CUT-OFF, SOURCE, STRATEGY & ANALYSIS

GENERAL STUDIES PRELIMS 2023 PAPER-I

By our Expert Team
Dear Friends,

UPSC conducted the Prelims for CSE 2023 on 28 May 2023. The questions can be said to be of moderate to difficult level. Hence, the expectation is that UPSC Prelims 2023 Expected Cutoff would remain low in the range of 85+/-2.

Many questions were of the type 'either you know or you don't'. Hence, this was a kind of paper where it was more important for a candidate to judge which question to leave rather than which one to attempt. UPSC asked questions in a new way (how many are correct) which made the use of the elimination technique difficult. Almost 45 questions were of this nature.
- The questions from polity were easy to moderate except for a few where deep knowledge of the facts was required.
- The questions from the environment section were moderate to difficult.
- Questions from Science and Technology were moderate to difficult. New and emerging technologies were stressed upon.
- Economy questions were moderate to difficult. Most of these needed a thorough understanding of the topic.
- The questions from history were moderate in nature.
- The questions from IR/IO were easy. They had linkage to current affairs.
- Topics which have been frequently been in news have been asked and these can be sourced from newspapers like Hindu, Times of India, Indian Express etc.
- Two question were asked from Sports.

After taking the prelims examination in the most taxing circumstances, aspirants now must be unsettled by the darkness of uncertainty around the score that would sail them through to the next stage. But remember prelims is just the qualifying phase of CSE. The real battle begins now. Anyone scoring 80+ should take two days' rest, refresh their mind and get into Mains mode.

Aspirants who failed to attempt the paper as per their expectations should remain calm and composed and take a few days break. Thereafter, do a diligent SWOT analysis of the syllabus, preparation, time schedule etc and think and plan accordingly with a new strategy. Do not try to imitate or blindly copy others and neither be influenced in a wrong way, rather get inspired. Do not settle for less and do not be afraid of failures.

The strategy should be:
Read standard books, grasp basic concepts, focus on fundamentals of current affairs, read the newspaper thoroughly, be aware and observant and focus on quality rather than quantity.
SUBJECT-WISE ANALYSIS

NUMBER OF QUESTIONS

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>NUMBER OF QUESTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polity &amp; Governance/Social Justice</td>
<td>17</td>
</tr>
<tr>
<td>Environment</td>
<td>13</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>11</td>
</tr>
<tr>
<td>Economy</td>
<td>16</td>
</tr>
<tr>
<td>History</td>
<td>14</td>
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<td>Geography</td>
<td>16</td>
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<tr>
<td>IR/IO</td>
<td>10</td>
</tr>
<tr>
<td>Misc (Security, Sports etc.)</td>
<td>3</td>
</tr>
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</table>

SUBJECT-WISE ANALYSIS

<table>
<thead>
<tr>
<th>Year</th>
<th>Polity</th>
<th>Env.</th>
<th>S&amp;T</th>
<th>Economy</th>
<th>History</th>
<th>Geography</th>
<th>Current Affairs</th>
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<td>2017</td>
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<td>2020</td>
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<td>2021</td>
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<td>15</td>
<td>20</td>
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<td>14</td>
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<td>2022</td>
<td>10</td>
<td>10</td>
<td>9</td>
<td>14</td>
<td>16</td>
<td>13</td>
<td>24+4(IR/IO)</td>
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LEVEL

NUMBER OF QUESTIONS

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>NUMBER OF QUESTIONS</th>
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<tbody>
<tr>
<td>Easy</td>
<td>30</td>
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<tr>
<td>Medium</td>
<td>43</td>
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<tr>
<td>Hard</td>
<td>27</td>
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<td>Qtn. No.</td>
<td>Qtn.</td>
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<tr>
<td>1</td>
<td>With reference to Home Guards, consider the following statements: 1. Home Guards are raised under the Home Guards Act and Rules of the Central Government. 2. The role of the Home Guards is to serve as an auxiliary force to the police in maintenance of the internal security. 3. To prevent infiltration on the international border/coastal areas, the Border Wings Home Guards Battalions have been raised in some States. How many of the above statements are correct? a. Only one b. Only two c. All three d. None</td>
</tr>
<tr>
<td>2</td>
<td>With reference to India, consider the following pairs: Action 1. Unauthorized wearing of police or military uniforms 2. Knowingly misleading or otherwise interfering with a police officer or military officer when engaged in their duties 3. Celebratory gunfire which can endanger the personal safety of others The Act under which it is covered: The Official Secrets Act, 1923 The Indian Evidence Act, 1872 The Arms (Amendment) Act, 2019</td>
</tr>
<tr>
<td>How many of the above pairs are correctly matched?</td>
<td>IR</td>
</tr>
<tr>
<td>Consider the following pairs with regard to sports awards.</td>
<td>Sports (Misc)</td>
</tr>
</tbody>
</table>
For the most spectacular and outstanding performance by a sportsperson over a period of last four years
For the lifetime achievement by a sportsperson
To honour eminent coaches who have successfully trained sportsperson or teams
To recognize the contribution made by sportspersons even after their retirement

How many of the above pairs are correctly matched?
- a. Only one
- b. Only two
- c. All three
- d. All four

|-----------------|------|---|-----------------|------------------------------------------------------------------------------------------------------------------|

Consider the following statements in respect of the 44th Chess Olympiad, 2022
1. It was the first time that Chess Olympiad was held in India.
2. The official mascot was named ‘Thambi’.
3. The trophy for the winning team in the open section is the Vera Menchik Cup.
4. The trophy for the winning team in the women’s section is the Hamilton-Russell Cup.

How many of the statements given above are correct?
- a. Only one
- b. Only two
- c. All three
- d. All four

Consider the following pairs:
Area of conflict mentioned in news:
1. Donbas
2. Kachin
3. Tigray
4. Syria
5. Ethiopia
6. North Yemen

How many of the above pairs are correctly matched?
- a. Only one
- b. Only two
- c. All three
- d. None

In the recent years Chad, Guinea, Mali and Sudan caught the international attention for which one of the following reason common to all the

| IR | Easy | D | The recent spate of coups in Chad, Guinea, Mali and Sudan has sparked a flurry of media attention and concern. | https://www.thehindustan Times.com/153400/chad-guinea-mali-sudan-can-a-coup-be-a-springboard-for-democracy/ |
### Consider the following statements about G-20:

1. The G-20 group was originally established as a platform for the Finance Ministers and Central Bank Governors to discuss the international economic and financial issues.
2. Digital public infrastructure is one of India’s G-20 priorities.

<table>
<thead>
<tr>
<th>IR</th>
<th>Easy</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement 1 is correct: The G20 was founded in 1999 in response to several world economic crises. The forum initially dealt with matters related to macroeconomics. Statement 2 is correct: G20 India has put forth six agenda priorities for the G20 dialogue in 2023 which include – Green Development, Climate Finance &amp; LiFE Accelerated, Inclusive &amp; Resilient Growth Accelerating progress on</td>
<td><a href="https://government.economictimes.indiatimes.com/news/governance/life-digital-public-infrastructure-and-tech-enabled-development-prominent-among-indiag20-priorities94172207">Link</a></td>
<td><a href="https://www.iasgyan.in/ias-gazette-magazine/g-20-summit-key-takeaways">Link</a></td>
</tr>
</tbody>
</table>

### Consider the following heavy industries:
- Fertilizer plants
- Oil refineries
- Steel Plants

Green hydrogen is expected to play a significant role in decarbonizing how many of the above industries?

<table>
<thead>
<tr>
<th>Environment</th>
<th>Med.</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributing 7% of total carbon dioxide (CO2) emissions worldwide, the steel industry has an important opportunity to achieve decarbonization and reduce its footprint. One of the solutions on the table is the injection of hydrogen into blast furnaces, where steel is made, thus substituting coke oven gas for a clean fuel (green hydrogen). This technology is still being demonstrated and there are still certain limitations, such as the cooling effect of the hydrogen inside the blast furnace. Refineries are used to convert crude oil into products that are useful to people. Responsible for 4% of world CO2 emissions, this sector produces the likes of petrol, diesel, asphalt, kerosene, liquid gas, oils and other fuels. One of the main uses of green hydrogen in this sector is as a substitute for fuels and hydrogen of fossil origin in various processes currently performed in refineries and petrochemical plants. The green hydrogen can be combined with nitrogen to make green ammonia, avoiding hydrocarbons in the process. Green ammonia is used to store energy and make fertilisers. Green hydrogen could become an alternative to coal in steel mills and fossil fuels in long-haul transport like shipping and trucking.</td>
<td><a href="https://www.actsustainability.com/sustainable-development/green-hydrogen-decarbonizing/?adin=02021864894">Link</a></td>
<td><a href="https://www.iasgyan.in/blogs/green-hydrogen-an-overview">Link</a></td>
</tr>
<tr>
<td>Question</td>
<td>Category</td>
<td>Difficulty</td>
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<tr>
<td>12</td>
<td>Art Culture</td>
<td>Med. B</td>
</tr>
<tr>
<td>13</td>
<td>Art Culture</td>
<td>Easy A</td>
</tr>
<tr>
<td>14</td>
<td>Consider the following statements in respect of the National Flag of India according to the Flag Code of India, 2002: Statement-I: One of the standard sizes of the National Flag of India is 600 mm * 400 mm. Statement-II: The ratio of the length to the height (width) of the Flag shall be 3:2 Which one of the following is correct in respect of the above statements? a. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I c. Statement-I is correct but Statement-II is incorrect d. Statement-I is incorrect but Statement-II is correct</td>
<td>Art Culture</td>
</tr>
<tr>
<td>15</td>
<td>Consider the following statements in respect of the Constitution Day: Statement-I: The Constitution Day is celebrated on 26th November every year to promote constitutional values among citizens. Statement-II: On 26th November, 1949, the constituent Assembly of India set up a Drafting Committee under the Chairmanship of Dr. B. R. Ambedkar to prepare a Draft Constitution of India. Which one of the following is correct in respect of the above statements? a. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I</td>
<td>Polity</td>
</tr>
<tr>
<td></td>
<td>IR</td>
<td>Diff.</td>
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</tbody>
</table>
| 16 | Consider the following statements:  
Statement – I: Switzerland is one of the leading exporters of gold in terms of value.  
Statement – II: Switzerland has the second largest gold reserves in the world.  
Which one of the following is correct in respect of the above statements?  
a. Both statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I  
b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I  
c. Statement-I is correct but Statement-II is incorrect  
d. Statement-I is incorrect but Statement-II is correct  
Statement 1 is correct: In 2021, Switzerland exported $86.7B in Gold, making it the 1st largest exporter of Gold in the world.  
Statement 2 is incorrect: Switzerland comes at 7th position. | IR | Diff. | C   |   |
| 17 | Consider the following statements:  
Statement – I: Recently, the United States of America (USA) and the European Union (EU) have launched the Trade and technology council.  
Statement – II: The USA and the EU claim that through this they are trying to bring technological progress and physical productivity under their control.  
Which one of the following is correct in respect of the above statements?  
a. Both statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I  
b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I  
Statement 1 is correct: The EU-US Trade and Technology Council serves as a forum for the United States and European Union to coordinate approaches to key global trade, economic, and technology issues and to deepen transatlantic trade and economic relations based on these shared values. It was established during the EU-US Summit on 15 June 2021 in Brussels.  
Statement 2 is incorrect: Through the Council, the EU and the US are working together to: ensure that trade and technology serve our societies and economies, while upholding our common values strengthen our technological and industrial leadership expand bilateral trade and investment | IR | Med. | C   |   |
### Question 18

Consider the following statement:

**Statement – I:** India accounts for 3.2% of global export of goods.

**Statement – II:** Many local companies and some foreign companies operating in India have taken advantage of India’s ‘Production-linked Incentive’ scheme.

Which one of the following is correct in respect of the above statements?

<table>
<thead>
<tr>
<th>Option</th>
<th>Correct/Incorrect</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Both statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I</td>
<td></td>
<td></td>
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<tr>
<td>c. Statement-I is correct but Statement-II is incorrect.</td>
<td></td>
<td></td>
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<tr>
<td>d. Statement-I is incorrect but Statement-II is correct.</td>
<td></td>
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</table>

**Hints:**
- Statement 1 is incorrect: As per the WTO data released in 2022, India’s share in global exports for merchandise was 1.9 % and in global imports was 4.1 %. India’s share in global exports was 3.5 % and imports was 3.2 %.
- Statement 2 is correct: Leading international companies are expanding production at their newly setup units in India after the government launched attractive initiatives such as PLI.

