall not lapse by reason of the prorogation of the Houses. Prorogation only ends a session; the Bill stays where it was and is taken up in the next session.

Statement 2 is correct. Article 107(4) says a Bill pending in the Council of States (Rajya Sabha) which has not been passed by the House of the People (Lok Sabha) shall not lapse on a dissolution of the Lok Sabha. The Rajya Sabha is a permanent House, so a Bill that began there and never reached the Lok Sabha survives.

Answer (b), 2 only.

**How to crack it:** Separate the two events. Prorogation ends a session, dissolution ends the House. Only dissolution can kill a Bill, and even then not one that began in the Rajya Sabha and never went to the Lok Sabha.

**Remember:** Under Article 107(5), dissolution makes a Bill lapse if it is pending in the Lok Sabha, or if it was passed by the Lok Sabha and is pending in the Rajya Sabha (subject to a joint sitting under Article 108). Prorogation never makes a Bill lapse.

---

2. Which of the following is/are the indicator/indicators used by IFPRI to compute the Global Hunger Index Report?

1. Undernourishment
2. Child stunting
3. Child mortality

Select the correct answer using the code given below.

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

**Answer: (c) 1, 2 and 3**

The Global Hunger Index was developed by the International Food Policy Research Institute (IFPRI) with Welthungerhilfe and first published in 2006. It combines four indicators into one score on a 100-point scale. Undernourishment (the share of the population with insufficient calorie intake) is one of them, so 1 is correct. Child stunting (low height for age among children under five) is another, so 2 is correct. Child mortality (the under-five death rate) is the third listed one, so 3 is correct. The fourth indicator, child wasting, was not offered. Answer (c), 1, 2 and 3.

**How to crack it:** The GHI measures hunger in the whole population and in children: one population indicator (undernourishment) and three child indicators (stunting, wasting, mortality). All three listed fit, so pick the option with all of them.

**Remember:** The four GHI indicators: undernourishment, child stunting, child wasting and child mortality. Since 2018 the report is published by Welthungerhilfe and Concern Worldwide, without IFPRI.

---

**3.** There has been a persistent deficit budget year after year. Which action/actions of the following can be taken by the Government to reduce the deficit?

1. Reducing revenue expenditure
2. Introducing new welfare schemes
3. Rationalizing subsidies
4. Reducing import duty

Select the correct answer using the code given below.

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

**Answer: (c) 1 and 3 only**

A deficit falls when the government spends less or earns more. The NCERT Macroeconomics textbook puts it in one line: the deficit can be reduced by an increase in taxes or a reduction in expenditure.

Reducing revenue expenditure (1) cuts spending, so it reduces the deficit. Rationalising subsidies (3) removes subsidy spending that does not reach its purpose, which also cuts expenditure.

Introducing new welfare schemes (2) adds spending, so it widens the deficit. Reducing import duty (4) lowers tax revenue, which also widens the deficit. Answer (c), 1 and 3 only.

**How to crack it:** Sort each action into 'spend less or earn more' versus 'spend more or earn less'. New schemes add spending and lower duties cut revenue, so both go.

---

4. The establishment of 'Payment Banks' is being allowed in India to promote financial inclusion. Which of the following statements is/are correct in this context?

1. Mobile telephone companies and supermarket chains that are owned and controlled by residents are eligible to be promoters of Payment Banks.
2. Payment Banks can issue both credit cards and debit cards.
3. Payment Banks cannot undertake lending activities.

Select the correct answer using the code given below.

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

**Answer: (b) 1 and 3 only**

Statement 1 is correct. The RBI's licensing guidelines for payments banks (November 2014) name mobile telephone companies and super-market chains among the entities that may be promoters, provided they are owned and controlled by residents.

Statement 2 is wrong. A payments bank may issue ATM and debit cards, but the same guidelines say payments banks cannot issue credit cards.

Statement 3 is correct. The guidelines say the payments bank cannot undertake lending activities; most of its deposits must go into government securities. Answer (b), 1 and 3 only.

**How to crack it:** A credit card is a loan. Once you know a payments bank cannot lend, statement 2 falls with statement 3 standing, which leaves only (b).

**Remember:** A payments bank takes deposits and moves money but never lends, so it can give a debit card and never a credit card.

---

5. With reference to 'LiFi', recently in the news, which of the following statements is/are correct?

1. It uses light as the medium for high-speed data transmission.
2. It is a wireless technology and is several times faster than WiFi.

Select the correct answer using the code given below.

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

**Answer: (c) Both 1 and 2**

Statement 1 is correct. Li-Fi is a wireless communication technology that uses light to transmit data: LEDs are switched on and off faster than the eye can notice, and the changes carry the data. Wi-Fi uses radio waves instead.

Statement 2 is correct. It is wireless, and laboratory tests have reached far higher data rates than Wi-Fi offers, over 1 Gbit/s in 2012 and up to 10 Gbit/s in 2013. Its limit is range: light cannot pass through walls. Answer (c), both.

**How to crack it:** The name gives statement 1 away (Li for light). For statement 2, recall why Li-Fi was in the news in 2015-16: very high speed in tests, so 'several times faster' fits.

6. The term 'Intended Nationally Determined Contributions' is sometimes seen in the news in the context of
- (a) pledges made by the European countries to rehabilitate refugees from the war-affected Middle East
  - (b) plan of action outlined by the countries of the world to combat climate change
  - (c) capital contributed by the member countries in the establishment of Asian Infrastructure Investment Bank
  - (d) plan of action outlined by the countries of the world regarding Sustainable Development Goals

**Answer: (b) plan of action outlined by the countries of the world to combat climate change**

Intended Nationally Determined Contributions (INDCs) were the climate pledges each country submitted before the Paris climate conference of 2015 under the UNFCCC, saying how it would cut emissions and adapt. Once the Paris Agreement came in, they became Nationally Determined Contributions (NDCs). Answer (b).

(a) is wrong: refugee resettlement from the Middle East has nothing to do with the UNFCCC. (c) is wrong: AIIB members subscribe capital, which is not called an INDC. (d) is wrong: the Sustainable Development Goals were adopted at the UN General Assembly in 2015 and are a separate track; INDCs were made only under the climate convention.

**How to crack it:** 'Nationally determined contribution' is Paris Agreement language. In a 2016 paper, any 'contribution' by 'the countries of the world' tied to a plan of action points to climate change.

7. Which one of the following is a purpose of 'UDAY', a scheme of the Government?
- (a) Providing technical and financial assistance to start-up entrepreneurs in the field of renewable sources of energy
  - (b) Providing electricity to every household in the country by 2018
  - (c) Replacing the coal-based power plants with natural gas, nuclear, solar, wind and tidal power plants over a period of time
  - (d) Providing for financial turnaround and revival of power distribution companies

**Answer: (d) Providing for financial turnaround and revival of power distribution companies**

UDAY (Ujwal DISCOM Assurance Yojana), launched in November 2015, is the financial turnaround and revival package for electricity distribution companies (DISCOMs). It let the state governments that own DISCOMs take over 75 per cent of their debt (as on 30 September 2015) and repay lenders by selling bonds, so that the companies could recover. Answer (d).

(a) is wrong: support for clean-energy start-ups is not its purpose. (b) is wrong: electricity to every household was the aim of other schemes such as Saubhagya (2017). (c) is wrong: UDAY does not replace coal plants; it fixes the finances of distribution companies.

**How to crack it:** Read the acronym: DISCOM in the name means the scheme is about distribution companies. Only (d) mentions them.

8. With reference to 'IFC Masala Bonds', sometimes seen in the news, which of the statements given below is/are correct?

1. The International Finance Corporation, which offers these bonds, is an arm of the World Bank.
2. They are the rupee-denominated bonds and are a source of debt financing for the public and private sector.

Select the correct answer using the code given below.

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

**Answer: (c) Both 1 and 2**

Statement 1 is correct. The International Finance Corporation (IFC) is a member of the World Bank Group. It issued the first masala bond in November 2014, raising 1,000 crore rupees to fund infrastructure in India.

Statement 2 is correct. Masala bonds are bonds issued outside India but denominated in Indian rupees, so the currency risk falls on the investor. They are debt, and both private and public sector borrowers use them: HDFC issued them in July 2016 and NTPC, a public sector undertaking, in August 2016. Answer (c), both.

**How to crack it:** Masala is the Indian clue: rupee-denominated debt raised abroad. IFC is part of the World Bank Group, so both statements hold.

---

9. Regarding the taxation system of Krishna Deva, the ruler of Vijayanagar, consider the following statements:

1. The tax rate on land was fixed depending on the quality of the land.
2. Private owners of workshops paid an industries tax.

Which of the statements given above is/are correct?

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

**Answer: (c) Both 1 and 2**

Statement 1 is correct. Land revenue was the state's main income, and it was not one flat rate: tax policy distinguished between kinds of land and their use, so different land paid different rates (for example, land under roses was assessed lower).

Statement 2 is correct. The state taxed far more than land: homes, trader shops, marriages, toddy and salt were taxed too, so those who made and sold goods paid alongside those who farmed. Answer (c), both.

**How to crack it:** Medieval states taxed land by its quality and output, and also taxed trades and crafts. When both statements describe a sensible revenue system and nothing in them is extreme, 'both' is the likely answer.

**10.** Which one of the following books of ancient India has the love story of the son of the founder of Sunga dynasty?

- (a) Swapnavasavadatta
- (b) Malavikagnimitra
- (c) Meghadoota
- (d) Ratnavali

**Answer: (b) Malavikagnimitra**

Kalidasa's play Malavikagnimitram tells the love story of Agnimitra, son of Pushyamitra Shunga, the founder of the Shunga dynasty, and the maid Malavika. Answer (b).

(a) Svapnavasavadatta, by Bhasa, is about Udayana, king of Vatsa, and Vasavadatta. (c) Meghaduta, also by Kalidasa, is a poem in which an exiled yaksha sends a message to his wife through a cloud. (d) Ratnavali, by Harsha, is about Udayana and Ratnavali. None of them concerns a Shunga prince.

**How to crack it:** The title holds the answer: Malavika plus Agnimitra. Agnimitra was the son of Pushyamitra, who founded the Shunga line.

---

**11.** In the context of which of the following do you sometimes find the terms 'amber box', 'blue box' and 'green box' in the news?

- (a) WTO affairs
- (b) SAARC affairs
- (c) UNFCCC affairs
- (d) India-EU negotiations on FTA

**Answer: (a) WTO affairs**

The amber, blue and green boxes are the WTO's way of sorting farm subsidies under the Agreement on Agriculture. Amber box support is linked directly to production and distorts trade, so it had to be reduced. Blue box support is tied to programmes that limit production. Green box support causes no more than minimal distortion and is exempt from reduction. Answer (a).

(b) SAARC, (c) the UNFCCC and (d) the India-EU free trade talks do not use these terms.

**How to crack it:** Colour-coded subsidy boxes are WTO agriculture language. Link 'boxes' with 'subsidies' and subsidies with the WTO.

**12.** Which of the following is/are included in the capital budget of the Government of India?

1. Expenditure on acquisition of assets like roads, buildings, machinery, etc.
2. Loans received from foreign governments
3. Loans and advances granted to the States and Union Territories

Select the correct answer using the code given below.

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

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

The capital budget has two sides, capital receipts and capital expenditure, and all three items fall in it.

Expenditure on acquiring assets such as land, buildings and machinery (1) is capital expenditure. Loans and advances by the Centre to the states and union territories (3) are also capital expenditure, because they create a claim the Centre will recover. Loans received from foreign governments (2) are capital receipts, because they create a liability. Answer (d), 1, 2 and 3.

**How to crack it:** Ask of each item: does it create an asset or a liability? Buying assets and lending to states create assets; borrowing from abroad creates a liability. All three are capital items.

**13.** What is/are the importance/importances of the United Nations Convention to Combat Desertification?

1. It aims to promote effective action through innovative national programmes and supportive international partnerships.
2. It has a special/particular focus on South Asia and North Africa regions, and its Secretariat facilitates the allocation of major portion of financial resources to these regions.
3. It is committed to bottom-up approach, encouraging the participation of local people in combating the desertification.

Select the correct answer using the code given below.

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

**Answer: (c) 1 and 3 only**

Statement 1 is correct. The United Nations Convention to Combat Desertification (UNCCD, adopted in 1994) works through national action programmes with long-term strategies, supported by international cooperation and partnership arrangements.

Statement 2 is wrong. The Convention's full name ends 'Particularly in Africa'. Its special focus is Africa, not South Asia and North Africa, and its secretariat does not allocate most of the money to those regions.

Statement 3 is correct. The Convention rests on participation, partnership and decentralisation, and its national action programmes are drawn up in a participative way involving local communities: a bottom-up approach. Answer (c), 1 and 3 only.

**How to crack it:** Remember the Convention's full title: '... Particularly in Africa'. That one phrase rules out statement 2, and only (a) and (c) remain; local participation is the heart of the UNCCD, so keep 3.