### Question 19

Consider the following statements:

1. The ‘Stability and Growth Pact’ of the European Union is a treaty that
   a. Limits the levels of budgetary deficit of the countries of the European Union.
   b. Makes the countries of the European Union to share their infrastructure facilities.
   c. Enables the countries of the European Union to share their technologies.

How many of the above statements are correct?

<table>
<thead>
<tr>
<th>Option</th>
<th>Correct/Incorrect</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Only one</td>
<td></td>
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<td>b. Only two</td>
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<td>c. All three</td>
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<td>d. None</td>
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</table>

**Hints:**
- The Stability and Growth Pact (SGP) is a set of rules designed to ensure that countries in the European Union pursue sound public finances and coordinate their financial policies.

### Question 20

Consider the following statements:

1. Recently, all the countries of the United Nations have adopted the first-ever

How many of the above statements are correct?

<table>
<thead>
<tr>
<th>Option</th>
<th>Correct/Incorrect</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Only one</td>
<td></td>
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<tr>
<td>b. Only two</td>
<td></td>
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<tr>
<td>c. All three</td>
<td></td>
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<tr>
<td>d. None</td>
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</table>

**Hints:**
- The Global Compact for Safe, Orderly and Regular Migration (GCM) is an intergovernmentally negotiated agreement, prepared under the
compact for international migration, the ‘Global Compact for Safe, Orderly and Regular Migration (GCM)’.  
2. The objective and commitments stated in the GCM are binding on the UN member countries.  
3. The GCM addresses internal migration or internally displaced people also in its objectives and commitments.

How many of the above statements are correct? 
- Only one  
- Only two  
- All three  
- None

21. Consider the following statements with reference to India:  
1. According to the ‘Micro, Small and Medium Enterprises Development (MSMED) Act, 2006’, the ‘medium enterprises’ are those with investments in plant and machinery between Rs. 15 crore and Rs. 25 crore.  
2. All bank loans to the Micro, Small and Medium Enterprises qualify under the priority sector.

Which of the statements given above is/are correct?  
- 1 only  
- 2 only  
- Both 1 and 2  
- Neither 1 nor 2

<table>
<thead>
<tr>
<th>Economy</th>
<th>Diff. B</th>
<th></th>
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</thead>
</table>
| Statement 1 is incorrect: The classification of Micro, Small and Med. Enterprises is defined under the MSMED Act 2006 amendment dated 01/06/2020. The Micro, Small and Med. Enterprises is based on the Investment in Plant, Machinery or Equipment values (excluding land and building) and Annual Turnover.  
Micro Enterprise: Where the investment in Plant and Machinery or Equipment does not exceed one crore rupees and turnover does not exceed five crore rupees.  
Small Enterprise: Where the investment in Plant and Machinery or Equipment does not exceed ten crore rupees and turnover does not exceed fifty crore rupees.  
Med. Enterprises: Where the investment in Plant and Machinery or Equipment does not exceed fifty crore rupees and turnover does not exceed two hundred and fifty crore rupees.  
Statement 2 is correct: As per the RBI, Priority sector advances ‘constitute lending to those sectors of the economy which may not get timely and adequate credit in the absence of this special dispensation.’  
Priority sector comprises agriculture, micro and small enterprises, education, housing, export credit and advances to weaker sections. Domestic

https://wbmsme.gov.in/what_msme  
https://economictimes.indiatimes.com/definition/priority-sector-advances
commercial banks and foreign banks with a network of 20 and more branches are required to lend 40% of their total disbursal to the priority sector.

Also, foreign banks with less than 20 branches are required to lend 32% of their total disbursal to the priority sector.

<table>
<thead>
<tr>
<th>Question</th>
<th>Economy</th>
<th>Difficulty</th>
<th>Choice</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 With reference to Central Bank digital currencies, consider the following statements: 1. It is possible to make payments in a digital currency without using US dollar or SWIFT system. 2. A digital currency can be distributed with a condition programmed into it such as a time-frame for spending it. With of the statements given above is/are correct?</td>
<td>Economy</td>
<td>Medium</td>
<td>C</td>
<td>Statement 1 is correct: Alternatives to SWIFT and the U.S. dollar are coming from two directions: cryptocurrencies and central bank digital currencies. Cryptocurrencies (or “crypto”) are a form of payment that can circulate without the need for a central monetary authority such as a government or bank and are created using distributed ledger technologies and cryptographic techniques that enable people to buy, sell or trade them securely in a decentralized way. These decentralized networks are controlled by no one and enable privacy from government intrusion or intervention. Statement 2 is correct: Currently, access to digital central bank money is limited to central bank operating hours, traditionally less than 24 hours a day and usually five days a week. CBDCs could be available 24 hours a day and seven days a week or only during certain specified times (such as the operating hours of large value payment systems). CBDC could be available permanently or for a limited duration (e.g., it could be created, issued and redeemed on an intraday basis).</td>
</tr>
<tr>
<td>23 In the context of finance, the term ‘beta’ refers to a. the process of simultaneous buying and selling of an asset from different platforms b. an investment strategy of a portfolio manager to balance risk versus reward c. a type of systemic risk that arises where perfect hedging is not possible d. a numeric value that measures the fluctuations of a stock</td>
<td>Economy</td>
<td>Easy</td>
<td>D</td>
<td>Beta is a numeric value that measures the fluctuations of a stock to changes in the overall stock market. Beta measures the responsiveness of a stock’s price to changes in the overall stock market. On comparison of the benchmark index for e.g., NSE Nifty to a particular stock returns, a pattern develops that shows the stock's openness to the market risk. This helps the investor to decide whether he wants to go for the</td>
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</table>
to changes in the overall stock market.

riskier stock that is highly correlated with the market (beta above 1), or with a less volatile one (beta below 1).

For example, if a stock's beta value is 1.3, it means, theoretically this stock is 30% more volatile than the market. Beta calculation is done by regression analysis which shows security’s response with that of the market.

By multiplying the beta value of a stock with the expected movement of an index, the expected change in the value of the stock can be determined. For example, if beta is 1.3 and the market is expected to move up by 10%, then the stock should move up by 13% (1.3 x 10).

Beta is the key factor used in the Capital Asset Price Model (CAPM) which is a model that measures the return of a stock. The volatility of the stock and systematic risk can be judged by calculating beta. A positive beta value indicates that stocks generally move in the same direction with that of the market and the vice versa.

24 Consider the following statements:
1. The Self-Help Group (SHG) programme was originally initiated by the State Bank of India by providing microcredit to the financially deprived.
2. In an SHG, all members of a group take responsibility for a loan that an individual member takes.
3. The Regional Rural Banks and Scheduled Commercial Banks support SHGs.

How many of the above statements are correct:
- a. Only one
- b. Only two
- c. All three
- d. None

Economy Med. B

Option 1 is incorrect: In India, banks are the predominant agency for delivery of micro-credit. In 1970, Ila Ben Bhat, founder member of ‘SEWA’ (Self Employed Women’s Association) in Ahmadabad, had developed a concept of ‘women and micro-finance’. The Annapurna Mahila Mandal in Maharashtra and ‘Working Women’s Forum’ in Tamilnadu and many National Bank for Agriculture and Rural Development (NABARD)-sponsored groups have followed the path laid down by ‘SEWA’. ‘SEWA’ is a trade union of poor, self-employed women workers. Since 1987 ‘Mysore Resettlement and Development Agency’ (MYRADA) has promoted Credit Management Groups (CMGs). CMGs are similar to self-help groups. The basic features of this concept promoted by MYRADA are: 1] Affinity, 2] Voluntarism, 3]
Homogeneity and 4) Membership should be limited to 15-20 persons. Aim of the CMG is to bestow social empowerment to women. In 1991-92 NABARD started promoting self-help groups on a large scale. And it was the real take-off point for the ‘SHG movement’. In 1993, the Reserve Bank of India also allowed SHGs to open saving accounts in banks. Facility of availing bank services was a major boost to the movement.

Option 2 is correct: Self Help Groups (SHGs) are small groups of poor people. The members of an SHG face similar problems. They help each other, to solve their problems. SHGs promote small savings among their members. The savings are kept with the bank. This is the common fund in the name of the SHG. The SHG gives small loans to its members from its common fund.

Option 3 is correct: The Indian micro finance sector has seen tremendous growth in the last few years. GOI has taken initiatives to widen the reach of RRBs all over India, especially in rural areas where commercial banks and other financial institution are beyond the reach of rural poor. Micro financing is one of the distinctive functional areas of RRBs.

The two important models of microfinance involving credit linkages with banks in India are

SHG - Bank Linkage Model: This model involves the SHGs financed directly by the banks viz., CBs (Public Sector and Private Sector), RRBs and Cooperative Banks.

MFI - Bank Linkage Model: This model covers financing of Micro Finance Institutions (MFIs) by banking agencies for on-lending to SHGs and other small borrowers.

Consider the following statements:

Statement I: India’s public sector health care system largely focuses on Social Justice

Statement II: India’s health care system is to improve health status through concerted policy

Option 1 is correct: The primary objective of India’s health care system is to improve health status through concerted policy.

Link: https://main.mohfw.gov.in/sites/default/files/9147562941489753121.pdf

Link:
curative care with limited preventive, promotive and rehabilitative care. Statement-II: Under India’s decentralized approach to health care delivery, the States are primarily responsible for organizing health services.

Which one of the following is correct in respect of the above statements?

a. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
c. Statement-I is correct but Statement-II is incorrect

d. Statement-I is incorrect but Statement-II is correct

Consider the following statements:
Statement-I: According to the United Nations’ World Water Development Report, 2022, India extracts more than a quarter of the world’s groundwater withdrawal each year. Statement-II: India needs to extract more than a quarter of the world’s groundwater withdrawal each year to satisfy the drinking water and sanitation needs of almost 18% of world’s population living within its territory.

Which one of the following is correct in respect of the above statements?

a. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
c. Statement-I is correct but Statement-II is incorrect
d. Statement-I is incorrect but Statement-II is correct
b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
c. Statement-I is correct but Statement-II is incorrect
d. Statement-I is incorrect but Statement-II is correct

necessary to meet the demands of its people. However, Statement-II is not the correct explanation for Statement-I. While it is true that India needs to extract a significant amount of groundwater to fulfill the water requirements of its population, it does not directly explain why India extracts more than a quarter of the world's groundwater withdrawal. The high groundwater extraction in India is influenced by various factors, including population density, agricultural practices, industrial demands, and water management policies. Therefore, the correct answer is (b) Both Statement-I and Statement-II are correct, but Statement-II is not the correct explanation for Statement-I.

27 Consider the following statements:
1. According to the Constitution of India, the Central Government has a duty to protect States from internal disturbances.
2. The Constitution of India exempts the States from providing legal counsel to a person being held for preventive detention.
3. According to the Prevention of Terrorism Act, 2002, confession of the accused before the police cannot be used as evidence.

How many of the above statements are correct?
a. Only one
b. Only two
c. All three
d. None

Statement 1 is correct. According to the Constitution of India, the Central Government has the responsibility to protect States from internal disturbances. This is outlined in Article 355 of the Constitution, which states that it shall be the duty of the Union to protect every State against external aggression and internal disturbances.

Statement 2 is incorrect. The Constitution of India does not specifically exempt the States from providing legal counsel to a person being held for preventive detention. The right to legal counsel is a fundamental right guaranteed under Article 22 of the Constitution, which applies to all persons, including those subjected to preventive detention.

Statement 3 is incorrect. The Prevention of Terrorism Act, 2002, has been repealed and is no longer in force. It was replaced by the Unlawful Activities (Prevention) Act, 1967. The admissibility of confessions made to the police as evidence is determined by the provisions of the Indian Evidence Act, 1872, and other relevant laws, not specifically by the Prevention of Terrorism.
28 Which one of the following countries has been suffering from decades of civil strife and food shortages and was in news in the recent past for its very severe famine? 

a. Angola  
b. Costa Rica  
c. Ecuador  
d. Somalia

Act. Therefore, only Statement 1 is correct.

Somalia has been suffering from decades of civil strife and food shortages and has been in the news in the recent past for its severe famine. Somalia, located in the Horn of Africa, has experienced ongoing civil conflicts, political instability, and humanitarian crises for several decades. These challenges have resulted in widespread displacement, food insecurity, and economic instability in the country. Somalia has faced recurrent droughts and inadequate infrastructure for agriculture, leading to food shortages and famines. The combination of conflict, insecurity, and natural disasters has exacerbated the humanitarian situation in the country, with millions of people in need of assistance.


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29 Consider the following statements: 
1. In India, the Biodiversity Management Committees are key to the realization of the objectives of the Nagoya Protocol. 
2. The Biodiversity Management Committees have important functions in determining access and benefit sharing, including the power to levy collection fees on the access of biological resources within its jurisdiction. 

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

Environmen Med. C Both of the statements given above are correct. 

Statement 1: In India, the Biodiversity Management Committees (BMCs) are indeed key to the realization of the objectives of the Nagoya Protocol. The Nagoya Protocol is an international agreement under the United Nations Convention on Biological Diversity (CBD) that aims to ensure the fair and equitable sharing of benefits arising from the utilization of genetic resources. The BMCs play a crucial role in implementing the provisions of the Nagoya Protocol at the local level in India. 

Statement 2: The Biodiversity Management Committees in India do have important functions in determining access and benefit sharing (ABS) of biological resources. They are empowered to grant permissions for accessing biological resources and associated traditional knowledge, and also to monitor and regulate such access. They have the authority to levy collection fees on the access of biological resources within their jurisdiction, which helps in generating revenue for biodiversity conservation and benefit-

https://www.cbd.int/abs
30. Consider the following statements in respect of election to the President of India:
1. The members nominated to either House of the Parliament or the Legislative Assemblies of States are also eligible to be included in the Electoral College.
2. Higher the number of elective Assembly seats, higher is the value of vote of each MLA of that State.
3. The value of vote of each MLA of Puducherry is higher than that of Arunachal Pradesh because the ratio of total population to total number of elective seats in Puducherry is greater as compared to Arunachal Pradesh.

How many of the above statements are correct?
(a) Only one
(b) Only two
(c) Only three
(d) All four

31. Consider the following countries:
1. Bulgaria
2. Czech Republic
3. Hungary
4. Latvia
5. Lithuania
6. Romania

How many of the above-mentioned countries share a land border the Ukraine?
(a) Only two
(b) Only three
(c) Only four
(d) Only five

32. With reference to the Earth’s atmosphere, which one of the following statements is correct?
(a) Infrared waves are largely absorbed by water vapor which is concentrated in the stratosphere.
(b) Carbon dioxide is a major contributor to the greenhouse effect.
(c) The correct statement is (c) Infrared waves are largely absorbed by water vapor that is concentrated in the troposphere.
(d) None of these

DIFF. 30   A

DIFF. 31   A

DIFF. 32   A
| is correct? | 33 Consider the following statements: Statements-I: The soil in tropical rain forests is rich in nutrients. Statements-II: The high temperature and moisture of tropical rain forests cause dead organic matter in the soil to decompose quickly. Which one of the following is correct in respect of the above statements? a. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I | Geograph y | Easy | D | Statement 1 is incorrect Statement 2 is correct: The high levels of precipitation and year-round warmth in tropical rainforest regions contribute to the breakdown of organic matter and the rapid recycling of nutrients within the ecosystem. This process, known as nutrient cycling, leads to the accumulation of nutrients in the soil. Tropical rainforest soils are often classified as “oxisols” or “ultisols.” Oxisols are typically found in older rainforest regions and are characterized by their highly weathered nature. Despite being highly weathered, oxisols can still contain substantial amounts of... | https://www.conserve-energy-future.com/tropical-rainforest-biome.php |
34 Consider the following statements:

Statements-I: The temperature contrast between continents and oceans is generally greater during summer than in winter.

Statements-II: The specific heat of water is more than that of land surface.

Which one of the following is correct in respect of the above statements?

a. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
c. Statement-I is correct but Statement-II is incorrect
d. Statement-I is incorrect but Statement-II is correct

35 Consider the following statements:

1. In a seismograph, P waves are recorded earlier than S waves.
2. In P waves, the individual particles vibrate to and fro in the direction of wave propagation whereas the individual particles vibrate back and forth perpendicular to the direction of wave propagation.

Statement 1 is correct: P waves are generally recorded earlier than S waves. P waves, also known as primary waves or compressional waves, are the first waves to arrive at a seismograph station after an earthquake occurs. These waves are longitudinal waves, meaning the particles of the substance move in the direction of wave propagation. S waves are secondary waves, also known as shear waves, and they move at a slower speed than P waves. S waves cause the ground to move back and forth perpendicular to the direction of wave propagation.
In S waves, the particles vibrate up and down at right angles to the direction of wave propagation. 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

Waves are characterized by their ability to travel through solids, liquids, and gases. S waves travel slower and arrive at the seismograph station after the P waves. Unlike P waves, S waves can only travel through solids and are responsible for the side-to-side shaking motion during an earthquake.

Statement 2 is correct: In P waves (primary waves or compressional waves), the individual particles vibrate back and forth in the same direction as the wave propagation. This means that as the P wave moves through a Med., such as the Earth’s crust during an earthquake, the particles within the Med. oscillate parallel to the direction of the wave. In S waves (secondary waves or shear waves), the particles vibrate in a perpendicular direction to the direction of wave propagation. Unlike P waves, which cause particles to compress and expand parallel to the wave’s direction, S waves cause particles to move in a perpendicular direction. This motion is commonly described as an up-and-down or side-to-side motion, where the particles oscillate at right angles to the direction of wave propagation.

With reference to coal-based thermal power plants in India, consider the following statements:
1. None of them uses seawater.
2. None of them is set up in water-stressed district.
3. None of them is privately owned.

How many of the above statements are correct?

a. Only one  
b. Only two  
c. All three  
d. None

Statement 3: None of the coal-based thermal power plants in India is privately owned. In India, coal-based thermal power plants are predominantly owned and operated by the government or government-controlled entities. Private ownership of coal-based thermal power plants is limited. Therefore, the correct answer is (C) All three are correct.

“Wolbachia method” is sometimes talked about with reference to which one of the following?

a. Controlling the viral diseases spread by mosquitoes  
b. Converting crop residues into packing material  
c. Producing biodegradable

Wolbachia are extremely common bacteria that occur naturally in 50 per cent of insect species, including some mosquitoes, fruit flies, moths, dragonflies and butterflies.

The World Mosquito Program’s innovative Wolbachia method is helping communities around the world prevent dengue fever.

plastics
d. Producing biochar from thermo-chemical conversion of biomass

the spread of mosquito-borne disease. It works everywhere that Aedes aegypti is found, it complements other techniques and has proven potential for long-term success.

| 38 | Consider the following activities:
|   | 1. Spreading finely ground basalt rock on farmlands extensively
|   | 2. Increasing the alkalinity of oceans by adding lime
|   | 3. Capturing carbon dioxide released by various industries and pumping it into abandoned subterranean mines in the form of carbonated waters
|   | How many of the above activities are often considered and discussed for carbon capture and sequestration?
|   | a. Only one
|   | b. Only two
|   | c. All three
|   | d. None
| Environment | Diff. | C | CCUS refers to a suite of technologies that enable the mitigation of carbon dioxide (CO2) emissions from large point sources such as power plants, refineries and other industrial facilities, or the removal of existing CO2 from the atmosphere.
|   | CCUS can play a strategic role in global decarbonisation efforts in a number of ways. These include: (i) reducing emissions in 'hard-to-abate' industries (those that are particularly Diff. to decarbonise); (ii) producing low-carbon electricity and hydrogen, which can be used to decarbonise various activities; and (iii) removing existing CO2 from the atmosphere.

| 39 | ‘Aerial metagenomics’ best refers to which one of the following situations?
|   | a. Collecting DNA samples from air in a habitat at one go
|   | b. Understanding the genetic makeup of avian species of a habitat
|   | c. Using air-borne devices to collect blood samples from moving animals
|   | d. Sending drones to inaccessible areas to collect plant and animal samples from land surfaces and water bodies
| ST | Med. | A | Genome-centric metagenomics is a field occupied with the retrieval of genomes from samples containing a mixture of microbes, such as soil, wastewater, or the gastrointestinal system. Typically, the overall aim is to study the structure and function of the microbes, often in the dynamic context of their natural environments or by their association with a host (microbiomics).
|   | Microsatellites are distributed nonrandomly in the genomic region, most probably due to their effect on cell cycle, DNA replication, chromatin organization, recombination, and gene activity, etc. (Li et al., 2002). Microsatellites are present in both prokaryotes and eukaryotes, but infrequent in Human Immunodeficiency Virus Type 1 (HIV-1). Thus A seems to be correct
|   | Metagenomics | From sample-to-answer | DNASense

| 40 | ‘Microsatellite DNA’ is used in the case of which one of the following?
|   | a. Studying the evolutionary relationships among various species of fauna
|   | b. Stimulating ‘stem cells’ to transform into diverse functional tissues
|   | c. Promoting clonal propagation of horticultural plants
|   | d. Assessing the efficacy of drugs by conducting series of drug trials in a population
| ST | Med. | A | Microsatellites are distributed nonrandomly in the genomic region, most probably due to their effect on cell cycle, DNA replication, chromatin organization, recombination, and gene activity, etc. (Li et al., 2002). Microsatellites are present in both prokaryotes and eukaryotes, but infrequent in Human Immunodeficiency Virus Type 1 (HIV-1). Thus A seems to be correct
|   | Microsatellite DNA - an overview | ScienceDirect Topics
### 41

Consider the following statements in relation to Janani Suraksha Yojana:

1. It is a safe motherhood intervention of the State Health Departments.
2. Its objective is to reduce maternal and neonatal mortality among poor pregnant women.
3. It aims to promote institutional delivery among poor pregnant women.
4. Its objective includes providing public health facilities to sick infants up to one year of age.

How many of the statements given above are correct?

a. Only one  
b. Only two  
c. All three  
d. None

**CA-Schemes**

<table>
<thead>
<tr>
<th>Diff.</th>
<th>B</th>
<th>Explanation:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Statement 1 is incorrect: Janani Suraksha Yojana (JSY) is a safe motherhood intervention under the National Health Mission (NHM). Statements 2 and 3 are correct: It was launched with the objective of reducing maternal and neonatal mortality, it promotes institutional delivery among pregnant women especially those with weak socio-economic status i.e. women from Scheduled Castes, Scheduled Tribes and BPL households. Statement 4 is incorrect: Janani Shishu Suraksha Karyakram (not the Janani Suraksha Yojana) was launched to eliminate out-of-pocket expenses for institutional delivery of pregnant women and treatment of sick infants (up to one year of age) accessing public health institutions for treatment.</td>
</tr>
</tbody>
</table>


### 42

Consider the following statements in the context of intervention being undertaken under Anaemia Mukt Bharat Strategy:

1. It provides prophylactic calcium supplementation for pre-school children, adolescents and pregnant women.
2. It runs a campaign for delayed cord clamping at the time of child birth.
3. It provides for periodic deworming to children and adolescents.
4. It addresses non-nutritional causes of anaemia in endemic pockets with special focus on malaria, hemoglobinopathies and fluorosis.

How many of the statements given above are correct?

a. Only one  
b. Only two  
c. All three  
d. None

**CA-Schemes**

<table>
<thead>
<tr>
<th>Diff.</th>
<th>C</th>
<th>Explanation:</th>
</tr>
</thead>
</table>
|       |    | In 2018, the Government of India launched the Anaemia Mukt Bharat (AMB) strategy with the target to reduce anaemia in vulnerable age groups such as women, children and adolescents. Under the AMB strategy, the interventions for tackling the problem of anaemia in all the States and UTs include:

1. Prophylactic Iron and Folic Acid Supplementation in all target age groups.  
   (Statement 1 is incorrect)
2. Intensified year-round Behaviour Change Communication (BCC) Campaign for:
   a. improving compliance to Iron Folic Acid supplementation and deworming.  
   (Statement 3 is correct)
   b. enhancing appropriate infant and young child feeding practices.  
   c. encouraging an increase in intake of iron-rich food through diet diversity/quantity/frequency and/or fortified foods with a focus on harnessing locally available resources.  
   d. ensuring delayed cord clamping after delivery (by 3 minutes) in health facilities.  
   (Statement 2 is correct)
3. Testing and treatment |

of anaemia, using digital methods and point-of-care treatment, with a special focus on pregnant women and school-going adolescents.