**14.** Recently, which one of the following currencies has been proposed to be added to the basket of IMF's SDR?

- (a) Rouble
- (b) Rand
- (c) Indian Rupee
- (d) Renminbi

**Answer: (d) Renminbi**

In November 2015 the IMF found that China's renminbi met the 'freely usable' test and announced it would join the Special Drawing Rights (SDR) basket. It was added on 1 October 2016 with a 10.9 per cent weight, making the basket five currencies: US dollar, euro, renminbi, yen and pound. Answer (d).

(a) The Russian rouble, (b) the South African rand and (c) the Indian rupee were not proposed; none is in the SDR basket.

**How to crack it:** The SDR basket holds only the most widely used reserve currencies. In 2015-16 the news was China's push to internationalise its currency, so pick the renminbi.

---

**15.** With reference to the International Monetary and Financial Committee (IMFC), consider the following statements:

1. IMFC discusses matters of concern affecting the global economy, and advises the International Monetary Fund (IMF) on the direction of its work.
2. The World Bank participates as observer in IMFC's meetings.

Which of the statements given above is/are correct?

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

**Answer: (c) Both 1 and 2**

Statement 1 is correct. The IMF's own factsheet says the International Monetary and Financial Committee (IMFC) advises and reports to the IMF Board of Governors on the supervision and management of the international monetary and financial system. It has no formal decision-making powers, but in practice it gives strategic direction to the Fund's work.

Statement 2 is correct. The same factsheet says a number of international institutions, including the World Bank, participate as observers in the IMFC's meetings. Answer (c), both.

**How to crack it:** The IMFC is the IMF's ministerial steering committee. Advising the Fund is its job, and sister institutions like the World Bank sit in as observers, so both hold.

**16.** 'Rashtriya Garima Abhiyaan' is a national campaign to

- (a) rehabilitate the homeless and destitute persons and provide them with suitable sources of livelihood
- (b) release the sex workers from their practice and provide them with alternative sources of livelihood
- (c) eradicate the practice of manual scavenging and rehabilitate the manual scavengers
- (d) release the bonded labourers from their bondage and rehabilitate them

**Answer: (c) eradicate the practice of manual scavenging and rehabilitate the manual scavengers**

Garima Abhiyan means 'campaign for dignity'. It works to end manual scavenging, the handling of human excreta from insanitary latrines, open drains, sewers and pits, and to help those who did it find other work; in Madhya Pradesh alone it has helped more than 20,000 women leave the occupation. Rashtriya Garima Abhiyan is the national campaign. Answer (c).

(a) homeless and destitute persons, (b) sex workers and (d) bonded labourers are covered by other laws and programmes; none is the aim of this campaign.

**How to crack it:** 'Garima' is dignity, and the dignity campaign in Indian news is about manual scavenging, the work most tied to caste humiliation.

---

**17.** With reference to the cultural history of medieval India, consider the following statements:

1. Siddhas (Sittars) of Tamil region were monotheistic and condemned idolatry.
2. Lingayats of Kannada region questioned the theory of rebirth and rejected the caste hierarchy.

Which of the statements given above is/are correct?

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

**Answer: (c) Both 1 and 2**

Statement 1 is correct. The Siddhas (Sittars) of the Tamil country, wandering adepts who wrote their teachings as Tamil poems, typically believed in one god, and their literature rejects idol worship outright: they taught that the divine is to be sought within oneself, not in images, and opposed superstition.

Statement 2 is correct. The Lingayats (Virashaivas), followers of Basavanna in the Kannada region, challenged the idea of caste and the 'pollution' attributed to certain groups by Brahmanas, and they also questioned the theory of rebirth; Lingayats believe that on death the devotee is united with Shiva and does not return to this world. Answer (c), both.

**How to crack it:** Both groups were medieval protest movements against Brahmanical orthodoxy: one in Tamil, one in Kannada. Statements that describe them as rejecting idols, caste or rebirth fit that pattern.

**18.** Which of the following best describes the term “import cover”, sometimes seen in the news?

- (a) It is the ratio of value of imports to the Gross Domestic Product of a country
- (b) It is the total value of imports of a country in a year
- (c) It is the ratio between the value of exports and that of imports between two countries
- (d) It is the number of months of imports that could be paid for by a country's international reserves

**Answer: (d) It is the number of months of imports that could be paid for by a country's international reserves**

Import cover tells you how long a country could keep paying for its imports out of its foreign exchange reserves alone. It is measured in months: central banks usually aim to hold at least three months of imports, and rating agencies watch the reserves-to-imports ratio in months. Answer (d).

(a) The ratio of imports to GDP measures how open an economy is. (b) Total imports in a year is just the import bill. (c) The ratio of exports to imports between two countries describes bilateral trade. None of them involves reserves.

**How to crack it:** 'Cover' asks what pays for imports. Only (d) brings in reserves, the thing that does the covering.

---

19. Consider the following pairs:

|    | Community sometimes mentioned in the news | In the affairs of |
|----|-------------------------------------------|-------------------|
| 1. | Kurd                                      | Bangladesh        |
| 2. | Madhesi                                   | Nepal             |
| 3. | Rohingya                                  | Myanmar           |

Which of the pairs given above is/are correctly matched?

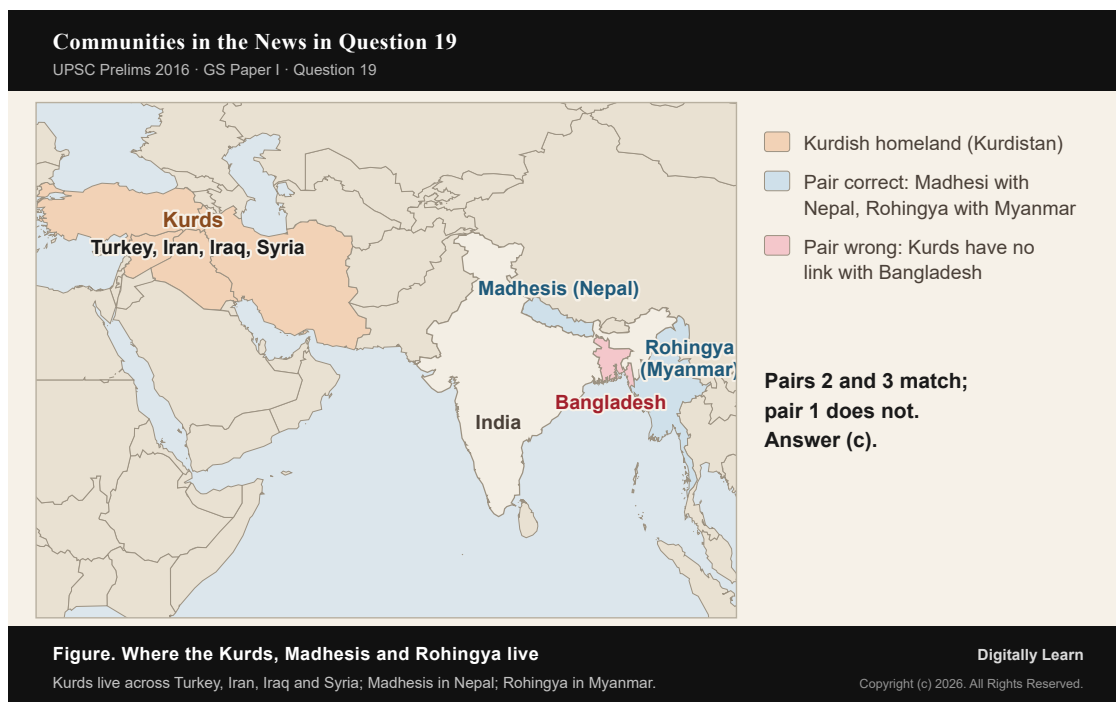
- (a) 1 and 2
- (b) 2 only
- (c) 2 and 3
- (d) 3 only

**Answer: (c) 2 and 3**

Pair 1 is wrong. The Kurds are a people of West Asia living mainly in Turkey, Iran, Iraq and Syria, the region called Kurdistan. They have no connection with Bangladesh.

Pair 2 is correct. The Madhesis are a people of the Terai plains of southern Nepal, in Nepal's news around its 2015 Constitution.

Pair 3 is correct. The Rohingya are a stateless, predominantly Muslim people of Rakhine State in Myanmar, many of whom live as refugees in Bangladesh. Answer (c), 2 and 3.



**How to crack it:** Locate each people on a map. Kurds belong to West Asia, so pair 1 goes and with it (a); Madhesi and Rohingya both match.

**20.** With reference to “Organization for the Prohibition of Chemical Weapons (OPCW)”, consider the following statements:

1. It is an organization of European Union in working relation with NATO and WHO.
2. It monitors chemical industry to prevent new weapons from emerging.
3. It provides assistance and protection to States (Parties) against chemical weapons threats.

Which of the statements given above is/are correct?

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

**Answer: (b) 2 and 3 only**

Statement 1 is wrong. The Organisation for the Prohibition of Chemical Weapons (OPCW) is an independent intergovernmental organisation, the implementing body for the Chemical Weapons Convention (in force since 29 April 1997), with 193 member states. It is not an EU body and has no working link with NATO or WHO.

Statement 2 is correct. Its inspectors check chemical industry to verify that industrial activities are consistent with the Convention, and its stated aim is to prevent the re-emergence of chemical weapons.

Statement 3 is correct. One of its programme aims is to provide protection and assistance against chemical weapons to member states, under Article X of the Convention. Answer (b), 2 and 3 only.

**How to crack it:** A global disarmament body that implements a UN-negotiated treaty cannot be 'an organization of the European Union'. Strike 1, and only (b) is left.

**Remember:** The OPCW won the Nobel Peace Prize in 2013 for its work to eliminate chemical weapons.

---

**21.** With reference to ‘Pradhan Mantri Fasal Bima Yojana’, consider the following statements:

1. Under this scheme, farmers will have to pay a uniform premium of two percent for any crop they cultivate in any season of the year.
2. This scheme covers post-harvest losses arising out of cyclones and unseasonal rains.

Which of the statements given above is/are correct?

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

**Answer: (b) 2 only**

Statement 1 is wrong. The premium is not one rate for every crop and season. When the Cabinet approved the scheme in January 2016, farmers were to pay 2 per cent for all kharif crops, 1.5 per cent for all rabi crops and 5 per cent for annual commercial and horticultural crops; the government pays the rest of the premium. The rate is uniform within each group, not across all of them.

Statement 2 is correct. The scheme covers post-harvest losses for up to two weeks after harvest, for crops left to dry in the field in cut and spread or small bundled condition, against hailstorm, cyclone, cyclonic rains and unseasonal rains. Answer (b), 2 only.

**How to crack it:** 'Uniform premium of two percent for any crop in any season' is an absolute claim. Remember the three rates, 2, 1.5 and 5 per cent, and the claim falls.

**22.** In which of the following regions of India are you “most likely” to come across the ‘Great Indian Hornbill’ in its natural habitat?

- (a) Sand deserts of northwest India
- (b) Higher Himalayas of Jammu and Kashmir
- (c) Salt marshes of western Gujarat
- (d) Western Ghats

**Answer: (d) Western Ghats**

The great hornbill, also called the great Indian hornbill, lives in dense old-growth forest in hilly country. In India its range is broken into two areas: the Western Ghats and the foothills of the Himalayas. Of the four options only the Western Ghats is such a forest. Answer (d).

(a) The sand deserts of the north-west have no tall evergreen forest. (b) The higher Himalayas of Jammu and Kashmir are cold and high, far above the forested foothills it uses. (c) The salt marshes of western Gujarat are open wetland. None of them is its habitat.

**How to crack it:** A hornbill needs large fruiting trees to feed and big tree holes to nest in. Ask which option is a dense tropical forest: only the Western Ghats.

---

**23.** Which of the following are the key features of ‘National Ganga River Basin Authority (NGRBA)’?

1. River basin is the unit of planning and management.
2. It spearheads the river conservation efforts at the national level.
3. One of the Chief Ministers of the States through which the Ganga flows becomes the Chairman of NGRBA on rotation basis.

Select the correct answer using the code given below:

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

**Answer: (a) 1 and 2 only**

Statement 1 is correct. The National Ganga River Basin Authority (NGRBA), set up on 20 February 2009 under the Environment (Protection) Act, 1986, was built on a new approach in which the river basin is the unit of planning and management.

Statement 2 is correct. The same approach made the NGRBA the body to spearhead river conservation efforts at the national level, with the states and urban local bodies doing the implementation.

Statement 3 is wrong. The Prime Minister is the ex-officio Chairperson; the Chief Ministers of the Ganga states (Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal) are members, and the chair does not rotate among them. Answer (a), 1 and 2 only.

**How to crack it:** A national body for the national river is chaired by the Prime Minister. That kills statement 3 and leaves only (a).

**Remember:** A notification of 20 September 2016 replaced the NGRBA with the National Ganga Council (National Council for River Ganga).

---

**24.** Why does the Government of India promote the use of 'Neem-coated Urea' in agriculture?

- (a) Release of Neem oil in the soil increases nitrogen fixation by the soil microorganisms
- (b) Neem coating slows down the rate of dissolution of urea in the soil
- (c) Nitrous oxide, which is a greenhouse gas, is not at all released into atmosphere by crop fields
- (d) It is a combination of a weedicide and a fertilizer for particular crops

**Answer: (b) Neem coating slows down the rate of dissolution of urea in the soil**

Neem-coated urea is ordinary urea coated with neem oil. The neem compounds slow the bacteria that turn the ammonium from urea into nitrate, and the coating acts as a physical barrier that slows the urea's dissolution. Nitrogen is then released slowly and stays available to the crop for longer, so less is lost and less urea is needed. Answer (b).