4. Addressing non-nutritional causes of anaemia in endemic pockets with a special focus on malaria, hemoglobinopathies and fluorosis. (Statement 4 is correct)

5. Management of severe anaemia in pregnant women undertaken by the administration of IV Iron Sucrose/Blood transfusion.

6. Field-level awareness by ASHAs through community mobilization activities and IEC and BCC activities.

Consider the following statements:
1. Carbon fibres are used in the manufacture of components used in automobiles and aircrafts.
2. Carbon fibres once used cannot be recycled.

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

**Explanation:**

**Statement 1 is correct:**
Carbon fibre is a material that is made up of long, thin strands of carbon that are bonded together. It is very strong and lightweight, making it ideal for use in a variety of applications, including aircraft manufacturing.

- **Aircraft manufacturing:** Carbon fibre is used in a variety of aircraft components, including wings, fuselages, and engine cowlings. It can help to reduce the weight of the aircraft, which can lead to improved fuel efficiency and performance.

- **Automotive manufacturing:** Carbon fibre is used in a variety of automotive components, including body panels, wheels, and brakes. It can help to reduce the weight of the vehicle, which can lead to improved fuel efficiency and performance.

**Statement 2 is incorrect:**
The carbon fibre is environmentally friendly and exhibits a longer life cycle. However, carbon fibre consumes almost 14 times more energy in its creation compared with steel. This significant energy intensiveness has led to huge emissions of greenhouse gases. Therefore, the recycling process could be one of the best ways to reduce this environmental impact while meeting global demand for this material in industrial applications.
Currently, carbon fibre waste or other fibre composites can be recycled using four types of technologies. There are two main types of carbon fibre waste. The first type of waste is virgin carbon fibre offcuts of the product generated from dry fibre and the non-used expired material, which are also called scrap. The second type of waste is the reclamation of fibres from carbon fibre-reinforced composites (CFRC).

Consider the following action:
1. Detection of car crash/collision which results in the deployment of airbags almost instantaneously.
2. Detection of accidental free fall of a laptop towards the ground which results in the immediate turning off the hard drive.
3. Detection of the tilt of the smart-phone which results in the rotation of display between portrait and landscape mode.

In how many of the above actions is the function of accelerometer required?
- Only one
- Only two
- All three
- None

Explanation:
An accelerometer can be defined as a device that is used to measure acceleration forces, the forces which are defined by this can be static, like the continuous force of gravity or light we have seen in the case of mobile phones and it can also be said in the case of dynamics to sense movement or vibrations.

Statement 1 is correct: Accelerometers can be used to measure vehicle acceleration.
Accelerometers can be used to measure vibration on cars, machines, buildings, process control systems and safety installations. They can also be used to measure seismic activity, inclination, machine vibration, dynamic distance and speed with or without the influence of gravity. Applications for accelerometers that measure gravity, wherein an accelerometer is specifically configured for use in gravimetry, are called gravimeters.

Statements 2 and 3 are correct: An accelerometer is used for safety purposes in laptops for the hard discs. Because of accelerometer sensors, we have landscape and portrait modes on our phones. Mobile phones keep changing the screen mode to landscape or portrait mode due to accelerometer applications.

Which reference to the role of biofilter in Recirculating Aquaculture System, consider the following statement
1. Biofilters provide

Explanation:
Statement 1 is correct: Biofilters are devices that use microorganisms attached to a solid material (called a carrier).
## waste treatment by removing uneaten fish feed.
2. Biofilters convert ammonia present in fish waste in nitrate.
3. Biofilters increase phosphorus as nutrient for fish in water.

How many of the statements given above are correct?

a. Only one  
b. Only two  
c. All three  
d. None

## 2. Biofilters convert ammonia present in fish waste in nitrate.
3. Biofilters increase phosphorus as nutrient for fish in water.

How many of the statements given above are correct?

a. Only one  
b. Only two  
c. All three  
d. None

### Statement 2 is correct:
The use of biofilters is common in closed aquaculture systems, such as recirculating aquaculture systems (RAS). Many designs are used, with different benefits and drawbacks, however, the function is the same: reducing water exchanges by converting ammonia to nitrate. Ammonia originates from the brachial excretion from the gills of aquatic animals and from the decomposition of organic matter. As ammonia-N is highly toxic, this is converted to a less toxic form of nitrite and then to an even less toxic form of nitrate. This "nitrification" process requires oxygen (aerobic conditions), without which the biofilter can crash.

### Statement 3 is incorrect:
Biofilters are devices that use biological processes to remove contaminants from water. One of the benefits of biofilters is that they do not increase the level of phosphorus, a nutrient that can stimulate the growth of algae and other aquatic plants. On the contrary, biofilters can reduce the amount of phosphorus in water by facilitating its uptake by microorganisms or its precipitation as insoluble compounds. This way, biofilters can help prevent eutrophication, a condition that degrades water quality and threatens aquatic life.

### Consider the following pairs:

<table>
<thead>
<tr>
<th>Object in space</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cepheids</td>
<td>Stars which brighten and dim periodically. Variable stars are essentially stars that experience fluctuations in their brightness. The Cepheid star's period (how often it pulsates) is directly related to its luminosity or brightness. They are used as cosmic yardsticks out to distances of a few tens of light-years.</td>
</tr>
<tr>
<td>Nebulae</td>
<td>Giant clouds of dust and gas in space.</td>
</tr>
<tr>
<td>Pulsars</td>
<td>Neutron stars that, are formed when massive stars run out of fuel and collapse.</td>
</tr>
</tbody>
</table>

How many of the objects in space are correct?

a. All three  
b. None  
c. Only one  
d. Only two

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**S&T**

<table>
<thead>
<tr>
<th>46</th>
<th>Consider the following pairs:</th>
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<tbody>
<tr>
<td></td>
<td><strong>Object in space</strong></td>
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<tr>
<td></td>
<td><strong>Description</strong></td>
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<tr>
<td>1.</td>
<td>Cepheids</td>
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<td>2.</td>
<td>Nebulae</td>
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<tr>
<td>3.</td>
<td>Pulsars</td>
</tr>
</tbody>
</table>

How many of the objects in space are correct?

a. All three  
b. None  
c. Only one  
d. Only two

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**Diff.**

|  
|  
|  

**D**

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|  
|  

**Explanation:**

**Pair 1 is incorrect:**
Cepheid star is a type of variable star which brighten and dims periodically. Variable stars are essentially stars that experience fluctuations in their brightness. The Cepheid star's period (how often it pulsates) is directly related to its luminosity or brightness. They are used as cosmic yardsticks out to distances of a few tens of light-years. **

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https://en.wikipedia.org/wiki/Cepheid_variable  
https://en.m.wikipedia.org/wiki/Nebula  
https://en.wikipedia.org/wiki/Pulsar  
https://www.iasgyan.in/blogs/black-hole
<table>
<thead>
<tr>
<th>47</th>
<th>Which one of the following countries has its own Satellite Navigation System?</th>
</tr>
</thead>
</table>
|    | a. Australia  
|    | b. Canada  
|    | c. Israel  
|    | d. Japan  |
|    | S&T Easy D Explanation  
|    | Option D is correct: A satellite navigation or satnav system is a system that uses satellites to provide autonomous geopositioning. A satellite navigation system with global coverage is termed a global navigation satellite system (GNSS). As of 2023, four global systems are operational: the United States Global Positioning System (GPS), Russia’s Global Navigation Satellite System (GLONASS), China’s BeiDou Navigation Satellite System, and the European Union’s Galileo. Regional navigation satellite systems in use are Japan’s Quasi-Zenith Satellite System (QZSS), a GPS satellite-based augmentation system to enhance the accuracy of GPS, with satellite navigation independent of GPS scheduled for 2023, and the Indian Regional Navigation Satellite System (IRNSS) or NavIC, which is planned to be expanded to a global version in the long term. |


| 48 | Consider the following statements:  
|    | 1. Ballistic missiles are jet-propelled at subsonic speeds throughout their flights, while cruise missiles are rocket-powered only in the initial phase of flight.  
|    | 2. Agni-V is a medium-range supersonic cruise |
|    | S&T Med. D Explanation  
|    | Statement 1 is incorrect: Cruise missiles and ballistic missiles are two types of long-range guided missiles. Cruise missiles are powered by air-breathing engines and fly at low altitudes in a straight line. Ballistic missiles are propelled by rockets and follow an |

https://science.howstuffworks.com/difference-ballistic-cruise-missile.htm  
https://www.iasgyan.in/daily-current-affairs/agni-5-missile
A green hydrogen is a form of hydrogen that is produced by using renewable energy sources, such as solar or wind, to power the

https://auto.economictimes.indiatimes.com/blog/managing-hydrogen-transportation-storage-dispensation/98381539

https://www.iasgyan.in/daily-affairs/green-hydrogen
with natural gas and used as fuel for heat or power generation. 3. It can be used in the hydrogen fuel cell to run vehicles.

How many of the above statements are correct?

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<tbody>
<tr>
<td>a. Only one</td>
<td>b. Only two</td>
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<tr>
<td>c. All three</td>
<td>d. None</td>
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<tbody>
<tr>
<td>electrolysis of water. This process splits water molecules into hydrogen and oxygen and emits no greenhouse gases. Green hydrogen has many potential applications in various sectors that are Diff. to decarbonize with electricity alone.</td>
<td></td>
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<tr>
<td>Statement 1 is correct: It can be used directly as a fuel for internal combustion engines, such as cars or trucks, that are modified to run on hydrogen. However, this is less efficient than using hydrogen in fuel cells, which convert hydrogen and oxygen into electricity and water.</td>
<td></td>
</tr>
<tr>
<td>Statement 2 is correct: It can be blended with natural gas and used as fuel for heat or power generation, either in existing gas pipelines or in dedicated hydrogen networks. This can reduce the carbon intensity of natural gas, but it also poses some technical challenges, such as ensuring the safety and compatibility of the gas mixtures.</td>
<td></td>
</tr>
<tr>
<td>Statement 3 is correct: It can be used in the hydrogen fuel cell to run vehicles, such as buses or trains, that are designed to operate on hydrogen. This is a more efficient and cleaner way of using hydrogen for transportation, as it only produces water as a by-product.</td>
<td></td>
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</table>

51 In which one of the following regions was Dhanyakataka, which flourished as a prominent Buddhist centre under the Mahasanghikas, located?

<table>
<thead>
<tr>
<th></th>
<th>Art Culture</th>
<th>Diff.</th>
<th>A</th>
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<tbody>
<tr>
<td>a. Andhra</td>
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<tr>
<td>b. Gandhara</td>
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<td></td>
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<tr>
<td>c. Kalinga</td>
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<td></td>
<td></td>
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<tr>
<td>d. Magadha</td>
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</table>

**Explanation:**

**Option A is correct:** Dharanikota, also known as Dhanyakatakam, is a village in Andhra Pradesh that has a rich history and culture. It was the capital of the Satavahana dynasty, which ruled over the Deccan region from the 1st to the 3rd centuries CE. It was also a major centre of Buddhism, as it is home to the famous Amaravati stupa, one of the largest and most decorated Buddhist monuments in India. The stupa was visited by the Chinese pilgrim Xuanzang in the 7th century CE, who praised its beauty and splendour. Archaeological excavations at [https://en.wikipedia.org/wiki/Dharanikota](https://en.wikipedia.org/wiki/Dharanikota)
Dharanikota have revealed many artefacts and structures that testify to its glorious past, such as coins, seals, pottery, sculptures, viharas and a brick wharf.

| 52 | With reference to ancient India, consider the following statements: 1. The concept of Stupa is Buddhist in origin. 2. Stupa was generally a repository of relics. 3. Stupa was a votive and commemorative structure in Buddhist tradition. How many of the statements given above are correct? Only one Only two All three None Correct Option: (b) | Art Culture Med. | B | Explanation:  
**Statement 1 is incorrect:** The origin of the stupa is pre-Buddhism. Stupas are mound-like structures that contain relics of holy or saintly persons. They were initially used as tombs for śramaṇas, ascetics who practised meditation and renunciation. Later, they became shrines for the Buddha and his associates, as well as places of worship and meditation for Buddhists.  
**Statement 2 is correct:** A stupa is a type of Buddhist monument that originated in ancient India and spread to other parts of Asia. The main purpose of a stupa was to serve as a repository of relics, such as the bodily remains or personal objects of the Buddha or his disciples. By venerating these relics, the devotees hoped to gain merit and spiritual benefits.  
**Statement 3 is correct:** A stupa is a type of monument that originated in ancient India and spread to other parts of Asia as part of the Buddhist tradition. It is usually a dome-shaped structure that contains relics of the Buddha or other revered figures and serves as a place of worship and meditation. Stupas are often built to commemorate significant events or teachings in the history of Buddhism, such as the enlightenment, death, or birth of the Buddha. | https://en.wikipedia.org/wiki/Stupa | https://www.iasgyan.in/daily-current-affairs/votive-stupa |

| 53 | With reference to ancient South India, Korkai, Poompuhar and Muchiri were well known as  
- a. capital cities  
- b. ports  
- c. centres of iron-and-steel making  
- d. Shrines of Jain Tirthankaras | Ancient History Easy | B | Explanation:  
**Option B is correct:** With reference to ancient South India, Korkai, Poompuhar and Muchiri were well-known as important ports and trade centres. These cities were located along the coast of Tamil Nadu and Kerala and had connections with various regions of Asia and Africa. They were also the sites of cultural and religious exchange, as evidenced by the presence of temples. | https://www.thehindu.com/society/history-and-culture/the-ancient-ports-of-india/article18198307.ece |
<table>
<thead>
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<th>Question</th>
<th>Answer</th>
<th>Explanation</th>
<th>Reference</th>
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<tr>
<td>54 Which one of the following explains the practice of &quot;Vattakirutal&quot; as mentioned in Sangam poems?</td>
<td>Option D is correct: Vattakiruttal also Vadamkuruthal and Vadakirutthal, was a Tamil ritual of fasting till death. It was especially widespread during the Sangam age, a period of ancient Tamil history that spanned from the 3rd century BCE to the 3rd century CE. The Tamil kings, in order to save their honour and prestige, were prepared to meet their death facing north and never would they turn their back in battle. It was a Tamil marital vow. This was either done alone or as a group with the supporters of the captured king. Vattakiruttal was considered a noble and heroic way of ending one's life, as it demonstrated loyalty, courage and dignity. It was also a way of avoiding humiliation and torture at the hands of the enemy.</td>
<td>Option D is correct: Vattakiruttal also Vadamkuruthal and Vadakirutthal, was a Tamil ritual of fasting till death. It was especially widespread during the Sangam age, a period of ancient Tamil history that spanned from the 3rd century BCE to the 3rd century CE. The Tamil kings, in order to save their honour and prestige, were prepared to meet their death facing north and never would they turn their back in battle. It was a Tamil marital vow. This was either done alone or as a group with the supporters of the captured king. Vattakiruttal was considered a noble and heroic way of ending one's life, as it demonstrated loyalty, courage and dignity. It was also a way of avoiding humiliation and torture at the hands of the enemy.</td>
<td><a href="https://en.wikipedia.org/wiki/Vattakiruttal">https://en.wikipedia.org/wiki/Vattakiruttal</a></td>
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<tr>
<td>55 Consider the following dynasties: 1. Hoysala 2. Gahadavala 3. Kakatiya 4. Yadava How many of the above dynasties established their kingdoms in early eighth century AD?</td>
<td>Option D is correct: 1. The Hoysala Empire was a Kannadiga power originating from the Indian subcontinent that ruled most of what is now Karnataka between the 10th and the 14th centuries. The capital of the Hoysalas was initially located at Belur but was later moved to Halebidu. 2. The Gahadavala dynasty was a Rajput dynasty that ruled parts of the present-day Indian states of Uttar Pradesh and Bihar, during the 11th and 12th centuries. Their capital was located at Banaras (now Varanasi) in the Gangetic plains, and for a brief period, they also controlled Kannauj. 3. The Kakatiya dynasty was a Telugu dynasty that ruled most of the eastern Deccan region in present-day India between the 12th and 14th centuries. Their territory comprised much of the present-day Telangana and Andhra Pradesh, and parts of eastern Karnataka, northern Tamil Nadu, and southern Odisha. Their capital was Orugallu, now known as Warangal. 4. The Yadavas initially ruled as feudatories of the</td>
<td>Option D is correct: 1. The Hoysala Empire was a Kannadiga power originating from the Indian subcontinent that ruled most of what is now Karnataka between the 10th and the 14th centuries. The capital of the Hoysalas was initially located at Belur but was later moved to Halebidu. 2. The Gahadavala dynasty was a Rajput dynasty that ruled parts of the present-day Indian states of Uttar Pradesh and Bihar, during the 11th and 12th centuries. Their capital was located at Banaras (now Varanasi) in the Gangetic plains, and for a brief period, they also controlled Kannauj. 3. The Kakatiya dynasty was a Telugu dynasty that ruled most of the eastern Deccan region in present-day India between the 12th and 14th centuries. Their territory comprised much of the present-day Telangana and Andhra Pradesh, and parts of eastern Karnataka, northern Tamil Nadu, and southern Odisha. Their capital was Orugallu, now known as Warangal. 4. The Yadavas initially ruled as feudatories of the</td>
<td><a href="https://en.wikipedia.org/wiki/Hoysala_Empire">https://en.wikipedia.org/wiki/Hoysala_Empire</a> <a href="https://en.wikipedia.org/wiki/Gahadavala_dynasty">https://en.wikipedia.org/wiki/Gahadavala_dynasty</a> <a href="https://en.wikipedia.org/wiki/Kakatiya_dynasty">https://en.wikipedia.org/wiki/Kakatiya_dynasty</a> <a href="https://en.wikipedia.org/wiki/Seuna_(Yadava)_dynasty">https://en.wikipedia.org/wiki/Seuna_(Yadava)_dynasty</a></td>
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<td>56</td>
<td>With reference to ancient Indian History, consider the following parts:</td>
<td>Ancient History</td>
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<td>Literary work Author</td>
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<td>How many of the above pairs are correctly matched?</td>
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<td></td>
<td>a. Only one</td>
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**Explanation:**

**Pair 1 is incorrect:** Devichandragupta is an Indian Sanskrit-language political drama written by Vishakhadeva, who is generally identified with Vishakhadatta. The play narrates the story of how Chandragupta Maurya, with the help of Chanakya, overthrew the Nanda dynasty and established the Mauryan empire.

**Pair 2 is correct:** Hammira Mahakavya is a 15th-century Indian Sanskrit epic poem written by the Jain scholar Nayachandra Suri. It is a legendary biography of the 13th-century Chahamana king Hammira. While not entirely accurate from a historical point-of-view, the text provides valuable information about the medieval history of northwestern India.

**Pair 3 is incorrect:** The Milindapartha is a Buddhist text which dates from sometime between 100 BC and 200 AD. It purports to record a dialogue between the Indian Buddhist sage Nāgasena, and the 2nd century BC Indo-Greek king Menander I of Bactria, in Sāgalā, present-day Sialkot.

**Pair 4 is correct:** Somadeva Suri was a south Indian Jain monk of the 10th century CE, author of a work known as Niti-vakyamrita.

<table>
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<tr>
<th>57</th>
<th>“Souls are not only the property of animal and plant life, but also of rocks, running water and many other natural objects not looked on as living by other religious cects.” The above statement reflects one of the core beliefs of which one of the following religious sects of ancients India?</th>
<th>Art Culture</th>
<th>Easy</th>
<th>B</th>
<th>Explanation:</th>
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<td><a href="https://education.nationalgeographic.org/resource/jainism/">https://education.nationalgeographic.org/resource/jainism/</a></td>
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<td></td>
<td>Medieval History</td>
<td>Med.</td>
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<td><strong>58</strong></td>
<td>Who among the following rulers of Vijayanagara Empire constructed a large dam across Tungabhadra River and a canal-cum-aqueduct several kilometres long from the river to the capital city?</td>
<td></td>
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<td>Explanation:</td>
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<td></td>
<td>a. Devaraya I</td>
<td>Medieval History</td>
<td>Med.</td>
<td>A</td>
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<td></td>
<td>b. Mallikarjuna</td>
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<td></td>
<td>c. Vira Vajaya</td>
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<td></td>
<td>d. Virupaksha</td>
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<td><strong>Option A is correct:</strong> Devaraya I was one of the most famous and powerful rulers of the Vijayanagara Empire. He is credited with building a large dam across the Tungabhadra River near Hospet, which created a huge reservoir for irrigation and drinking water. He also constructed a canal-cum-aqueduct that carried water from the reservoir to the royal city of Vijayanagara. This engineering marvel was called Raya Vihar and was praised by contemporary travellers such as Domingo Paes and Niccolò de' Conti. The dam and the canal-cum-aqueduct were part of Krishnadeva Raya's efforts to improve the agriculture, economy and urban infrastructure of his empire.</td>
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<td><strong>59</strong></td>
<td>Who among the following rulers of medieval Gujarat surrendered Diu to Portuguese?</td>
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<td>Explanation:</td>
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<td></td>
<td>a. Ahmad Shah</td>
<td>Medieval History</td>
<td>Med.</td>
<td>C</td>
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<td>b. Mahmud Begarha</td>
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<td>c. Bahadur Shah</td>
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<td>d. Muhammad Shah</td>
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<td><strong>Option C is correct:</strong> Qutb-ud-Din Bahadur Shah, born Bahadur Khan was a sultan of the Muzaffarid dynasty who reigned over the Gujarat Sultanate, a late medieval kingdom in India from 1526 to 1535 and again from 1536 to 1537. As Gujarat fell to the Mughal Empire, Bahadur Shah was forced to court the Portuguese. In 1534 he signed the Treaty of Bassein. Based on the terms of the agreement, the Portuguese Empire gained control of the city of Bassein (Vasai), as well as its territories, islands, and seas which included Daman and Bombay islands too. He had granted them leave to erect a factory in Diu. Instead of a factory, the Portuguese built the Diu Fort.</td>
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<td><strong>60</strong></td>
<td>By which one of the following Acts was the Governor General of Bengal designated as the Governor General of India?</td>
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<td>Explanation:</td>
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<td>a. The Regulating Act</td>
<td>Modern History</td>
<td>Easy</td>
<td>D</td>
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<td>b. The Pitt's India Act</td>
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<td>c. The Charter Act of 1793</td>
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<td>d. The Charter Act of 1833</td>
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|   | **The Government of India Act 1833**  
1. It was an Act of the Parliament of the United Kingdom, later retitled as the Saint Helena Act 1833.  
2. It extended the royal charter granted to the East India Company for |   |   |   |
|   |   |       |   |   |   |
1833

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<tr>
<th>61</th>
<th>In essence, what does 'Due Process of Law' means?</th>
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<td><strong>Polity</strong></td>
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<td>Statement A is correct. Before the Maneka Gandhi case, the extent of Article 21 of the Indian Constitution was very limited. However, in the Maneka Gandhi case, the Supreme Court broadened the ambit of Article 21 of the Indian Constitution by declaring that due process of law is an inherent element of procedure established by law. Moreover, an individual’s life and freedoms can be taken away only when the following requirements are satisfied:</td>
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<td>The law must be valid. There must be a proper procedure. That procedure should be just, fair, and not arbitrary. If the procedure provided by law is frivolous,</td>
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<td><a href="https://www.iasgyan.in/blogs/the-indian-constitution-important-things-you-should-know">https://www.iasgyan.in/blogs/the-indian-constitution-important-things-you-should-know</a></td>
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</table>
Consider the following statements:
Statement-I: In India, prisons are managed by State Governments with their own rules and regulations for the day-to-day administration of prisons.
Statement-II: In India, prisons are governed by the Prisons Act, 1894 which expressly kept the subject of prisons in the control of Provincial Governments.

Which one of the following is correct in respect of the above statements?