(a) is wrong: neem slows soil bacteria (the nitrifying ones); it does not boost nitrogen fixation. (c) is wrong because of 'not at all': nitrous oxide emissions are brought down significantly, not stopped. (d) is wrong: the coating is not a weedicide, and the product is a fertiliser only. The scheme also helped curb the black market and hoarding of urea.

**How to crack it:** Watch for absolute words. 'Not at all released' in (c) is too strong; slowing the release of nitrogen is the real purpose of any fertiliser coating.

---

**25.** Consider the following statements:

1. The Chief Secretary in a State is appointed by the Governor of that State.
2. The Chief Secretary in a State has a fixed tenure.

Which of the statements given above is/are correct?

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

**Answer: (d) Neither 1 nor 2**

Statement 1 is wrong. The Chief Secretary, usually the senior-most IAS officer in the state, is chosen by the state government: the Chief Minister approves the appointment. It is not a choice left to the Governor's own discretion.

Statement 2 is wrong. No fixed tenure is laid down for the office; a Chief Secretary serves at the state government's pleasure and the term can be extended. Answer (d), neither.

**How to crack it:** The Chief Secretary is the Chief Minister's top officer, so the Chief Minister picks the officer and can change the incumbent: no Governor's appointment, no fixed term.

---

**26.** With reference to 'Stand Up India Scheme', which of the following statements is/are correct?

1. Its purpose is to promote entrepreneurship among SC/ST and women entrepreneurs.
2. It provides for refinance through SIDBI.

Select the correct answer using the code given below:

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

**Answer: (c) Both 1 and 2**

Statement 1 is correct. The Union Cabinet approved the Stand Up India Scheme on 6 January 2016 to promote entrepreneurship among SC/ST and women entrepreneurs: bank loans of 10 lakh to 1 crore rupees for a new (greenfield) enterprise, at least one SC or ST borrower and one woman borrower per bank branch. Statement 2 is correct. The scheme provides a refinance window through the Small Industries Development Bank of India (SIDBI) with an initial amount of 10,000 crore rupees, together with a credit guarantee mechanism through the National Credit Guarantee Trustee Company. Answer (c), both.

**How to crack it:** 'Stand Up' is the companion of 'Start Up': it lends to SC/ST and women entrepreneurs, and SIDBI is the bank that refinances small-enterprise lending. Both statements fit.

---

**27.** The FAO accords the status of 'Globally Important Agricultural Heritage System (GIAHS)' to traditional agricultural systems. What is the overall goal of this initiative?

1. To provide modern technology, training in modern farming methods and financial support to local communities of identified GIAHS so as to greatly enhance their agricultural productivity.
2. To identify and safeguard eco-friendly traditional farm practices and their associated landscapes, agricultural biodiversity and knowledge systems of the local communities.
3. To provide Geographical Indication status to all the varieties of agricultural produce in such identified GIAHS.

Select the correct answer using the code given below:

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

**Answer: (b) 2 only**

Statement 2 is correct. FAO's Globally Important Agricultural Heritage Systems (GIAHS) programme helps farming communities safeguard traditional agricultural systems and their landscapes, agricultural biodiversity, knowledge systems and cultures.

Statement 1 is wrong. The aim is to conserve traditional systems that already work, not to replace them with modern technology to raise productivity.

Statement 3 is wrong. Geographical Indication status is a separate legal protection that a country grants to particular products (in India, under the Geographical Indications of Goods (Registration and Protection) Act); GIAHS recognition does not confer it on all produce of a site. Answer (b), 2 only.

**How to crack it:** 'Heritage' means preserving the old, which is statement 2. 'Modern technology' in 1 contradicts it, and 'all varieties' in 3 is an absolute claim.

**Remember:** India's GIAHS sites: the saffron heritage of Kashmir (Pampore, 2011), Koraput traditional agriculture (Odisha, 2012) and Kuttanad below-sea-level farming (Kerala, 2013).

---

**28.** Which of the following is/are tributary/tributaries of Brahmaputra?

1. Dibang
2. Kameng
3. Lohit

Select the correct answer using the code given below.

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

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

All three are tributaries of the Brahmaputra. Near Sadiya in north-eastern Assam the Dihang (Siang) is joined by the Dibang and the Lohit, and below that confluence the river is called the Brahmaputra; so 1 and 3 are correct.

The Kameng rises below Gori Chen in Tawang district of Arunachal Pradesh, flows into Assam (where it is called the Jia Bharali) and joins the Brahmaputra at Tezpur, so 2 is correct too. Answer (d), 1, 2 and 3.

**How to crack it:** Picture the Brahmaputra entering Assam: the Dibang and Lohit meet it at the head of the valley, and the north-bank rivers of Arunachal (Subansiri, Kameng, Manas) follow. All three fit.

---

**29.** The term 'Core Banking Solutions' is sometimes seen in the news. Which of the following statements best describes/describe this term?

1. It is a networking of a bank's branches which enables customers to operate their accounts from any branch of the bank on its network regardless of where they open their accounts.
2. It is an effort to increase RBI's control over commercial banks through computerization.
3. It is a detailed procedure by which a bank with huge non-performing assets is taken over by another bank.

Select the correct answer using the code given below.

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

**Answer: (a) 1 only**

Statement 1 is correct. Core banking is a service run over a network of a bank's branches that lets a customer use the account and carry out basic transactions from any branch on the network, wherever the account was opened.

Statement 2 is wrong. Core Banking Solutions are the bank's own computer system for serving customers; they are not a step by the RBI to control banks.

Statement 3 is wrong. Taking over a bank weighed down by bad loans is a merger or resolution, unrelated to core banking. Answer (a), 1 only.

**How to crack it:** 'Core banking' is about the customer's account being central, reachable from anywhere. Only statement 1 speaks of customers and branches.

30. Consider the following pairs:

|    | Terms sometimes seen in the news | Their origin       |
|----|----------------------------------|--------------------|
| 1. | Annex-I Countries                | Cartagena Protocol |
| 2. | Certified Emissions Reductions   | Nagoya Protocol    |
| 3. | Clean Development Mechanism      | Kyoto Protocol     |

Which of the pairs given above is/are correctly matched?

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

**Answer: (c) 3 only**

Pair 1 is wrong. Annex I countries are the developed countries listed in the UN Framework Convention on Climate Change (1992). The Cartagena Protocol is about the safe movement of living modified organisms under the Convention on Biological Diversity.

Pair 2 is wrong. Certified Emission Reductions (CERs) are the credits earned by Clean Development Mechanism projects under the Kyoto Protocol. The Nagoya Protocol deals with access to genetic resources and sharing their benefits.

Pair 3 is correct. The Clean Development Mechanism is one of the Kyoto Protocol's flexibility mechanisms. Answer (c), 3 only.

**How to crack it:** Sort the treaties into families. Annex I, CERs and the CDM are all climate (UNFCCC and Kyoto) terms; Cartagena and Nagoya are biodiversity protocols. Only pair 3 stays in the climate family.

31. In the context of the developments in Bioinformatics, the term 'transcriptome', sometimes seen in the news, refers to

- (a) a range of enzymes used in genome editing
- (b) the full range of mRNA molecules expressed by an organism
- (c) the description of the mechanism of gene expression
- (d) a mechanism of genetic mutations taking place in cells

**Answer: (b) the full range of mRNA molecules expressed by an organism**

The transcriptome is the set of all RNA molecules (transcripts) in a cell or a population of cells. Genes are copied into RNA before they act, and messenger RNA (mRNA) is the part that carries the instructions for making proteins, so the transcriptome shows which genes are switched on at a given time. Of the options, 'the full range of mRNA molecules expressed by an organism' is the only one that describes this set of molecules. Answer (b).

(a) Enzymes used in genome editing are tools that cut DNA, not a set of transcripts. (c) The mechanism of gene expression is a process, while the transcriptome is the product of that process at one moment. (d) Mutations are changes in DNA, not RNA transcripts.

**How to crack it:** '-ome' means 'the complete set of': genome is all the DNA, proteome all the proteins, and transcriptome all the transcripts, which are RNA. Pick the option that is a complete set of RNA.

**32.** 'Mission Indradhanush' launched by the Government of India pertains to

- (a) immunization of children and pregnant women
- (b) construction of smart cities across the country
- (c) India's own search for the Earth-like planets in outer space
- (d) New Educational Policy

**Answer: (a) immunization of children and pregnant women**

Mission Indradhanush, launched by the Union Health Ministry on 25 December 2014, is an immunisation drive. Its goal is full immunisation of children up to two years of age and of pregnant women against vaccine-preventable diseases; its name, the rainbow, stood for the seven diseases it first covered. Answer (a). (b) Smart cities, (c) the search for Earth-like planets and (d) education policy are separate programmes with nothing to do with vaccination.

**How to crack it:** Indradhanush is a rainbow of seven colours, matched to the seven diseases the vaccines first targeted. Remember it as India's immunisation mission.

---

**33.** Which of the following best describes/describe the aim of 'Green India Mission' of the Government of India?

1. Incorporating environmental benefits and costs into the Union and State Budgets thereby implementing the 'green accounting'
2. Launching the second green revolution to enhance agricultural output so as to ensure food security to one and all in the future
3. Restoring and enhancing forest cover and responding to climate change by a combination of adaptation and mitigation measures

Select the correct answer using the code given below.

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

**Answer: (c) 3 only**

Statement 3 is correct. The National Mission for a Green India, one of the missions under the National Action Plan on Climate Change, aims to increase forest and tree cover on 5 million hectares and improve the quality of forest on another 5 million hectares, and it responds to climate change by a combination of adaptation and mitigation measures.

Statement 1 is wrong. Green accounting in budgets is not part of the mission, which works on forests and ecosystems. Statement 2 is wrong. A second green revolution in farm output is an agricultural goal; this mission is about forests. Answer (c), 3 only.

**How to crack it:** 'Green India' here means green cover, not green budgets or green revolution. Only statement 3 talks about forests.

**34.** With reference to pre-packaged items in India, it is mandatory to the manufacturer to put which of the following information on the main label, as per the Food Safety and Standards (Packaging and Labelling) Regulations, 2011?

1. List of ingredients including additives
2. Nutrition information
3. Recommendations, if any, made by the medical profession about the possibility of any allergic reactions
4. Vegetarian/non-vegetarian

Select the correct answer using the code given below.

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

**Answer: (c) 1, 2 and 4**

The Food Safety and Standards (Packaging and Labelling) Regulations, 2011 list what every package of pre-packaged food must carry. They include the list of ingredients (1), nutritional information per 100 g, 100 ml or serving (2), and the declaration of vegetarian or non-vegetarian food by a coloured symbol (4).

A recommendation from the medical profession about possible allergic reactions (3) is not in that list of mandatory label declarations. Answer (c), 1, 2 and 4.

**How to crack it:** Think of what you see on every Indian snack packet: ingredients, a nutrition table and the green or brown dot. Doctors' advice on allergies is not printed as a rule.

---

**35.** 'Project Loon', sometimes seen in the news, is related to

- (a) waste management technology
- (b) wireless communication technology
- (c) solar power production technology
- (d) water conservation technology

**Answer: (b) wireless communication technology**

Project Loon (later Loon LLC, a subsidiary of Alphabet, Google's parent company, 2011 to 2021) used high-altitude balloons in the stratosphere to provide Internet access to remote areas. It is wireless communication technology. Answer (b).

It had nothing to do with (a) waste management, (c) solar power production (the balloons carried solar panels only to run themselves) or (d) water conservation.

**How to crack it:** Loon is short for balloon. Balloons floating in the stratosphere carrying radios means Internet from the sky.

**36.** 'Net metering' is sometimes seen in the news in the context of promoting the

- (a) production and use of solar energy by the households/consumers
- (b) use of piped natural gas in the kitchens of households
- (c) installation of CNG kits in motor-cars
- (d) installation of water meters in urban households

**Answer: (a) production and use of solar energy by the households/consumers**

Net metering is an electricity billing mechanism that lets consumers who generate some or all of their own electricity, for example from rooftop solar panels, feed the surplus into the grid and use that credit later. The meter records the net of what they draw and what they supply. It encourages households to produce and use solar power. Answer (a).

(b) Piped natural gas, (c) CNG kits and (d) water meters do not involve generating electricity and selling it to the grid, so net metering does not apply to them.

**How to crack it:** 'Net' means what is left after you subtract what you send back to the grid. Only a consumer who also generates electricity, the rooftop solar user, sends anything back.

---

**37.** India's ranking in the 'Ease of Doing Business Index' is sometimes seen in the news. Which of the following has declared that ranking?

- (a) Organization for Economic Cooperation and Development (OECD)
- (b) World Economic Forum
- (c) World Bank
- (d) World Trade Organization (WTO)

**Answer: (c) World Bank**

The Ease of Doing Business index was created by economists of the World Bank Group, and the World Bank published the rankings in its annual Doing Business report. Answer (c). The World Bank discontinued the report on 14 September 2021 after an audit found pressure to manipulate the 2018 and 2020 results.