- a. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- c. Statement-I is correct but Statement-II is incorrect
- d. Statement-I is incorrect but Statement-II is correct

Statement 1 is correct: 'Prisons'/'persons detained therein' is a "State-List" subject under Entry 4 of List II of the Seventh Schedule to the Constitution of India. Administration and management of prisons and prisoners is the responsibility of respective State Governments who are competent to take appropriate action in this regard. However, given the significance of prisons in the Criminal Justice System, the Ministry of Home Affairs has been providing regular guidance and support to the States and UTs on diverse issues relating to prison administration.

Statement 2 is correct: In 1894, the draft bill became law with the assent of the Viceroy. It is this Act which forms the basis for the present day jail management and administration in India. This Act has hardly undergone any substantial changes since its inception. However, the process of review of prison problems in India continued. In the report of the Indian Jail Committee 1919-20, for the first time in the history of prisons, 'reformation and rehabilitation' of offenders were identified as the objectives of prison. The Government of India Act 1935 resulted in the transfer of the subject of jails from the Central List to the control of Provincial Governments and henceforth reduced the possibility of uniform implementation of a prison policy at the national level. Thus, State Governments have their own rules and regulations for the day to day administration of prisons, maintenance of prisoners, and prescribing procedures.

https://parliamentlibrary.india.nic.in/writereaddata/Library/Reference%20Notes/Prison_reforms_in_India.pdf
<table>
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<tr>
<th>Question</th>
<th>Category</th>
<th>Difficulty</th>
<th>Answer</th>
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<tr>
<td>63. Which one of the following statements best reflects the Chief purpose of the ‘Constitution’ of a country?</td>
<td>Polity</td>
<td>Easy</td>
<td>C</td>
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<tr>
<td>a. It determines the objective for the making of necessary laws.</td>
<td>Statement C is correct: Most of the older constitutions limited themselves largely to allocating decision-making power and setting some limits to government power. But many twentieth century constitutions, of which the Indian Constitution is the finest example, also provide an enabling framework for the government to do certain positive things, to express the aspirations and goals of society. The Indian Constitution was particularly innovative in this respect. Societies with deep entrenched inequalities of various kinds, will not only have to set limits on the power of government, they will also have to enable and empower the government to take positive measures to overcome forms of inequality or deprivation.</td>
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<td><a href="https://ncert.nic.in/textbook/pdf/keps201.pdf">https://ncert.nic.in/textbook/pdf/keps201.pdf</a></td>
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<td>b. It enables the creation of political offices and a government.</td>
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<td>c. It defines and limits the powers of government.</td>
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<td>d. It secures social justice, social equality and social security.</td>
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<td>64. In India, which one of the following Constitutional Amendments was widely believed to be enacted to overcome the judicial interpretations of the Fundamental Rights?</td>
<td>Polity</td>
<td>Medium</td>
<td>B</td>
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<td>a. Ist Amendment</td>
<td>Statement B is correct: The Constitutional Amendment widely believed to have been enacted in India to overcome the judicial interpretation of the Fundamental Rights is the 42nd Amendment Act of 1976. The 42nd Amendment Act, also known as the Mini Constitution or the Constitution (Forty-second Amendment) Act, was introduced during the period of the emergency declared in India from 1975 to 1977.</td>
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<td><a href="https://en.wikipedia.org/wiki/Forty-second_Amendment_of_the_Constitution_of_India#:~:text=The%2042nd%20Amendment%20changed,B.20R">https://en.wikipedia.org/wiki/Forty-second_Amendment_of_the_Constitution_of_India#:~:text=The%2042nd%20Amendment%20changed,B.20R</a>.</td>
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<td>b. 42nd Amendment</td>
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<td>c. 44th Amendment</td>
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<td>d. 86th Amendment</td>
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<td>65. Consider the following organization/bodies in India:</td>
<td>Polity</td>
<td>Easy</td>
<td>A</td>
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<td>1. The National Commission for Backward Classes</td>
<td>Only one is correct: In 1992, the Supreme Court of India in the Mandal case judgement directed the Union government to create a permanent statutory body to examine the complaints of citizens belonging to backward classes (BC). In 1993, the National Commission for Backward Classes (NCBC) was set up. In 2018, the 102nd Constitutional Amendment Act granted constitutional status to the Commission by inserting a new Article 338-B in the Indian constitution. The National Human Rights Commission is a statutory body established in 1993 under the</td>
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<td><a href="https://www.iasgyan.in/daily-current-affairs/national-co">https://www.iasgyan.in/daily-current-affairs/national-co</a></td>
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<td>4. The National Consumer Disputes Redressal Commission</td>
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<td>How many of the above are constitutional bodies?</td>
<td>a. Only one</td>
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<td>b. Only two</td>
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<td>c. Only three</td>
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<td>d. All four</td>
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https://www.iasgyan.in/daily-current-affairs/kesavananda-bharti-case
Protection of Human Rights Act, 1993. The Law Commission of India is a non-statutory body that is constituted by a notification of the Union Government, with definite terms of reference to carry out research in the field of law. The Act defined a consumer as a person who buys any goods or avails of service for final use. It does not include a person who buys a good for resale or a good or service for commercial purposes.

66 Consider the following statements:
1. If the election of the President of India is declared void by the Supreme Court of India, all acts done by him/her in the performance of duties of his/her office of President before the date of decision become invalid.
2. Election for the post of the President of India can be postponed on the ground that some legislative Assemblies have been dissolved and elections are yet to take place.
3. When a Bill is presented to the President of India, the Constitution prescribes time limits within which he/she has to declare his/her assent.

How many of the above statements are correct?
   a. Only one  
   b. Only two  
   c. All three  
   d. None

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<th>Polity Med.</th>
<th>D</th>
<th>Statement 1 is incorrect: If the election of a person as President or Vice President is declared void by the Supreme court, acts done by him in the exercise and performance of the powers and duties of the office of President or Vice President, as the case may be, on or before the date of the decision of the Supreme Court shall not be invalidated by reason of that declaration. Statement 2 is incorrect: The interveners suggested that the word &quot;otherwise&quot; occurring in Article 62(2) of the Constitution contemplates a case of filling a vacancy occurring by the expiration of the term but where such vacancy cannot be filled up by completing the election before the expiration of the term by reason of dissolution of the Assembly. The interveners submitted that a vacancy could in such a case be filled up not later than six months from the date of the occurrence of the vacancy. The submission of the interveners is unsound. The word &quot;otherwise&quot; does not refer to a vacancy caused by the expiration of the term of office for the obvious reason that the same is the subject matter of Article 62(1). The marginal note to Article 62 fully bears this out. Further, a President whose term has expired can continue to hold the office only under Article 56(1)(c) until this successor enters upon his office. Statement 3 is incorrect: A pocket veto is a legislative maneuver that allows a president or other official with veto</th>
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power to exercise that power over a bill by taking no action (keeping it in their pocket[1]), thus effectively killing the bill without affirmatively vetoing it. This depends on the laws of each country; the common alternative is that if the president takes no action a bill automatically becomes law.

67 With reference to Finance Bill and Money Bill in the Indian Parliament, consider the following statements:
1. When the Lok Sabha transmits Finance Bill to the Rajya Sabha, it can amend or reject the Bill.
2. When the Lok Sabha transmits Money Bill to the Rajya Sabha, it cannot amend or reject the Bill, it can only make recommendations.
3. In the case of disagreement between the Lok Sabha and the Rajya Sabha, there is not joint sitting for Money Bill, but a joint sitting becomes necessary for Finance Bill.

How many of the above statements are correct?
- a. Only one
- b. Only two
- c. All three
- d. None

Polity Easy C All statements are correct: A Money Bill will always be a Finance Bill. However, a Finance Bill need not necessarily be a Money Bill. Only those financial bills are money bills which contain exclusively those matters which are mentioned in Article 110 of the Constitution. These are also certified by the Speaker of Lok Sabha as money bills.

The Rajya Sabha has limited powers concerning a money bill: It cannot reject or amend a money bill. It can only make recommendations.

It must return the bill to the Lok Sabha within 14 days, whether with or without recommendations. Lok Sabha has more powers than Rajya Sabha concerning a money bill. Lok Sabha can either accept or reject all or any of the recommendations of the Rajya Sabha.

Case 1: If the Lok Sabha accepts any recommendation, the bill is then deemed to have been passed by both Houses in the modified form.
Case 2: If the Lok Sabha does not accept any recommendation, the bill is then deemed to have passed by both Houses in the form originally passed by the Lok Sabha without any change.
Case 3: If the Rajya Sabha does not return the bill to the Lok Sabha within 14 days, the bill is deemed to have been passed by both Houses in the form originally passed by the Lok Sabha.

It can be either rejected or amended by either House of Parliament. In case of a disagreement between the two Houses over such a bill, the President can summon a joint sitting of the two Houses to resolve the deadlock.

When the bill is presented to the President, he can

https://www.iasgyan.in/daily-current-affairs/finance-bill
either give his assent to the bill or withhold his assent to the bill or return the bill for reconsideration in the Houses.

68 | Consider the following statements: Once the Central Government notifies an area as a ‘Community Reserve’ 1. The Chief Wildlife Warden of the State becomes the governing authority of such forest. 2. Hunting is not allowed in such area. 3. People of such area are allowed to collect non-timber forest produce. 4. People of such area are allowed traditional agricultural practices  
How many of the above statements are correct?  
a. Only one  
b. Only two  
c. Only three  
d. All four  

<table>
<thead>
<tr>
<th>Environment</th>
<th>Med.</th>
<th>C</th>
<th>Statement 1 is incorrect: Once forest land has been declared as a community reserve, it goes from being governed by local village councils to coming under the forest department. This changes the lives of local residents, according to forest rights activists. A community reserve is usually formed by the local village council and the forest department signing a memorandum of understanding (MoU). Statement 2, 3, 4 are correct: Conservation reserves and community reserves are protected areas of India which typically act as buffer zones between established national parks, wildlife sanctuaries and reserved and protected forests of India, according to the Union Ministry of Environment, Forests and Climate change (MoEFCC). These protected area categories were first introduced in the Wild Life (Protection) Amendment Act of 2002 — the amendment to WLPA, 1972. The provisions of the WLPA apply to an area once it has been declared a community reserve. Section 33 of the WLPA passes the authority of the sanctuary to the chief wildlife warden. The village council members who sign the MoUs with the forest department are mostly illiterate and do not understand what they are getting into. He accepted that communities were unaware that WLPA became in an area once it became a community reserve, as it fell under protected areas.</th>
</tr>
</thead>
</table>

69 | With reference to ‘Scheduled Areas’ in India, consider the following statements: 1. Within a State, the notification of an area as Scheduled Area takes place through an Order of the President. 2. The largest administrative unit forming the Scheduled Area is the  

<table>
<thead>
<tr>
<th>Polity</th>
<th>Med.</th>
<th>B</th>
<th>Statement 1 is correct: The specification of “Scheduled Areas” in relation to a State is by a notified order of the President, after consultation with the State Government concerned. The same applies in the case of any alteration, increase, decrease, incorporation of new areas, or rescinding any Orders relating to</th>
</tr>
</thead>
</table>
Consider the following statements:

**Statement-I:**
The Supreme Court of India has held in some judgements that the reservation policies made under Article 16(4) of the Constitution of India would be limited by Article 335 for maintenance of efficiency of administration.

**Statement-II:**
Article 335 of the Constitution of India defines the term ‘efficiency of administration’.

Which one of the following is correct in respect of the above statements?

<table>
<thead>
<tr>
<th>a. Both Statement-I and Statement-II are correct</th>
<th>b. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I</th>
<th>c. Statement-I is correct but Statement-II is incorrect</th>
<th>d. Statement-I is incorrect but Statement-II is correct</th>
</tr>
</thead>
</table>

**Statement 1** is correct, **Statement 2** is incorrect.

The Court has held in several judgments — Indra Sawhney v Union of India 1993; M Nagaraj v Union of India 2006 — that the reservation policies made under Article 16(4)¹ of the Constitution would be limited by Article 335,² which provides for “maintenance of efficiency of administration,” while considering the claims of the Scheduled Castes (SCs) and the Scheduled Tribes (STs) in the making of appointments to public services and posts. This was done while the Constitution does not define the term “efficiency of administration.” Supreme Court assumed, the framers of the Constitution did not envisage that Article 16 would be limited by or subjected to Article 335. The phrase “efficiency of administration” was used as an exclusionary construct in the colonial and precolonial eras.