(a) The OECD publishes other economic outlooks. (b) The World Economic Forum publishes the Global Competitiveness Report, a different ranking. (d) The WTO deals with trade rules and does not rank business regulation.

**How to crack it:** Doing Business was a World Bank flagship report. Do not confuse it with the WEF's competitiveness ranking, the usual trap option.

---

**38.** Banjaras during the medieval period of Indian history were generally

- (a) agriculturists
- (b) warriors
- (c) weavers
- (d) traders

**Answer: (d) traders**

The Banjaras were the most important trader-nomads of medieval India. They moved in caravans called *tanda*, carrying grain and goods on their animals and buying and selling as they went; Sultan Alauddin Khalji used them to transport grain to the city markets, and they carried food grain for the Mughal army on campaign. Answer (d).

They were not settled (a) agriculturists, (b) warriors or (c) weavers; their livelihood was moving goods across the country.

**How to crack it:** Banjaras are remembered for their caravans of pack animals. A people always on the move with goods are traders.

---

**39.** Who of the following had first deciphered the edicts of Emperor Ashoka?

- (a) Georg Bühler
- (b) James Prinsep
- (c) Max Müller
- (d) William Jones

**Answer: (b) James Prinsep**

James Prinsep, founding editor of the *Journal of the Asiatic Society of Bengal*, completed the decipherment of the Brahmi script in 1837 and also deciphered Kharosthi. The Brahmi edicts named a king 'Devanampriya Piyadasi', and Prinsep linked that title to Ashoka with help from Sri Lankan Pali texts. Answer (b).

(a) Georg Bühler worked on the Ashokan edicts later (his translations came in the 1880s and 1890s), building on Prinsep's decipherment. (c) Max Müller was a philologist best known for editing the *Rigveda* and the *Sacred Books of the East*. (d) William Jones founded the Asiatic Society in Calcutta in 1784 and proposed the kinship of Indo-European languages, but he did not read Brahmi.

**How to crack it:** Prinsep is the name tied to Brahmi. Jones founded the society that published Prinsep's work, a common confusion; keep the two apart.

**40.** With reference to the 'Gram Nyayalaya Act', which of the following statements is/are correct?

1. As per the Act, Gram Nyayalayas can hear only civil cases and not criminal cases.
2. The Act allows local social activists as mediators/reconciliators.

Select the correct answer using the code given below:

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

**Answer: (b) 2 only**

Statement 1 is wrong. The Gram Nyayalayas Act, 2008 gives these village courts both criminal jurisdiction (section 12) and civil jurisdiction (section 13), over the offences and suits listed in its First and Second Schedules; criminal cases are tried by summary procedure.

Statement 2 is correct. Section 27 asks the District Court, in consultation with the District Magistrate, to prepare a panel of social workers at the village level, people of integrity, to be appointed as Conciliators who help the parties to a civil dispute settle it. Answer (b), 2 only.

**How to crack it:** The Act's chapter list gives it away: it has separate chapters for procedure in criminal cases and in civil cases, so 'only civil' fails at once.

---

**41.** With reference to the 'Trans-Pacific Partnership', consider the following statements:

1. It is an agreement among all the Pacific Rim countries except China and Russia.
2. It is a strategic alliance for the purpose of maritime security only.

Which of the statements given above is/are correct?

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

**Answer: (d) Neither 1 nor 2**

Statement 1 is wrong. Only twelve countries negotiated the Trans-Pacific Partnership and signed it on 4 February 2016: Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States and Vietnam. Many Pacific Rim countries, such as South Korea, Indonesia and the Philippines, were not in it, so it was never 'all the Pacific Rim countries except China and Russia'.

Statement 2 is wrong. The TPP was a trade agreement, covering tariffs, investment and trade rules, not a maritime security alliance. Answer (d), neither.

**How to crack it:** 'Partnership' with 'Trans-Pacific' in a trade context points to a free trade deal. 'Maritime security only' and 'all the Pacific Rim countries' are both too sweeping.

**Remember:** The United States withdrew in 2017; the other eleven went ahead with a successor, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).

**42.** Consider the following statements: The India-Africa Summit

1. held in 2015 was the third such Summit
2. was actually initiated by Jawaharlal Nehru in 1951

Which of the statements given above is/are correct?

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

**Answer: (a) 1 only**

Statement 1 is correct. The India-Africa Forum Summit held in New Delhi from 26 to 30 October 2015 was the third; the first was in New Delhi in 2008 and the second in Addis Ababa in 2011. India invited all 54 African countries to the third.

Statement 2 is wrong. The summit series was not begun by Jawaharlal Nehru in 1951; the forum was founded in April 2008, under Prime Minister Manmohan Singh. Answer (a), 1 only.

**How to crack it:** The forum is recent: 2008, 2011, 2015. Counting them gives 'third' for 2015, and rules out a 1951 start.

---

**43.** What is/are the purpose/purposes of the 'Marginal Cost of Funds based Lending Rate (MCLR)' announced by RBI?

1. These guidelines help improve the transparency in the methodology followed by banks for determining the interest rates on advances.
2. These guidelines help ensure availability of bank credit at interest rates which are fair to the borrowers as well as the banks.

Select the correct answer using the code given below:

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

**Answer: (c) Both 1 and 2**

Both statements repeat the RBI's own reasons. In its press release of 17 December 2015 on the final guidelines, effective from 1 April 2016, the RBI said the Marginal Cost of Funds based Lending Rate (MCLR) would improve transparency in the methodology followed by banks for determining interest rates on advances (statement 1).

It also said the guidelines were expected to ensure availability of bank credit at interest rates which are fair to the borrowers as well as the banks (statement 2). Beyond these, the RBI expected the method, which prices loans from the marginal cost of funds, to help changes in the policy rate pass on to banks' lending rates. Answer (c), both.

**How to crack it:** Both statements are stated aims of a reform, and neither is extreme. When a question lists a reform's declared purposes, 'both' is usually right.

**44.** What is/are unique about 'Kharai camel', a breed found in India?

1. It is capable of swimming up to three kilometres in seawater.
2. It survives by grazing on mangroves.
3. It lives in the wild and cannot be domesticated.

Select the correct answer using the code given below:

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

**Answer: (a) 1 and 2 only**

Statement 1 is correct. The Kharai of Kutch in Gujarat is known as the 'swimming camel': it swims up to 3 kilometres through shallow sea to reach its grazing grounds.

Statement 2 is correct. Unlike other camel breeds it depends on mangroves for food, and in the monsoon it moves to mangrove islands to forage.

Statement 3 is wrong. It is a domesticated breed, owned and managed by the Rabari and Fakirani Jat herding communities, not a wild animal. Answer (a), 1 and 2 only.

**How to crack it:** A camel 'breed' is by definition a domesticated animal, so statement 3 contradicts the question itself. Strike it and only (a) is left.

---

**45.** Recently, our scientists have discovered a new and distinct species of banana plant which attains a height of about 11 metres and has orange-coloured fruit pulp. In which part of India has it been discovered?

- (a) Andaman Islands
- (b) Anaimalai Forests
- (c) Maikala Hills
- (d) Tropical rain forests of northeast

**Answer: (a) Andaman Islands**

The species, named *Musa indandamanensis*, was described by a Botanical Survey of India scientist from the forests of Little Andaman, in the Andaman Islands. It stands 11 to 11.3 metres tall, and its fruit pulp turns yellowish orange and very sweet when ripe. Answer (a).

It was not found in (b) the Anaimalai forests of the Western Ghats, (c) the Maikala hills of central India or (d) the north-eastern rain forests. The name itself carries 'Andaman'.

**How to crack it:** Islands are where new endemic species keep turning up, and the scientific name *Musa indandamanensis* says Andaman outright.

**46.** Which one of the following is the best description of 'INS Astradharini', that was in the news recently?

- (a) Amphibious warfare ship
- (b) Nuclear-powered submarine
- (c) Torpedo launch and recovery vessel
- (d) Nuclear-powered aircraft carrier

**Answer: (c) Torpedo launch and recovery vessel**

INS Astradharini, commissioned on 6 October 2015 at Visakhapatnam, is the Indian Navy's indigenous torpedo launch and recovery vessel, built with a catamaran hull, used to test torpedoes and recover them after trials. Answer (c).

It is not (a) an amphibious warfare ship, (b) a nuclear-powered submarine or (d) a nuclear-powered aircraft carrier; India's own nuclear-powered submarine is INS Arihant (commissioned in August 2016), and India has no nuclear-powered carrier.

**How to crack it:** 'Astra' means weapon and 'dharini' one who holds it: a vessel that carries weapons for testing. Torpedo launch and recovery fits.

---

**47.** What is 'Greased Lightning-10 (GL-10)', recently in the news?

- (a) Electric plane tested by NASA
- (b) Solar-powered two-seater aircraft designed by Japan
- (c) Space observatory launched by China
- (d) Reusable rocket designed by ISRO

**Answer: (a) Electric plane tested by NASA**

The GL-10 Greased Lightning is a NASA prototype: an unmanned tilt-wing aircraft with ten electric motor-driven propellers, eight on the wing and two on the tail, powered in the full-scale design by diesel engines charging batteries. Answer (a).

It is not (b) a Japanese solar two-seater, (c) a Chinese space observatory or (d) an ISRO reusable rocket.

**How to crack it:** The name 'Greased Lightning' and the code GL-10 sound like an aircraft, and of the agencies listed NASA is the one testing electric aircraft at the time.

---

**48.** With reference to 'Initiative for Nutritional Security through Intensive Millets Promotion', which of the following statements is/are correct?

1. This initiative aims to demonstrate the improved production and post-harvest technologies, and to demonstrate value addition techniques, in an integrated manner, with cluster approach.
2. Poor, small, marginal and tribal farmers have larger stake in this scheme.
3. An important objective of the scheme is to encourage farmers of commercial crops to shift to millet cultivation by offering them free kits of critical inputs of nutrients and microirrigation equipment.

Select the correct answer using the code given below.

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

**Answer: (c) 1 and 2 only**

Statement 1 is correct. The Initiative for Nutritional Security through Intensive Millets Promotion (INSIMP) was launched from kharif 2011 in 16 states as a sub-scheme of the Rashtriya Krishi Vikas Yojana, with 300 crore rupees, to demonstrate improved production and post-harvest technologies in an integrated manner, and to build demand for millet foods through processing and value addition.

Statement 2 is correct. Millets give food and livelihood security above all to small and marginal farmers in rainfed areas, especially in remote tribal areas, so these farmers have the largest stake in a scheme that raises millet yields and prices.

Statement 3 is wrong. The scheme chose districts that already had large areas under millets but low yields, and gave input kits and seed minikits to millet growers there; it was not designed to persuade farmers of commercial crops to switch to millets. Answer (c), 1 and 2 only.

**How to crack it:** A scheme for 'nutritional security through millets' works where millets are already grown, by the poorer rainfed and tribal farmers. Paying commercial farmers to switch crops is not its design.

---

**49.** The 'Swadeshi' and 'Boycott' were adopted as methods of struggle for the first time during the

- (a) agitation against the Partition of Bengal
- (b) Home Rule Movement
- (c) Non-Cooperation Movement
- (d) visit of the Simon Commission to India

**Answer: (a) agitation against the Partition of Bengal**

Swadeshi (use of Indian goods) and boycott (of British goods) were first adopted as methods of struggle in the movement against the Partition of Bengal of 1905. The pledge to boycott foreign goods was first taken in protest meetings across Bengal, and the Boycott Resolution passed at a mass meeting in the Calcutta Town Hall in August 1905 formally proclaimed the Swadeshi Movement. Answer (a).

(b) The Home Rule Movement (1916), led by Annie Besant and Tilak, worked through leagues and propaganda for self-government. (c) The Non-Cooperation Movement (1920) used boycott again, but it came fifteen years later. (d) The Simon Commission (1928) was met with hartals, black flags and 'Simon Go Back', long after these methods were first used.

**How to crack it:** The question asks 'for the first time'. Put the options in order of date (1905, 1916, 1920, 1928) and take the earliest: Swadeshi is even the name of the 1905 movement.

**50.** With reference to the religious history of India, consider the following statements:

1. The concept of Bodhisattva is central to Hinayana sect of Buddhism.
2. Bodhisattva is a compassionate one on his way to enlightenment.
3. Bodhisattva delays achieving his own salvation to help all sentient beings on their path to it.

Which of the statements given above is/are correct?

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

**Answer: (b) 2 and 3 only**

Statement 1 is wrong. The Bodhisattva ideal is central to Mahayana Buddhism, where anyone who develops bodhicitta, the compassionate wish to attain Buddhahood for the benefit of all beings, is a bodhisattva. In the early schools and in Theravada (the Hinayana of the question), the term is reserved for a rare few, such as the future Buddha Maitreya.

Statement 2 is correct: a bodhisattva is a person striving towards enlightenment, moved by great compassion. Statement 3 is correct: the term often means one who delays personal nirvana in order to help other beings reach Buddhahood. Answer (b), 2 and 3 only.

**How to crack it:** Hinayana seeks one's own liberation; Mahayana's hero helps everyone first. Once the Bodhisattva is placed in Mahayana, statement 1 falls and 2 and 3 describe the ideal.

---

**51.** 'Doctors Without Borders (Medecins Sans Frontieres)', often in the news, is

- (a) a division of World Health Organization
- (b) a non-governmental international organization
- (c) an inter-governmental agency sponsored by European Union
- (d) a specialized agency of the United Nations

**Answer: (b) a non-governmental international organization**

Medecins Sans Frontieres (French for Doctors Without Borders), founded in Paris on 22 December 1971, is an international non-governmental organisation that provides humanitarian medical care, especially in conflict zones and in countries hit by endemic disease. Answer (b).

It is not (a) a division of the WHO, (c) an inter-governmental agency of the European Union or (d) a specialised agency of the UN. Its independence from governments is the point: private donors provide about 98 per cent of its funding.

**How to crack it:** 'Without borders' signals a body that works across countries free of any government. That is the definition of a non-governmental organisation.

**52.** With reference to an initiative called 'The Economics of Ecosystems and Biodiversity (TEEB)', which of the following statements is/are correct?

1. It is an initiative hosted by UNEP, IMF and World Economic Forum.
2. It is a global initiative that focuses on drawing attention to the economic benefits of biodiversity.
3. It presents an approach that can help decision-makers recognize, demonstrate and capture the value of ecosystems and biodiversity.

Select the correct answer using the code given below.

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

**Answer: (c) 2 and 3 only**

Statement 1 is wrong. The Economics of Ecosystems and Biodiversity (TEEB) began in 2007 with Germany and the European Commission, after a proposal of the G8+5 environment ministers at Potsdam, and its second phase is hosted by the United Nations Environment Programme (UNEP). The IMF and the World Economic Forum are not its hosts.

Statements 2 and 3 are correct. TEEB is a global study of the economics of biodiversity loss: it draws attention to the economic benefits of biodiversity, and it offers decision support to policy-makers, administrators and businesses so they can recognise, show and capture the value of ecosystems. Answer (c), 2 and 3 only.

**How to crack it:** An environmental economics study would be hosted by an environment body. The IMF and the WEF in statement 1 are odd partners, so strike 1 and keep the two statements that describe its purpose.

---

**53.** With reference to 'Red Sanders', sometimes seen in the news, consider the following statements:

1. It is a tree species found in a part of South India.
2. It is one of the most important trees in the tropical rain forest areas of South India.

Which of the statements given above is/are correct?

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

**Answer: (a) 1 only**

Statement 1 is correct. Red sanders (*Pterocarpus santalinus*, red sandalwood) is endemic to the southern Eastern Ghats of South India, for example the Talakona forest of Andhra Pradesh. It is listed as Endangered by the IUCN, and its prized red wood, sold at a high price in China, makes it a target of smugglers, which is why it is often in the news.

Statement 2 is wrong. Its home is a small part of the southern Eastern Ghats, not the tropical rain forests of South India, which lie in the Western Ghats; it is not an important tree of those forests at all. Answer (a), 1 only.

**How to crack it:** Remember red sanders with smuggling cases in Andhra Pradesh, i.e. the Eastern Ghats. Rain forests in South India mean the Western Ghats, so statement 2 does not fit.

**54.** Which of the following statements is/are correct? Proper design and effective implementation of UN-REDD+ Programme can significantly contribute to

1. Protection of biodiversity
2. Resilience of forest ecosystems
3. Poverty reduction

Select the correct answer using the code given below.

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

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

All three are benefits of REDD+ done well. REDD+ pays developing countries to reduce emissions from deforestation and forest degradation and to manage forests sustainably; the UN-REDD Programme of the FAO, UNDP and UNEP helps countries prepare for it.

Keeping forests standing protects the plants and animals that live in them (1); the REDD+ safeguards require conservation of natural forests and biodiversity, and UN-REDD reports its work as a contribution to biodiversity conservation. Forests that are not cut or degraded keep their structure and so stay better able to withstand and recover from stress (2). And because the payments and the rights to forest land reach forest communities, UN-REDD counts its work towards Sustainable Development Goal 1, ending poverty (3). Answer (d), 1, 2 and 3.

**How to crack it:** The question says 'can significantly contribute', a soft claim. Each item is a known co-benefit of saving forests, so take all three.

---

**55.** What is 'Greenhouse Gas Protocol'?

- (a) It is an international accounting tool for government and business leaders to understand, quantify and manage greenhouse gas emissions.
- (b) It is an initiative of the United Nations to offer financial incentives to developing countries to reduce greenhouse gas emissions and to adopt eco-friendly technologies.
- (c) It is an inter-governmental agreement ratified by all the member countries of the United Nations to reduce greenhouse gas emissions to specified levels by the year 2022.
- (d) It is one of the multilateral REDD+ initiatives hosted by the World Bank.

**Answer: (a) It is an international accounting tool for government and business leaders to understand, quantify and manage greenhouse gas emissions.**

The Greenhouse Gas (GHG) Protocol, built by the World Resources Institute and the World Business Council for Sustainable Development, sets the most widely used standards for measuring and managing greenhouse gas emissions of businesses, governments and other organisations. It is an accounting tool, not a treaty.

Answer (a).

(b) It gives no money to developing countries. (c) It is not an inter-governmental agreement with emission targets; the Kyoto Protocol and the Paris Agreement are such agreements, and none binds every UN member to a 2022 target. (d) It is not a REDD+ initiative of the World Bank.

**How to crack it:** Despite the word 'protocol', this is an accounting standard: you cannot manage what you cannot measure. Only (a) talks about understanding and quantifying emissions.

**56.** With reference to 'Financial Stability and Development Council', consider the following statements:

1. It is an organ of NITI Aayog.
2. It is headed by the Union Finance Minister.
3. It monitors macroprudential supervision of the economy.

Which of the statements given above is/are correct?

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

**Answer: (c) 2 and 3 only**

Statement 1 is wrong. The Financial Stability and Development Council (FSDC) was set up by the government in 2010, on the decision of the then Finance Minister Pranab Mukherjee; it is an apex body of the government chaired by the Finance Minister, not an organ of NITI Aayog (which only came in 2015).

Statement 2 is correct. The Union Finance Minister chairs it, and its members include the Governor of the RBI and the heads of the financial regulators.

Statement 3 is correct. Its mandate includes financial stability, inter-regulatory coordination and monitoring macro-prudential regulation of the economy. Answer (c), 2 and 3 only.

**How to crack it:** A council of the financial regulators is chaired by the Finance Minister. NITI Aayog came five years later, so strike statement 1 and the answer is (c).

---

**57.** With reference to 'Agenda 21', sometimes seen in the news, consider the following statements:

1. It is a global action plan for sustainable development.
2. It originated in the World Summit on Sustainable Development held in Johannesburg in 2002.

Which of the statements given above is/are correct?

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

**Answer: (a) 1 only**

Statement 1 is correct. Agenda 21 is a non-binding action plan of the United Nations for sustainable development.

Statement 2 is wrong. Agenda 21 came out of the Earth Summit, the UN Conference on Environment and Development, at Rio de Janeiro in 1992. The Johannesburg summit of 2002, known as Rio+ 10, reviewed its progress; it did not create it. Answer (a), 1 only.

**How to crack it:** The '21' referred to its target, the 21st century, and the plan was adopted in 1992 at Rio. Johannesburg 2002 was the ten-year review.

**58.** Satya Shodhak Samaj organized

- (a) a movement for upliftment of tribals in Bihar
- (b) a temple-entry movement in Gujarat
- (c) an anti-caste movement in Maharashtra
- (d) a peasant movement in Punjab

**Answer: (c) an anti-caste movement in Maharashtra**

The Satyashodhak Samaj (Society of Seekers of Truth) was founded by Jyotirao Phule and Savitribai Phule in Poona on 24 September 1873. It rejected the caste system and the need for priests between God and man, and worked for the rights of women, peasants and Dalits: an anti-caste movement in Maharashtra. Answer (c).

It was not (a) a tribal movement in Bihar, (b) a temple-entry movement in Gujarat or (d) a peasant movement in Punjab.

**How to crack it:** Link Phule with Poona and with the fight against caste. The only Maharashtra option is (c).

---

**59.** Which of the following statements is/are correct? Viruses can infect

- 1. Bacteria
- 2. Fungi
- 3. Plants

Select the correct answer using the code given below.

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

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

Viruses infect every kind of cell-based life. Bacteriophages (phages) are viruses that infect and replicate within bacteria (1). Mycoviruses are viruses that infect fungi (2). Plant viruses infect plants, for example the leaf curl and mosaic viruses of crops (3). Answer (d), 1, 2 and 3.

**How to crack it:** A virus needs a living cell to copy itself, and bacteria, fungi and plants all have cells. Phage, mycovirus and plant virus are the names to remember.

**60.** The term 'Base Erosion and Profit Shifting' is sometimes seen in the news in the context of

- (a) mining operation by multinational companies in resource-rich but backward areas
- (b) curbing of the tax evasion by multinational companies
- (c) exploitation of genetic resources of a country by multinational companies
- (d) lack of consideration of environmental costs in the planning and implementation of developmental projects

**Answer: (b) curbing of the tax evasion by multinational companies**

Base Erosion and Profit Shifting (BEPS) means the tax planning by which multinational companies shift profits from where they are earned to low-tax places, eroding the tax base of the countries where they actually do business. The OECD, with the G20, has led the international effort to curb it since 2012. Answer (b), curbing tax evasion by multinationals.

(a) Mining in backward areas, (c) exploitation of genetic resources (biopiracy) and (d) ignoring environmental costs are real issues, but none of them is what BEPS refers to.

**How to crack it:** 'Base' here is the tax base and 'profit shifting' is moving profits to tax havens. Both words point to tax.

---

**61.** Recently, India's first 'National Investment and Manufacturing Zone' was proposed to be set up in

- (a) Andhra Pradesh
- (b) Gujarat
- (c) Maharashtra
- (d) Uttar Pradesh

**Answer: (a) Andhra Pradesh**

National Investment and Manufacturing Zones (NIMZs) are large industrial townships planned under the National Manufacturing Policy, 2011. By the end of 2015, twelve NIMZs had in-principle approval, but only one had final approval: the NIMZ at Prakasam in Andhra Pradesh, cleared by a High Level Committee on 25 August 2015, approved by the Minister on 30 September 2015 and formally accorded by DIPP on 6 October 2015, over about 14,231 acres. That made Prakasam, in Andhra Pradesh, the first NIMZ to receive final approval. Answer (a).

(b) Gujarat, (c) Maharashtra and (d) Uttar Pradesh had no NIMZ with final approval at the time; Nagpur in Maharashtra, for example, had only in-principle approval.

**How to crack it:** 'First' means the first to get final approval. Remember Prakasam (Andhra Pradesh), approved in 2015, while the others stayed at the in-principle stage.

---

**62.** What is/are the purpose/purposes of 'District Mineral Foundations' in India?

1. Promoting mineral exploration activities in mineral-rich districts
2. Protecting the interests of the persons affected by mining operations
3. Authorizing State Governments to issue licences for mineral exploration

Select the correct answer using the code given below.

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

**Answer: (b) 2 only**

District Mineral Foundations were created by section 9B, inserted into the Mines and Minerals (Development and Regulation) Act, 1957 by the 2015 amendment. The state government must set one up, as a non-profit trust, in every district affected by mining, and the Act says its object shall be to work for the interest and benefit of persons, and areas affected by mining related operations. So statement 2 is correct; mining leaseholders pay the foundation a share on top of their royalty to fund this work.

Statement 1 is wrong: mineral exploration is funded through a separate body created by the same amendment, the National Mineral Exploration Trust. Statement 3 is wrong: the foundation grants no licences; mineral concessions are given by the state government under the Act, now by auction. Answer (b), 2 only.

**How to crack it:** The foundation is paid from mining for the districts hurt by mining. Its job is the people there, not exploration or licensing.

---

**63.** 'SWAYAM', an initiative of the Government of India, aims at

- (a) promoting the Self Help Groups in rural areas
- (b) providing financial and technical assistance to young start-up entrepreneurs
- (c) promoting the education and health of adolescent girls
- (d) providing affordable and quality education to the citizens for free

**Answer: (d) providing affordable and quality education to the citizens for free**

SWAYAM is the Government of India's free online course (MOOC, massive open online course) platform, set up by the Ministry of Human Resource Development (now Education) to offer university and college courses to anyone, at no cost. Answer (d).

(a) Self-help groups, (b) start-up support and (c) adolescent girls' health are the work of other schemes; none of them is SWAYAM, which is about courses.

**How to crack it:** SWAYAM means 'self'; it stands for self-learning online. The one option about education for all citizens fits.

**64.** The Montague-Chelmsford Proposals were related to

- (a) social reforms
- (b) educational reforms
- (c) reforms in police administration
- (d) constitutional reforms

**Answer: (d) constitutional reforms**

The Montagu-Chelmsford proposals, named after Edwin Montagu, Secretary of State for India, and Lord Chelmsford, the Viceroy, were set out in their report of 1918 and formed the basis of the Government of India Act 1919. They were constitutional reforms: they enlarged the legislatures, widened the franchise and gave the provinces more authority. Answer (d).