---

Consider the following statements:

<table>
<thead>
<tr>
<th>Economy</th>
<th>Med.</th>
<th>A</th>
<th>Statement 1 is correct, 2 is incorrect.</th>
</tr>
</thead>
</table>

---

Visit the following links for more information:

https://theprint.in/opinion/article-164-stands-on-its-own-constitution-made-no-room-for-merit-that-courts-invokes/669215/

https://www.iasgyan.in/daily-current-
| Statement I: | An Infrastructure Investment Trust (InvITs) is like a mutual fund, which enables direct investment of small amounts of money from possible individual/institutional investors in infrastructure to earn a small portion of the income as return. InvITs work like mutual funds or real estate investment trusts (REITs) in features. InvITs can be treated as the modified version of REITs designed to suit the specific circumstances of the infrastructure sector. Sebi notified the Sebi (Infrastructure Investment Trusts) Regulations, 2014 on September 26, 2014, providing for registration and regulation of InvITs in India. The objective of InvITs is to facilitate investment in the infrastructure sector. InvITs can be established as a trust and registered with Sebi. An InvIT consists of four elements: 1) Trustee, 2) Sponsor(s), 3) Investment Manager and 4) Project Manager. The trustee, who inspects the performance of an InvIT is certified by Sebi and he cannot be an associate of the sponsor or manager. |
| Statement II: | Sebi notified the Sebi (Infrastructure Investment Trusts) Regulations, 2014 on September 26, 2014, providing for registration and regulation of InvITs in India. The objective of InvITs is to facilitate investment in the infrastructure sector. InvITs can be established as a trust and registered with Sebi. An InvIT consists of four elements: 1) Trustee, 2) Sponsor(s), 3) Investment Manager and 4) Project Manager. The trustee, who inspects the performance of an InvIT is certified by Sebi and he cannot be an associate of the sponsor or manager. |

Which one of the following is correct in respect of the above statements?

a. Both Statement I and Statement II are correct and Statement II is the correct explanation for Statement I
b. Both Statement I and Statement II are correct and Statement II is not the correct explanation for Statement I
c. Statement I is correct but Statement II is incorrect
d. Statement I is incorrect but Statement II is correct

---

Consider the following statements:

Statement I: In the post-pandemic recent past, many Central Banks worldwide had carried out interest rate hikes.

Statement II: Central Banks generally assume that they have the ability to counteract the rising consumer prices via monetary policy means.

Which one of the following is correct in respect of the above statements?

a. Both Statement I and Statement II are correct and Statement II is the correct explanation for Statement I
b. Both Statement I and Statement II are correct and Statement II is not the correct explanation for Statement I
c. Statement I is correct but Statement II is incorrect
d. Statement I is incorrect but Statement II is correct

---

Both statements are correct:

As central banks across the world simultaneously hike interest rates in response to inflation, the world may be edging toward a global recession in 2023 and a string of financial crises in emerging market and developing economies that would do them lasting harm, according to a comprehensive new study by the World Bank.

Central banks around the world have been raising interest rates this year with a degree of synchronicity not seen over the past five decades—a trend that is likely to continue well into next year, according to the report. Yet the currently expected trajectory of interest-rate increases and other policy actions may not be sufficient to bring global inflation back down to levels seen before the...
<table>
<thead>
<tr>
<th>Question Number</th>
<th>Question</th>
<th>Difficulty</th>
<th>Correct Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>73</td>
<td>Consider the following statements: Statement-I: Carbon markets are likely to be one of the most widespread tools in the fight against climate change Statement-II: Carbon markets transfer resources from the private sector to the State. Which one of the following is correct in respect of the above statements? a. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I c. Statement-I is correct but Statement-II is incorrect d. Statement-I is incorrect but Statement-II is correct</td>
<td>Environment</td>
<td>C</td>
</tr>
<tr>
<td>74</td>
<td>Which one of the following activities of the Reserve Bank of India is considered to be part of ‘sterilization’? a. Conducting ‘Open Market Operations’ b. Oversight of settlement and payment systems c. Debt and cash management for the Central and State Governments d. Regulating the functions of Non-banking Financial Institutions</td>
<td>Economy</td>
<td>A</td>
</tr>
<tr>
<td>75</td>
<td>Consider the following</td>
<td>Economy</td>
<td>B</td>
</tr>
</tbody>
</table>
markets:  
1. Government Bond Market  
2. Call Money Market  
3. Treasury Bill Market  
4. Stock Market  

How many of the above are included in capital markets?  
a. Only one  
b. Only two  
c. Only three  
d. All four

The capital market is the place that acts as the platform between the suppliers and the buyers. The savings and investments are channelized between the persons who have capital and the person who needs capital. In simpler terms, the market where buyers and sellers engage in trading of financial securities like bonds, stocks, etc. However, the market is much wider than securities. The participants during such transactions can be an individual as well as an institution. It includes all types of lending and borrowing. The capital market is generally for the raising of long-term funds. The markets deal mainly with debts and equity securities. There are different types of buyers such as businessmen, companies, government or it can be general people. The major regulatory body is the RBI (Reserve bank of India) assisted by the Ministry of Finance and the SEBI (Security Exchange Board of India). Capital markets are financial markets that bring buyers and sellers together to trade stocks, bonds, currencies, and other financial assets. Capital markets include the stock market and the bond market. They help people with ideas become entrepreneurs and help small businesses grow into big companies. They also give folks like you and me opportunities to save and invest for our futures.

76 Which one of the following best describes the concept of 'Small Farmer Large Field'?

a. Resettlement of a large number of people, uprooted from their countries due to war, by giving them a large cultivable land which they cultivate collectively and share the produce  
b. Many marginal farmers in an area organize themselves into groups and synchronize and harmonize selected agricultural operations  

Agriculture Med. B  
Small Farmer Large Field (SFLF) is an innovative bottoms up informal model which allows small landholding farmers to benefit from economies of scale by organizing themselves and integrating their small plots into one large field. The SFLF model is founded upon the principle of aggregating small and marginal farmers to achieve bargaining power by strengthening backward and forward integration along the supply chain, lowering cost and improving efficiency by

https://ageconsearch.umn.edu/record/290734/files/Abstracts_19_05_15_03_08_32_48_27_79_137_16_0.pdf
3. Many marginal farmers in an area together make a contract with a corporate body to surrender their land to the corporate body of a fixed term for which the corporate body makes a payment of an agreed amount to the farmers.

d. A company extends loans, technical knowledge and material inputs to a number of small farmers in an area so that they produce the agricultural commodity required by the company for its manufacturing process and commercial production.

synchronizing selected key operations such as nursery seed bed management, land preparation, transplanting and harvest. The SFLF concept was first started in Vietnam in 2011 and in the last few years, gained immense popularity with area under the SFLF model increasing from 8 hectares in 2011 to 196,000 hectares in 2015.

77 Consider the following statements:
1. The Government of India provides Minimum Support Price for niger (Guizotia abyssinica) seeds.
2. Niger is cultivated as a Kharif crop.
3. Some tribal people in India use niger seed oil for cooking.

How many of the above statements are correct?

a. Only one
b. Only two
c. All three
d. None

Agriculture Med. C All statements are correct. Niger (Guizotia abyssinica) is a minor oilseed crop that is grown in India mainly during the kharif season. It is also known as ramtil or karala. Niger seeds have high oil content (37-47%) and protein content (18-24%). The oil is used for cooking, lighting, lubrication and perfume making. The seed cake is used as animal feed and manure. Niger seed oil are also consumed as a condiment by some tribal people. The Government of India provides Minimum Support Price for niger.

Niger can grow on various types of soils, from clay loam to sandy loam, as long as they are well drained. It can tolerate slight alkalinity and salinity. It requires moist soil and moderate rainfall (1000-1300 mm). Niger is cultivated as a sole crop or mixed crop with millets, groundnut or pulses. The seed rate varies from 5 to 15 kg/ha depending on the method of sowing. Niger is cross-pollinated by bees and other insects. The major niger producing states in India are Madhya Pradesh, Orissa, Maharashtra, Karnataka, Gujarat and Jharkhand. The average yield of niger in India is around 266 kg/ha. However, the area under niger cultivation has been declining over the years due to various factors such as low productivity, lack of government support, amarbel infestation and increasing preference for

https://vikaspedia.in/agriculture/crop-production/package-of-practices/oilseeds/niger
### Question 78

Consider the investments in the following assets:
1. Brand recognition
2. Inventory
3. Intellectual property
4. Mailing list of clients

How many of the above intangible investments?
- a. Only one
- b. Only two
- c. Only three
- d. All four

**Economy Easy C**

Only three are correct: Intangible assets are non-physical assets that have a monetary value since they represent potential revenue. Intangible assets include patents, copyrights, and a company's brand. Intangible assets are intellectual property that includes:
- Patents, which provide property rights to an inventor
- Trademarks, which are a recognizable phrase or symbol that denotes a specific product and differentiates a company
- Franchises, which are a type of license that a party (franchisee) buys to allow them to have access to a company's brand and sell goods under their name
- Goodwill, which represents the value above and beyond a target company's assets that another company pays to acquire them
- Copyrights, which represent intellectual property that's protected from being duplicated by non-authorized parties.


### Question 79

Consider the following:
1. Demographic performance
2. Forest and ecology
3. Governance reforms
4. Stable government
5. Tax and fiscal efforts

For the horizontal tax devolution, the Fifteenth Finance Commission used how many of the above as criteria other than population area and income distance?
- a. Only two
- b. Only three
- c. Only four
- d. All five

**Economy Easy B**

Only three are correct: Income distance; Income distance is the distance of a state’s income from the state with the highest income. Income of a state has been computed as average per capita GSDP during the three-year period between 2016-17 and 2018-19. A state with lower per capita income will have a higher share to maintain equity among states.

Demographic performance: The Terms of Reference of the Commission required it to use the population data of 2011 while making recommendations. Accordingly, the Commission used 2011 population data for its recommendations. The demographic performance criterion has been used to reward efforts made by states in controlling their population. States with a lower fertility ratio will be scored higher on this criterion.

Forest and ecology: This criterion has been arrived at by calculating the share of the dense forest of each state in the total dense forest of all the states.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Topic</th>
<th>Difficulty</th>
<th>Correctness</th>
<th>Notes</th>
</tr>
</thead>
</table>
| 80 Consider the following infrastructure sectors:  
1. Affordable housing  
2. Mass rapid transport  
3. Health rare  
4. Renewable energy  
On how man of the above does UNOPS Sustainable Investments in Infrastructure and Innovation (S3i) initiative focus for its investments?  
a. Only one  
b. Only two  
c. Only three  
| 81 Consider the following statements:  
Statement-I: India, despite having uranium deposits, depends on coal for most of its electricity production.  
Statement-II: Uranium, enriched to the extent of at least 60%, is required for the production of electricity.  
Which one of the following is correct in respect of the above statements?  
a. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I  
b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I  
c. Statement-I is correct Statement-II is incorrect  
| 82 Consider the following statements:  
Statement-I: Marsupials are not naturally found in India.  
Statement-II: Marsupials are not naturally found in India.  
Tax and fiscal efforts: This criterion has been used to reward states with higher tax collection efficiency. It is measured as the ratio of the average per capita own tax revenue and the average per capita state GDP during the three years between 2016-17 and 2018-19. | Environment | Diff. | C | [Link](https://animals.sandiegozoo.org/animals/marsupial) |
Marsupials can thrive only in montane grasslands with no predators.

Which one of the following is correct in respect of the above statements?

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I</td>
<td>b. Both Statement-I and Statement-II are correct and Statement-H is not the correct explanation for Statement-I</td>
<td>c. Statement-I is correct but Statement-II is incorrect</td>
</tr>
</tbody>
</table>

Almost foetal state and, in most species, carry them within an external pocket or pouch formed by a flap of dermal tissue on the abdomen. The most familiar marsupials are the kangaroos. The Marsupials are native to Australia. They are not naturally found in India. Marsupials are mostly found in arid and semi-arid regions and not only in montane grasslands with no predators.