They were not about (a) social reform, (b) education or (c) police administration as such; their subject was how India was to be governed.

**How to crack it:** Every 'Montagu-Chelmsford' answer leads to the Government of India Act 1919, a constitutional Act.

---

65. What is/are common to the two historical places known as Ajanta and Mahabalipuram?

1. Both were built in the same period.
2. Both belong to the same religious denomination.
3. Both have rock-cut monuments.

Select the correct answer using the code given below.

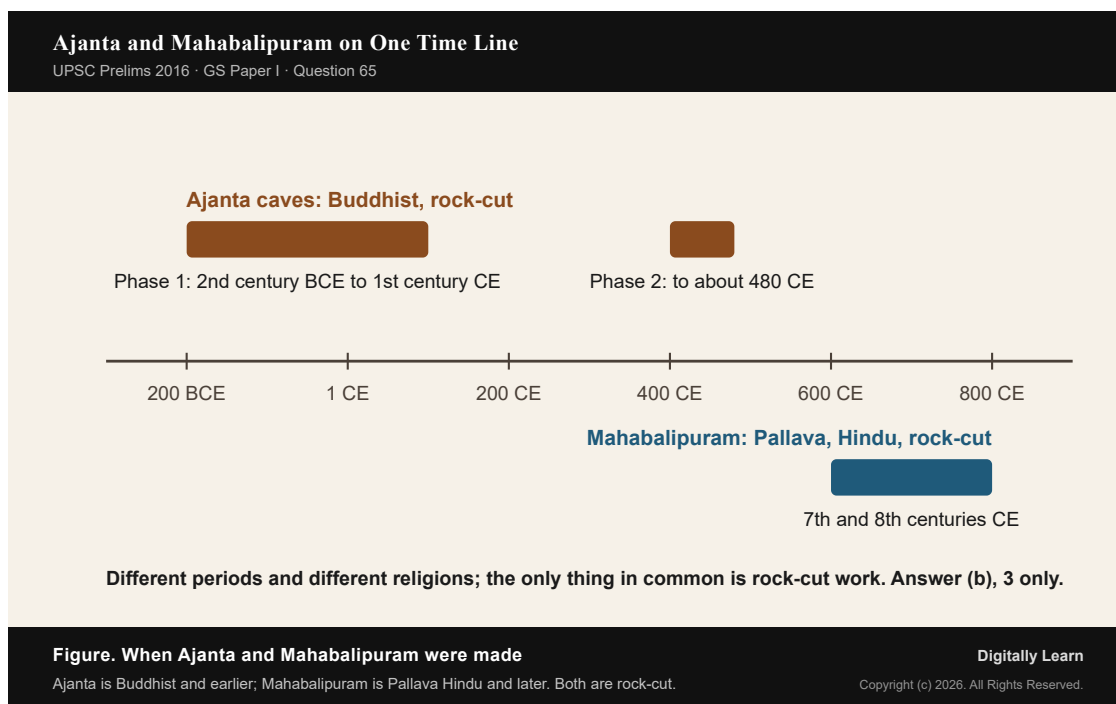
- (a) 1 and 2 only
- (b) 3 only
- (c) 1 and 3 only
- (d) None of the statements given above is correct

**Answer: (b) 3 only**

Statement 1 is wrong. The Ajanta caves were made in two phases, from the 2nd century BCE to about 480 CE, while the Mahabalipuram monuments are of the 7th and 8th centuries CE, built under the Pallavas.

Statement 2 is wrong. Ajanta is a group of Buddhist cave monuments; Mahabalipuram is a group of Hindu temples and reliefs.

Statement 3 is correct. Both have rock-cut monuments: the 30 rock-cut caves of Ajanta, and Mahabalipuram's rock-cut cave temples (mandapas), monolithic rathas and the great relief known as the Descent of the Ganges or Arjuna's Penance. Answer (b), 3 only.



**How to crack it:** Place each site: Ajanta is Buddhist and early, Mahabalipuram Pallava Hindu and later. Different age and religion leaves only the rock-cut technique in common.

**66.** With reference to 'Bitcoins', sometimes seen in the news, which of the following statements is/are correct?

1. Bitcoins are tracked by the Central Banks of the countries.
2. Anyone with a Bitcoin address can send and receive Bitcoins from anyone else with a Bitcoin address.
3. Online payments can be sent without either side knowing the identity of the other.

Select the correct answer using the code given below.

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

**Answer: (b) 2 and 3 only**

Statement 1 is wrong. Bitcoin is a decentralised cryptocurrency: it operates without a central authority or single administrator, and its transactions are recorded on a shared ledger, the blockchain, not tracked by central banks.

Statement 2 is correct. Anyone can create a bitcoin address and transact with any other address without needing anyone's approval.

Statement 3 is correct. Bitcoin is pseudonymous: payments go between addresses, not names, so the two sides need not know each other's identity, which is why regulators worry about its use by criminals. Answer (b), 2 and 3 only.

**How to crack it:** Bitcoin was designed to remove the middleman, central banks included. 'Tracked by the Central Banks' contradicts that, so drop 1 and keep the two statements about free, pseudonymous transfers.

---

**67.** Consider the following statements:

1. New Development Bank has been set up by APEC.
2. The headquarters of New Development Bank is in Shanghai.

Which of the statements given above is/are correct?

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

**Answer: (b) 2 only**

Statement 1 is wrong. The New Development Bank was set up by the BRICS countries, Brazil, Russia, India, China and South Africa (agreed in July 2014, in operation from July 2015), not by APEC.

Statement 2 is correct. Its headquarters is in Shanghai, China. Answer (b), 2 only.

**How to crack it:** The NDB is the 'BRICS bank'. APEC is a Pacific trade forum with no bank, so statement 1 falls.

**Remember:** India's K. V. Kamath was the NDB's president when it began work in 2015.

---

**68.** 'Gadgil Committee Report' and 'Kasturirangan Committee Report', sometimes seen in the news, are related to

- (a) constitutional reforms
- (b) Ganga Action Plan
- (c) linking of rivers
- (d) protection of Western Ghats

**Answer: (d) protection of Western Ghats**

The Western Ghats Ecology Expert Panel, chaired by Madhav Gadgil (hence the Gadgil Committee, report of 31 August 2011), and the high-level working group under K. Kasturirangan that followed it, both dealt with protecting the ecology of the Western Ghats, especially how much of it to declare ecologically sensitive: the Gadgil report proposed 64 per cent, the Kasturirangan report 37 per cent. Answer (d).

They have nothing to do with (a) constitutional reforms, (b) the Ganga Action Plan or (c) linking of rivers.

**How to crack it:** Gadgil and then Kasturirangan, in that order, both reported on the Western Ghats: remember them as a pair.

---

**69.** Consider the following:

1. Calcutta Unitarian Committee
2. Tabernacle of New Dispensation
3. Indian Reform Association

Keshab Chandra Sen is associated with the establishment of which of the above?

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

**Answer: (b) 2 and 3 only**

Keshab Chandra Sen founded the Indian Reform Association in Calcutta in 1870, on his return to India, working on cheap literature, women's improvement, education, temperance and charity (3). In his later years he proclaimed the 'New Dispensation' (Nava Vidhan), and the Tabernacle of New Dispensation belongs to that movement of his (2).

The Calcutta Unitarian Committee (1) was not his; it belongs to the earlier generation, when Raja Rammohan Roy co-founded the Calcutta Unitarian Society. Answer (b), 2 and 3 only.

**How to crack it:** Separate the two generations of the Brahmo movement: Rammohan Roy and the Unitarians first, Keshab Chandra Sen and the New Dispensation later.

---

**70.** Which of the following is not a member of 'Gulf Cooperation Council'?

- (a) Iran
- (b) Saudi Arabia
- (c) Oman
- (d) Kuwait

**Answer: (a) Iran**

The Gulf Cooperation Council has six members: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates, with its headquarters in Riyadh. Iran is not a member; it is a non-Arab neighbour across the Gulf. Answer (a).

(b) Saudi Arabia, (c) Oman and (d) Kuwait are all members.

**How to crack it:** The GCC is the council of the Arab states of the Gulf. Iran is the one non-Arab country on the list.

---

**71.** What is/are the purpose/purposes of Government's 'Sovereign Gold Bond Scheme' and 'Gold Monetization Scheme'?

1. To bring the idle gold lying with Indian households into the economy
2. To promote FDI in the gold and jewellery sector
3. To reduce India's dependence on gold imports

Select the correct answer using the code given below.

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

**Answer: (c) 1 and 3 only**

Both schemes were launched together on 5 November 2015. The Gold Monetisation Scheme lets households, firms and trusts deposit the gold they hold with banks and earn interest on it, so gold lying idle at home is mobilised into the economy (1). Sovereign Gold Bonds let people invest in gold without buying physical gold. Together they were meant to cut India's gold imports, which make up most of its gold demand and had widened the current account deficit (3).

Neither scheme has anything to do with foreign direct investment in the gold and jewellery sector (2). Answer (c), 1 and 3 only.

**How to crack it:** India buys most of its gold from abroad and keeps a lot of it idle at home. Both schemes target those two problems; FDI is a different policy tool.

---

**72.** 'Belt and Road Initiative' is sometimes mentioned in the news in the context of the affairs of

- (a) African Union
- (b) Brazil
- (c) European Union
- (d) China

**Answer: (d) China**

The Belt and Road Initiative is China's global infrastructure and connectivity strategy, launched in 2013 and run from Beijing: an overland Silk Road Economic Belt and a Maritime Silk Road of ports and shipping routes. Answer (d).

It is not a project of (a) the African Union, (b) Brazil or (c) the European Union, though many countries in Africa and Europe take part in it.

**How to crack it:** 'Belt and Road' is the revival of the old Silk Road, and the Silk Road began in China.

---

**73.** Pradhan Mantri MUDRA Yojana is aimed at

- (a) bringing the small entrepreneurs into formal financial system
- (b) providing loans to poor farmers for cultivating particular crops
- (c) providing pensions to old and destitute persons
- (d) funding the voluntary organizations involved in the promotion of skill development and employment generation

**Answer: (a) bringing the small entrepreneurs into formal financial system**

Pradhan Mantri MUDRA Yojana (launched on 8 April 2015) works through MUDRA (Micro Units Development and Refinance Agency), which lends to micro-finance institutions and non-banking financial institutions that in turn give credit to micro, small and medium enterprises. Its target is small entrepreneurs outside the reach of regular banks, about 5.77 crore small businesses, so it brings them into the formal financial system. Answer (a).

(b) Crop loans to farmers, (c) pensions for the old and destitute and (d) funding voluntary organisations for skilling are run under other schemes; MUDRA loans are for non-farm small businesses.

**How to crack it:** MUDRA means Micro Units: it is about tiny businesses getting formal credit. Only (a) mentions small entrepreneurs.

---

**74.** In which of the following regions of India are shale gas resources found?

1. Cambay Basin
2. Cauvery Basin
3. Krishna-Godavari Basin

Select the correct answer using the code given below.

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

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

All three. A team of the Directorate General of Hydrocarbons, ONGC, Oil India and GAIL picked six basins as prospective for shale gas: Cambay, Krishna-Godavari onland, Cauvery onland, Assam-Arakan, Gondwana and Indo-Gangetic. Cambay (1), Cauvery (2) and Krishna-Godavari (3) are all on the list, and they are also the three basins in which the US Geological Survey estimated India's recoverable shale gas in 2012. Answer (d), 1, 2 and 3.

**How to crack it:** Shale gas sits in thick sedimentary basins. Cambay, Krishna-Godavari and Cauvery appear in every assessment of India's shale gas, so take all three.

---

**75.** 'Global Financial Stability Report' is prepared by the

- (a) European Central Bank
- (b) International Monetary Fund
- (c) International Bank for Reconstruction and Development
- (d) Organization for Economic Cooperation and Development

**Answer: (b) International Monetary Fund**

The Global Financial Stability Report is published by the International Monetary Fund, prepared by its Monetary and Capital Markets Department, and assesses the global financial system and markets. Answer (b). (a) The European Central Bank, (c) the International Bank for Reconstruction and Development (the World Bank's lending arm) and (d) the OECD do not publish it. The IMF publishes it alongside its World Economic Outlook.

**How to crack it:** Financial stability across the world is the IMF's brief: pair the Global Financial Stability Report with the IMF, as you pair the World Economic Outlook with it.

**76.** Regarding 'Atal Pension Yojana', which of the following statements is/are correct?

1. It is a minimum guaranteed pension scheme mainly targeted at unorganized sector workers.
2. Only one member of a family can join the scheme.
3. Same amount of pension is guaranteed for the spouse for life after subscriber's death.

Select the correct answer using the code given below:

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

**Answer: (c) 1 and 3 only**

Statement 1 is correct. Atal Pension Yojana, administered by the Pension Fund Regulatory and Development Authority (PFRDA), gives a guaranteed minimum pension of 1,000 to 5,000 rupees a month from age 60, and it is focused on workers of the unorganised sector.

Statement 2 is wrong. Any citizen of India aged 18 to 40 with a savings bank or post office account can join; there is no limit of one member per family.

Statement 3 is correct. After the subscriber's death the spouse is entitled to the same pension amount for life, and after both die the accumulated corpus goes to the nominee. Answer (c), 1 and 3 only.

**How to crack it:** 'Only one member of a family' is a restriction no pension scheme for individuals would have. Strike it, and (c) is the only option with 1 and 3.

---

**77.** The term 'Regional Comprehensive Economic Partnership' often appears in the news in the context of the affairs of a group of countries known as

- (a) G20
- (b) ASEAN
- (c) SCO
- (d) SAARC

**Answer: (b) ASEAN**

The Regional Comprehensive Economic Partnership (RCEP) was conceived at the 2011 ASEAN summit in Bali and its negotiations were launched at the 2012 ASEAN summit in Cambodia: a free trade agreement between the ten ASEAN members and their partners (Australia, China, Japan, New Zealand and South Korea, and India until it opted out). Answer (b).

(a) The G20, (c) the Shanghai Cooperation Organisation and (d) SAARC have no link to RCEP.

**How to crack it:** RCEP was born at ASEAN summits and its depositary is the Secretary-General of ASEAN: link it to ASEAN.

**Remember:** RCEP was signed in November 2020, without India, which had taken part in the negotiations and then opted out.

**78.** On which of the following can you find the Bureau of Energy Efficiency Star Label?

1. Ceiling fans
2. Electric geysers
3. Tubular fluorescent lamps

Select the correct answer using the code given below:

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

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

All three carried the Bureau of Energy Efficiency star label in 2016. The BEE's standards and labelling programme listed tubular fluorescent lamps (3) and electric geysers (2) among the appliances for which the label is mandatory, and ceiling fans (1) among the appliances labelled voluntarily. Answer (d), 1, 2 and 3.

(a), (b) and (c) each leave out at least one appliance that did carry the label.

**How to crack it:** The star scheme covers almost every common household electric appliance, either compulsorily or voluntarily. When fans, geysers and tube lights are all listed, take all of them.

---

**79.** India is an important member of the 'International Thermonuclear Experimental Reactor'. If this experiment succeeds, what is the immediate advantage for India?

- (a) It can use thorium in place of uranium for power generation.
- (b) It can attain a global role in satellite navigation.
- (c) It can drastically improve the efficiency of its fission reactors in power generation.
- (d) It can build fusion reactors for power generation.

**Answer: (d) It can build fusion reactors for power generation.**

ITER (the International Thermonuclear Experimental Reactor) in France is a project of China, the EU, India, Japan, South Korea, Russia and the United States to show that power can be produced by nuclear fusion. If it succeeds, India, as a full member, could build fusion reactors to generate power. Answer (d).

(a) Using thorium in place of uranium is the goal of India's own three-stage fission programme, not of a fusion project. (b) Satellite navigation has nothing to do with it. (c) It does not improve fission reactors; fusion is a different process.

**How to crack it:** 'Thermonuclear' means fusion. The only option about fusion is (d); the others are about fission or satellites.

**80.** Consider the following pairs:

|    | Term     | Description                                                                    |
|----|----------|--------------------------------------------------------------------------------|
| 1. | Eripatti | Land, revenue from which was set apart for the maintenance of the village tank |
| 2. | Taniyurs | Villages donated to a single Brahmin or a group of Brahmins                    |
| 3. | Ghatikas | Colleges generally attached to the temples                                     |

Which of the pairs given above is/are correctly matched?

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

**Answer: (d) 1 and 3**

Pair 1 is correct. Eripatti (Tamil eri, tank) was land or an endowment whose income was set apart for repairing and maintaining the village tank; the University of Madras Tamil Lexicon defines it as an endowment made for repairs to the tank, citing South Indian Inscriptions.

Pair 2 is wrong. Under the Cholas a taniyur was a large village big enough to form a revenue unit (a kurram) by itself. A village given to one Brahmana or a group of Brahmanas was a brahmadeya or agrahara, not a taniyur.

Pair 3 is correct. Ghatikas were centres of learning, chiefly of the Vedas taught by learned Brahmanas; the Talagunda inscription records that the Kadamba founder Mayurasharma went to study at the ghatika of Kanchi, the Pallava capital, which was known as a ghatikasthana or place of learning. With pair 1 right and pair 2 wrong, only one option fits. Answer (d), 1 and 3.

**How to crack it:** Settle the easiest pair first. Once taniyur is seen as a large village unit, any option with 2 goes, and eripatti being right leaves only (d).

**81.** Consider the following statements:

1. The International Solar Alliance was launched at the United Nations Climate Change Conference in 2015.
2. The Alliance includes all the member countries of the United Nations.

Which of the statements given above is/are correct?

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

**Answer: (a) 1 only**

Statement 1 is correct. The International Solar Alliance was formed in Paris on 30 November 2015, the opening day of the UN Climate Change Conference there (COP21, 30 November to 12 December 2015), on an initiative of Prime Minister Narendra Modi.

Statement 2 is wrong. It was conceived as an alliance of 'sunshine countries' lying wholly or partly between the Tropic of Cancer and the Tropic of Capricorn; it has over a hundred members, not every member of the UN. Answer (a), 1 only.

**How to crack it:** 'All the member countries of the United Nations' is an absolute claim, and the ISA was built for sun-rich tropical countries. Drop 2.

**Remember:** The ISA's headquarters is in India, at the National Institute of Solar Energy, Gurugram (Haryana).

---

**82.** 'European Stability Mechanism', sometimes seen in the news, is an

- (a) agency created by EU to deal with the impact of millions of refugees arriving from Middle East
- (b) agency of EU that provides financial assistance to eurozone countries
- (c) agency of EU to deal with all the bilateral and multilateral agreements on trade
- (d) agency of EU to deal with the conflicts arising among the member countries

**Answer: (b) agency of EU that provides financial assistance to eurozone countries**

The European Stability Mechanism, set up on 27 September 2012 by a treaty among the eurozone countries, is a permanent firewall that gives financial assistance to eurozone member states in financial difficulty, with a lending capacity of 500 billion euros; it lent, for example, to recapitalise Spanish banks and to Cyprus. Answer (b).

It does not deal with (a) refugees, (c) trade agreements or (d) disputes among member countries.

**How to crack it:** 'Stability' in a European money context means rescuing countries that use the euro. Only (b) is about financial help.

**83.** Which of the following is/are the advantage/advantages of practising drip irrigation?

1. Reduction in weed
2. Reduction in soil salinity
3. Reduction in soil erosion

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 3 only
- (c) 1 and 3 only
- (d) None of the above is an advantage of practising drip irrigation

**Answer: (c) 1 and 3 only**

Drip irrigation delivers water drop by drop to the roots of each plant. Because the space between plants stays dry, weed growth is lessened (1). Because water is not run over the field surface, soil erosion is lessened (3). Reduction in soil salinity (2) is not an advantage: most drip systems apply little extra water to wash salts down (little leaching), so salts brought in with the irrigation water can build up in the root zone. The method can work with salty water, but it does not by itself lower soil salinity. Answer (c), 1 and 3 only.

**How to crack it:** Think about where the water goes. Only the root zone is wetted, so weeds and erosion fall; but nothing flushes the salts away, so salinity is not reduced.

---

**84.** Regarding 'DigiLocker', sometimes seen in the news, which of the following statements is/are correct?

1. It is a digital locker system offered by the Government under Digital India Programme.
2. It allows you to access your e-documents irrespective of your physical location.

Select the correct answer using the code given below:

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

**Answer: (c) Both 1 and 2**

Statement 1 is correct. DigiLocker is a cloud service of the Ministry of Electronics and Information Technology, provided under the Digital India programme.

Statement 2 is correct. It gives access, from anywhere online, to certified digital versions of documents such as driving licences, vehicle registration, birth certificates and academic transcripts, and offers storage for scanned copies of other documents. Answer (c), both.

**How to crack it:** A 'digital locker' kept in the cloud is by nature reachable from anywhere, and it is a Digital India service. Both statements simply describe it.

**85.** Recently, linking of which of the following rivers was undertaken?

- (a) Cauvery and Tungabhadra
- (b) Godavari and Krishna
- (c) Mahanadi and Sone
- (d) Narmada and Tapi

**Answer: (b) Godavari and Krishna**

The Pattiseema Lift Irrigation Project in Andhra Pradesh lifts water from the Godavari into the Polavaram right main canal, which carries it to the Krishna delta. In its 2015 trial run it moved 8.8 tmc of Godavari water to the Krishna delta, linking the two rivers. Answer (b).

(a) Cauvery and Tungabhadra, (c) Mahanadi and Sone and (d) Narmada and Tapi had not been linked at the time.

**How to crack it:** Remember Andhra Pradesh's Pattiseema project of 2015, which took surplus Godavari water to the Krishna.

**Remember:** Godavari-Krishna was reported in September 2015 as India's first river linkage.

---

**86.** In the cities of our country, which among the following atmospheric gases are normally considered in calculating the value of Air Quality Index?

1. Carbon dioxide
2. Carbon monoxide
3. Nitrogen dioxide
4. Sulfur dioxide
5. Methane

Select the correct answer using the code given below.

- (a) 1, 2 and 3 only
- (b) 2, 3 and 4 only
- (c) 1, 4 and 5 only
- (d) 1, 2, 3, 4 and 5

**Answer: (b) 2, 3 and 4 only**

India's National Air Quality Index, launched on 17 September 2014, considers eight pollutants: PM10, PM2.5, nitrogen dioxide, sulphur dioxide, carbon monoxide, ozone, ammonia and lead. Of the gases listed, carbon monoxide (2), nitrogen dioxide (3) and sulphur dioxide (4) are in it. Answer (b), 2, 3 and 4 only.

Carbon dioxide (1) and methane (5) are greenhouse gases, but they are not among the pollutants the index measures.

**How to crack it:** The AQI measures gases that harm health directly when breathed. CO<sub>2</sub> and methane matter for climate change, not for the local air-quality index.

---

**87.** With reference to 'Astrosat', the astronomical observatory launched by India, which of the following statements is/are correct?

1. Other than USA and Russia, India is the only country to have launched a similar observatory into space.
2. Astrosat is a 2000 kg satellite placed in an orbit at 1650 km above the surface of the Earth.

Select the correct answer using the code given below.

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

**Answer: (d) Neither 1 nor 2**

Statement 1 is wrong. Countries other than the USA and Russia had already put space observatories in orbit before Astrosat (launched on 28 September 2015): Japan's X-ray observatory Suzaku in 2005, and the European Space Agency's XMM-Newton in 1999.

Statement 2 is wrong. Astrosat had a launch mass of 1,513 kg, not 2,000 kg, and it orbits in a near-equatorial orbit about 650 km above the Earth (perigee 643.5 km, apogee 654.9 km), not at 1,650 km. Answer (d), neither.

**How to crack it:** 'The only country' claims are usually wrong; Japan and Europe have space telescopes. Astrosat's numbers (about 1,500 kg, about 650 km) rule out statement 2.

---

**88.** With reference to the economic history of medieval India, the term 'Araghatta' refers to

- (a) bonded labour
- (b) land grants made to military officers
- (c) waterwheel used in the irrigation of land
- (d) wasteland converted to cultivated land

**Answer: (c) waterwheel used in the irrigation of land**

Araghatta is the Sanskrit name of the water-lifting wheel, the device later known as the Persian wheel: a spoked wheel carrying pots that lifted water from a well, or turned in a stream to water the fields. The name joins ara (spoke) and ghatta (pot), and the device is mentioned as early as the Panchatantra. Answer (c).

It is not (a) bonded labour, (b) a land grant to military officers or (d) wasteland brought under the plough.

**How to crack it:** Break the word: ara (spoke) + ghatta (pot). A spoked wheel with pots is a waterwheel.

**89.** With reference to the cultural history of India, the memorizing of chronicles, dynastic histories and epic tales was the profession of who of the following?

- (a) Shramana
- (b) Parivraajaka
- (c) Agrahaarika
- (d) Maagadha

**Answer: (d) Maagadha**

A Maagadha was the professional bard or panegyrist of a king, a calling often named together with the suta. The suta was the royal herald and bard who proclaimed the heroic deeds of the king and his ancestors and had to know by heart parts of the epic poems and old ballads. Memorising and reciting chronicles, dynastic histories and epic tales was the profession of this class of bards. Answer (d).

(a) A Shramana was an ascetic or religious mendicant, the name used especially for Buddhist and Jain monks. (b) A Parivraajaka was a wandering religious mendicant. (c) An Agrahaarika was one who held an agrahara, an endowment of land or villages given to Brahmanas. None of them kept dynastic histories as a profession.

**How to crack it:** Three of the options are religious or landholding roles (ascetic, wanderer, holder of a Brahmana land grant). Only the Maagadha is a court bard, the keeper of the king's story.

---

**90.** Recently, for the first time in our country, which of the following States has declared a particular butterfly as 'State Butterfly'?

- (a) Arunachal Pradesh
- (b) Himachal Pradesh
- (c) Karnataka
- (d) Maharashtra

**Answer: (d) Maharashtra**

In June 2015 Maharashtra declared the Blue Mormon, a large swallowtail butterfly of south India, its 'State Butterfly', and became the first state in India to have one. Answer (d).

(a) Arunachal Pradesh, (b) Himachal Pradesh and (c) Karnataka did not do so first.

**How to crack it:** Link the Blue Mormon with Maharashtra: in 2015 it became India's first state butterfly.

**Remember:** The Blue Mormon, with a wingspan of 120 to 150 mm, is the fourth largest butterfly of India.

---

**91.** Consider the following statements: The Mangalyaan launched by ISRO

1. is also called the Mars Orbiter Mission
2. made India the second country to have a spacecraft orbit the Mars after USA
3. made India the only country to be successful in making its spacecraft orbit the Mars in its very first attempt

Which of the statements given above is/are correct?

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

**Answer: (c) 1 and 3 only**

Statement 1 is correct. Mangalyaan is the unofficial name of ISRO's Mars Orbiter Mission (MOM), launched on 5 November 2013 and in orbit around Mars from 24 September 2014.

Statement 2 is wrong. ISRO became the fourth space agency to reach Mars orbit, after the Soviet space programme, NASA and the European Space Agency, so India was not 'second after the USA'.

Statement 3 is correct. India was the first to succeed in putting a spacecraft into Mars orbit on its very first attempt, and the first Asian nation to reach Martian orbit. Answer (c), 1 and 3 only.

**How to crack it:** Remember the order: Soviet Union, NASA, ESA, then ISRO, fourth. 'Second after USA' fails, but 'first attempt' is MOM's famous record.

---

**92.** What was the main reason for the split in the Indian National Congress at Surat in 1907?

- (a) Introduction of communalism into Indian politics by Lord Minto
- (b) Extremists' lack of faith in the capacity of the moderates to negotiate with the British Government
- (c) Foundation of Muslim League
- (d) Aurobindo Ghosh's inability to be elected as the President of the Indian National Congress

**Answer: (b) Extremists' lack of faith in the capacity of the moderates to negotiate with the British Government**

The Congress split at Surat in December 1907 because the Moderates and the Extremists could not agree on how far to carry the struggle. The Extremists wanted to extend Swadeshi and boycott beyond Bengal into a nationwide mass movement, including a boycott of councils and law courts; they felt the time had come for the big push and saw the Moderates as a drag on the movement. That lack of faith in the Moderates is option (b). Answer (b).

(a) Separate electorates, Minto's step towards communal politics, came with the Indian Councils Act of 1909, after Surat. (c) The Muslim League was founded in 1906, but it was not the cause of the Congress quarrel. (d) The dispute was over programme and methods, not over Aurobindo Ghosh's election as president.

**How to crack it:** Surat was a fight between two wings of the Congress over methods: petitions versus mass struggle. Pick the option about the Moderates and the Extremists.

**93.** The plan of Sir Stafford Cripps envisaged that after the Second World War

- (a) India should be granted complete independence
- (b) India should be partitioned into two before granting independence
- (c) India should be made a republic with the condition that she will join the Commonwealth
- (d) India should be given Dominion status

**Answer: (d) India should be given Dominion status**

The Cripps Mission of late March 1942 offered India full Dominion status once the war was over, with elections, and the chance to leave the Commonwealth later. Answer (d).

(a) Complete independence was not offered at once; it came only through the option to secede later. (b) It did not propose partition before independence, though a clause said no province would be compelled to join post-war India. (c) It did not offer a republic on condition of joining the Commonwealth.

**How to crack it:** Cripps' offer is remembered for 'Dominion status after the war', which Gandhi called a post-dated cheque drawn on a failing bank.

---

94. Consider the following pairs:

|    | Famous place   | Region      |
|----|----------------|-------------|
| 1. | Bodhgaya       | Baghelkhand |
| 2. | Khajuraho      | Bundelkhand |
| 3. | Shirdi         | Vidarbha    |
| 4. | Nasik (Nashik) | Malwa       |
| 5. | Tirupati       | Rayalaseema |

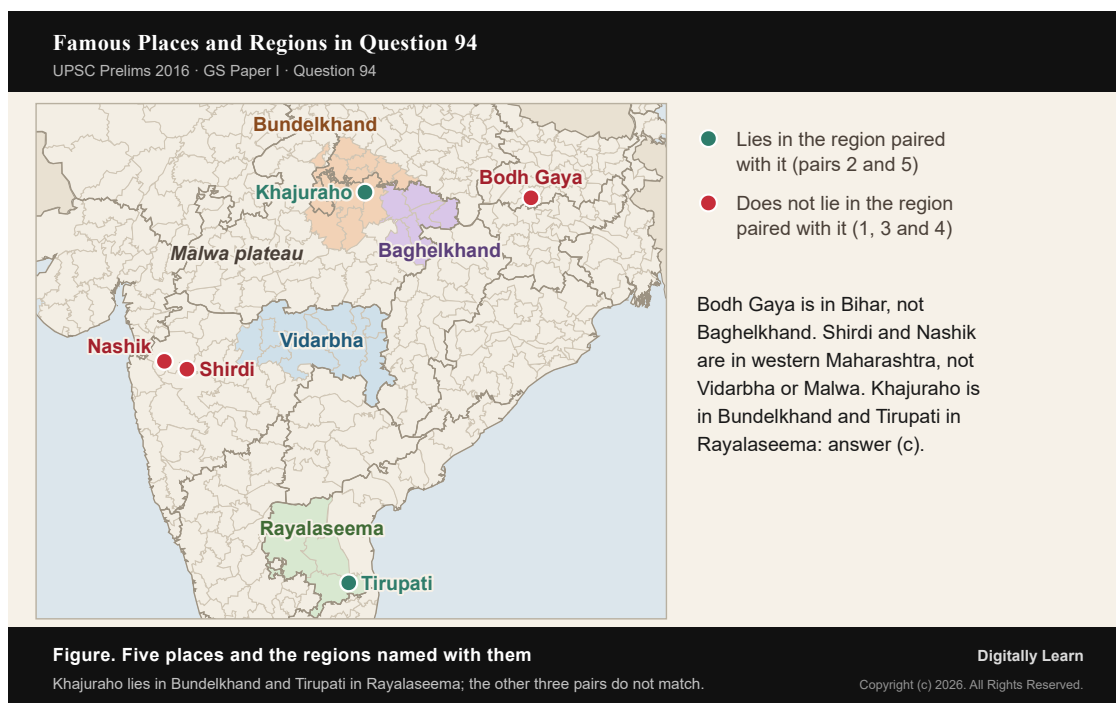
Which of the pairs given above are correctly matched?

- (a) 1, 2 and 4
- (b) 2, 3, 4 and 5
- (c) 2 and 5 only
- (d) 1, 3, 4 and 5

**Answer: (c) 2 and 5 only**

Pair 1 is wrong: Bodh Gaya is in Gaya district of Bihar, not in Baghelkhand, which covers north-eastern Madhya Pradesh around Rewa and Satna. Pair 2 is correct: the Khajuraho temples were built by the Chandelas in the region later known as Bundelkhand.

Pair 3 is wrong: Shirdi is in Ahmednagar district of western Maharashtra, while Vidarbha is the eastern region around Nagpur and Amravati. Pair 4 is wrong: Nashik is in Maharashtra, while Malwa is a plateau of western Madhya Pradesh and south-eastern Rajasthan. Pair 5 is correct: Tirupati lies in the Rayalaseema region of Andhra Pradesh. Answer (c), 2 and 5 only.



**How to crack it:** Put each place in its state first. Bodh Gaya (Bihar), Shirdi and Nashik (western Maharashtra) cannot belong to Baghelkhand, Vidarbha or Malwa; only Khajuraho and Tirupati survive.

**95.** The Parliament of India acquires the power to legislate on any item in the State List in the national interest if a resolution to that effect is passed by the

- (a) Lok Sabha by a simple majority of its total membership
- (b) Lok Sabha by a majority of not less than two-thirds of its total membership
- (c) Rajya Sabha by a simple majority of its total membership
- (d) Rajya Sabha by a majority of not less than two-thirds of its members present and voting

**Answer: (d) Rajya Sabha by a majority of not less than two-thirds of its members present and voting**

Under Article 249 of the Constitution, Parliament may make laws on a matter in the State List if the Council of States (Rajya Sabha) has declared by resolution, supported by not less than two-thirds of the members present and voting, that it is necessary or expedient in the national interest. Answer (d).

(a), (b) and (c) are wrong because the power rests with the Rajya Sabha, the House that represents the states, and the majority required is two-thirds of the members present and voting, not of the total membership or a simple majority. The resolution is valid for up to one year at a time.

**How to crack it:** The Rajya Sabha is the guardian of the states, so it alone can let Parliament step into the State List, and only by a two-thirds vote.

---

**96.** Recently, which of the following States has explored the possibility of constructing an artificial inland port to be connected to sea by a long navigational channel?

- (a) Andhra Pradesh
- (b) Chhattisgarh
- (c) Karnataka
- (d) Rajasthan

**Answer: (d) Rajasthan**

Rajasthan is landlocked, so a port there needs a navigable channel to the sea. Such a route, along the Jawai and Luni rivers to the Rann of Kutch in Gujarat, 590 km long, is listed as National Waterway 48 under the National Waterways Act, 2016. Answer (d).

(a) Andhra Pradesh and (c) Karnataka have long coastlines and natural seaports, so they would not need an artificial inland port with a long channel. (b) Chhattisgarh is landlocked too, but no such plan was proposed there.

**How to crack it:** Only a landlocked state needs an 'artificial inland port connected to the sea by a long channel', and Rajasthan is the landlocked state next to the Rann of Kutch.

**97.** With reference to the Agreement at the UNFCCC Meeting in Paris in 2015, which of the following statements is/are correct?

1. The Agreement was signed by all the member countries of the UN and it will go into effect in 2017.
2. The Agreement aims to limit the greenhouse gas emissions so that the rise in average global temperature by the end of this century does not exceed 2 °C or even 1.5 °C above pre-industrial levels.
3. Developed countries acknowledged their historical responsibility in global warming and committed to donate \$1000 billion a year from 2020 to help developing countries to cope with climate change.

Select the correct answer using the code given below.

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

**Answer: (b) 2 only**

Statement 1 is wrong. The Paris Agreement was opened for signature on 22 April 2016, but not every UN member signed it, and it entered into force on 4 November 2016 (after 55 parties covering 55 per cent of emissions ratified it), not in 2017.

Statement 2 is correct. Its long-term goal is to keep the rise in global temperature well below 2 °C above pre-industrial levels, and preferably to 1.5 °C.

Statement 3 is wrong. Developed countries reaffirmed a goal of mobilising 100 billion dollars a year in climate finance by 2020, not 1,000 billion. Answer (b), 2 only.

**How to crack it:** Check the numbers: '1000 billion' is ten times the real 100 billion dollar goal, and 'signed by all' is an absolute claim. Only the temperature goal is right.

---

**98.** Consider the following statements:

1. The Sustainable Development Goals were first proposed in 1972 by a global think tank called the 'Club of Rome'.
2. The Sustainable Development Goals have to be achieved by 2030.

Which of the statements given above is/are correct?

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

**Answer: (b) 2 only**

Statement 1 is wrong. The Sustainable Development Goals came out of the UN process that followed the Rio+20 conference of 2012 ('The Future We Want'): a 30-member Open Working Group of the UN General Assembly, set up in January 2013, drafted them, and they were adopted in 2015. The Club of Rome is known for a different 1972 report, The Limits to Growth.

Statement 2 is correct. The SDGs, established in 2015, are to be achieved by 2030. Answer (b), 2 only.

**How to crack it:** The SDGs replaced the Millennium Development Goals in 2015 for the period to 2030. 1972 and the Club of Rome belong to The Limits to Growth, a decoy.

**99.** A recent movie titled The Man Who Knew Infinity is based on the biography of

- (a) S. Ramanujan
- (b) S. Chandrasekhar
- (c) S. N. Bose
- (d) C. V. Raman

**Answer: (a) S. Ramanujan**

The Man Who Knew Infinity (2015), starring Dev Patel, is a British biographical film about the mathematician Srinivasa Ramanujan, based on Robert Kanigel's 1991 book of the same name: his rise from poverty in Madras to Cambridge during the First World War. Answer (a).

The film is about Ramanujan, not (b) S. Chandrasekhar, (c) S. N. Bose or (d) C. V. Raman.

**How to crack it:** 'Infinity' points to a mathematician, and Ramanujan, who worked with Hardy at Cambridge, is India's most celebrated one.

---

**100.** Consider the following statements:

1. The minimum age prescribed for any person to be a member of Panchayat is 25 years.
2. A Panchayat reconstituted after premature dissolution continues only for the remainder period.

Which of the statements given above is/are correct?

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

**Answer: (b) 2 only**

Statement 1 is wrong. Under Article 243F, a person can be a member of a Panchayat at 21: no one is disqualified on the ground of being under 25 if he or she has attained the age of 21 years.

Statement 2 is correct. Article 243E(4) says a Panchayat constituted after the premature dissolution of a Panchayat continues only for the remainder of the period for which the dissolved Panchayat would have continued. Answer (b), 2 only.

**How to crack it:** For Panchayats the Constitution keeps the minimum age at 21, lower than the 25 for a state legislature. And a mid-term Panchayat only serves out the old term.

---