<table>
<thead>
<tr>
<th>83</th>
<th>Invasive Species Specialist Group' (that develops Global Invasive Species Database) belongs to which one of the following organizations?</th>
<th>Environment</th>
<th>Easy</th>
</tr>
</thead>
</table>

The Invasive Species Specialist Group (ISSG) is a global network of scientific and policy experts on invasive species, organized under the auspices of the Species Survival Commission (SSC) of the International Union for Conservation of Nature (IUCN). Hence option A is correct.

<table>
<thead>
<tr>
<th>84</th>
<th>Consider the following fauna: 1. Lion-tailed Macaque 2. Malabar Civet 3. Sambar Deer How many of the above are generally nocturnal or most active after sunset?</th>
<th>Environment</th>
<th>Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Only one</td>
<td>b. Only two</td>
<td>c. All three</td>
<td>d. None</td>
</tr>
</tbody>
</table>

Lion-tailed macaques are diurnal and live in groups of 10 to 20 individuals. There is typically one male overlooking several females and juveniles. The Malabar civet is considered nocturnal and so elusive that little is known about its biology and ecology apart from habitat use. Sambar are nocturnal or crepuscular. The males live alone for much of the year, and the females live in small herds of up to 16 individuals. Indeed, in some areas, the average herd consists of only three or four individuals, typically consisting of an adult female, her most recent young, and perhaps a subordinate, immature female.

<table>
<thead>
<tr>
<th>85</th>
<th>Which of the following organisms perform waggle dance for others of their kin to indicate the direction</th>
<th>Environment</th>
<th>Med.</th>
</tr>
</thead>
</table>

Waggle dance is a term used in beekeeping and ethology for a particular figure-eight dance of the honey bee. By performing
and the distance to a source of their food?

- a. Butterflies
- b. Dragonflies
- c. Honeybees
- d. Wasps

This dance, successful foragers can share information about the direction and distance to patches of flowers yielding nectar and pollen, to water sources, or to new nest-site locations with other members of the colony.

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<table>
<thead>
<tr>
<th>Question</th>
<th>Category</th>
<th>Difficulty</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>86</td>
<td>Consider the following statements: 1. Some mushrooms have medicinal properties. 2. Some mushrooms have psycho-active properties. 3. Some mushrooms have insecticidal properties. 4. Some mushrooms have bioluminescent properties.</td>
<td>Health Med. D</td>
<td>How many of the above statements are correct? a. Only one b. Only two c. Only three d. All four</td>
</tr>
<tr>
<td></td>
<td>Mushrooms act as antibacterial, immune system enhancer and cholesterol lowering agents; additionally, they are important sources of bioactive compounds. As a result of these properties, some mushroom extracts are used to promote human health and are found as dietary supplements. Psychedelic mushrooms are wild or cultivated mushrooms that contain psilocybin, a naturally occurring psychoactive and hallucinogenic compound. Recently, an increasing number of mushrooms have been found to contain insecticidal compounds. Among these are species of Lactarius (Russulaceae), which react to wounding by exuding a milky fluid and/or color change reactions, which could be a warning reaction.</td>
<td></td>
<td><a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4320875/#:~:text=Mushrooms%20act%20as%20antibacterial%2C%20immune%20system%20enhancer%2C%20and%20cholesterol%20lowering%20agents%3B%20additionally%2C%20they%20are%20important%20sources%20of%20bioactive%20compounds.%20As%20a%20result%20of%20these%20properties%2C%20some%20mushroom%20extracts%20are%20used%20to%20promote%20human%20health%20and%20are%20found%20as%20dietary%20supplements.%20Psychedelic%20mushrooms%20are%20wild%20or%20cultivated%20mushrooms%20that%20contain%20psilocybin%2C%20a%20naturally%20occurring%20psychoactive%20and%20hallucinogenic%20compound.%20Recently%2C%20an%20increasing%20number%20of%20mushrooms%20have%20been%20found%20to%20contain%20insecticidal%20compounds.%20Among%20these%20are%20species%20of%20Lactarius%20(Russulaceae)%2C%20which%20react%20to%20wounding%20by%20exuding%20a%20milky%20fluid%20and%20or%20color%20change%20reactions%2C%20which%20could%20be%20a%20warning%20reaction.">link to source</a></td>
</tr>
<tr>
<td>87</td>
<td>Consider the following statements regarding the Indian squirrels: 1. They build nests by making burrows in the ground. 2. They store their food materials like nuts and seeds in the ground. 3. They are omnivorous.</td>
<td>Environment Med. C</td>
<td>How many of the above statements are correct? a. Only one b. Only two c. All three</td>
</tr>
<tr>
<td></td>
<td>Indian squirrels are found in India (south of the Vindhyas) and Sri Lanka. They live in tropical dry forests, rainforests, mangrove forests, grasslands, scrub, parks, gardens, and urban areas. They are solitary and only come together during the breeding season. They are active during the day spending their time both in trees and on the ground. Sometimes they live in a system of burrows that they use for shelter and storage.</td>
<td></td>
<td><a href="https://serc.carleton.edu/">link to source</a></td>
</tr>
<tr>
<td>88</td>
<td>Consider the following</td>
<td>Geography Diff. C</td>
<td>Statement 1 is correct:</td>
</tr>
<tr>
<td></td>
<td>Statement 2 and 3 are correct: They store their food materials like nuts and seeds in the ground. Squirrels hide nuts this way as preparation for cold weather when otherwise food will be scarce. Indian squirrels are omnivores. They feed mainly on nuts and fruits but will also eat seeds, insects, small mammals and reptiles, eggs, and even sometimes chicks of bird.</td>
<td></td>
<td><a href="https://animals.mom.com/squirrel-gathers-food-4133.html">link to source</a></td>
</tr>
<tr>
<td>Statements:</td>
<td></td>
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<td></td>
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<tr>
<td>-------------</td>
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<tr>
<td>1. Some microorganisms can grow in environments with temperature above the boiling point of water.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Some microorganisms can grow in environments with temperature below the freezing point of water.</td>
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<td></td>
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<tr>
<td>3. Some microorganisms can grow in highly acidic environments with a pH below 3.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

| y | Thermophiles are microorganisms with optimal growth temperatures between 60 and 108 degrees Celsius. They are isolated from a number of marine and terrestrial geothermally-heated habitats including shallow terrestrial hot springs, hydrothermal vent systems, sediment from volcanic islands, and deep-sea hydrothermal vents. The boiling point of water is 100 degrees Celsius. |
|--------------------------------|
| Thermophiles are microorganisms with optimal growth temperatures between 60 and 108 degrees Celsius. They are isolated from a number of marine and terrestrial geothermally-heated habitats including shallow terrestrial hot springs, hydrothermal vent systems, sediment from volcanic islands, and deep-sea hydrothermal vents. The boiling point of water is 100 degrees Celsius. |

| a. Only one |
| b. Only two |
| c. All three |
| d. None |

| 89 | Which one of the following makes a tool with a stick to scrape insects from a hole in a tree or a log of wood? |
|---------------------------------------------|
| a. Fishing cat |
| b. Orangutan |
| c. Otter Sloth bear |
| d. Sloth bear |

| 89 | Environme nt | Med. | B |
|-----------------------------------------------|
| Orangutan been observed as using sticks for fishing out bugs from bark. Researchers have also spotted orangutans using sticks to extract seeds from fruit and scrape insects from a hole in a tree in the wild. The name orangutan means “man of the forest” in the Malay language. In the lowland forests in which they reside, orangutans live solitary existences. They feast on wild fruits like lychees, mangosteens, and figs, and slurp water from holes in trees. They make nests in trees of vegetation to sleep at night and rest during the day. |
| https://en.wikipedia.org/wiki/Tool_use_by_non-human_animals |

| 90 | Consider the following: |
|--------------------------------|
| 1. Aerosols |
| 2. Foam agents |
| 3. Fire retardants |
| 4. Lubricants |
| In the making of how many of the above |

| 90 | Environme nt | Diff. | D |
|-----------------------------------------------|
| HFCs are relatively nonflammable, chemically stable, and nonreactive. Many are colourless, odourless gases, but some—such as HFC-365mfc (1,1,1,3,3-pentafluorobutane)—are liquids at room |
| https://www.britannica.com/science/hydrofluorocarbon |
**Question:** Are hydrofluorocarbons used?
- a. Only one
- b. Only two
- c. Only three
- d. All four

**Answer:** Temperature. As refrigerants, HFCs are used in a wide variety of cooling systems, from refrigerators and freezers to automotive air-conditioning units. HFCs are also used as blowing agents in the production of polymer foams; as firefighting agents (having replaced halons); also in lubricants; as solvents in cleaning products for plastics and metals and in plasma etching for semiconductor technology; and as propellants in metered-dose inhalers prescribed for the treatment of asthma. Hence Option D is correct.

**Question:** Consider the following statements:
1. Jhelum River passes through Wular Lake.
2. Krishna River directly feeds Kolleru Lake.

How many of the statements given above are correct?
- a. Only one
- b. Only two
- c. All three
- d. None

**Answer:** Statement 1 is correct: The Jhelum rises from a deep spring at Vernag, in western Jammu and Kashmir union territory, in the Indian-administered portion of the Kashmir region. The river meanders northwestward from the northern slope of the Pir Panjal Range through the Vale of Kashmir to Wular Lake at Srinagar, which controls its flow.

Statement 2 is incorrect: Krishna River does not directly feed Kolleru Lake. The lake is fed directly by water from the seasonal Budameru and Tammileru streams, and is connected to the Krishna and Godavari systems by many inflowing drains and channels.

Statement 3 is correct: Kanwar jheel in Bihar is a residual oxbow lake, formed due to meandering of Gandak river, a tributary of Ganga, in the geological past.

**Question:** Consider the following pairs:
- Port : Well known as
  1. Kamarajar Port : First major port in India registered as a company
  2. Mundra Port : Largest privately owned port in India
  3. Visakhapatnam Port : Largest container port in India

How many of the above pairs are correctly matched?
- a. Only one pair
- b. Only two pairs
- c. All three pairs
- d. None of the pairs

**Answer:** Pair 1 is correct: Kamarajar Port Limited, formerly Ennore Port, is located on the Coromandel Coast, Chennai about 18 km north of Chennai Port. It is the 12th major port of India, and the first port in India which is a public company.

Pair 2 is correct: As the largest private port in India, Mundra is a major hub for containers and bulk cargo. It is run by Adani Ports and SEZ Limited (APSEZ) and began operations in 2001.

Pair 3 is incorrect: https://en.wikipedia.org/wiki/Kamarajar_Port_Limited#text=Kamarajar_Port_Limited%2C(formerly%20Ennore)which%20is%20a%20public%20company.
Jawaharlal Nehru Port Trust – Nhava Sheva (JNPT) Known as Nhava Sheva, JNPT is the largest container port in India and one of the most essential subcontinents harbours on the Western coast.

Consider the following trees:
1. Jackfruit (Artocarpus heterophyllus)
2. Mahua (Madhuca indica)
3. Teak (Tectona grandis)

How many of the above are deciduous trees?
- Only one
- Only two
- All three
- None

Geography

Consider the following statements:
1. India has more arable area than China.
2. The proportion of irrigated area is more in India as compared to China.
3. The average productivity per hectare in Indian agriculture is higher than that in China.

How many of the above statements are correct?
- Only one
- Only two
- All three
- None

Agriculture

Ilmenite and rutile, abundantly available in certain coastal tracts of India, are rich sources of which one of the following?
- Heavy mineral sands
- Ore deposits
- Precious metal deposits
- Non-metallic mineral deposits
<table>
<thead>
<tr>
<th>Question</th>
<th>Type</th>
<th>Difficulty</th>
<th>Correct Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>97</td>
<td>Geograph y</td>
<td>Med.</td>
<td>C</td>
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<tr>
<td>About three-fourths world's cobalt, a metal required for the manufacture of batteries for electric motor vehicles, is produced by:</td>
<td></td>
<td></td>
<td>The Democratic Republic of Congo boasts the world's largest endowment of cobalt mine reserves (4,000,000 tonnes), followed by Australia (1,500,000 tonnes) and Indonesia (600,000 tonnes). Hence option C is correct</td>
</tr>
<tr>
<td>98</td>
<td>Geograph y</td>
<td>Easy</td>
<td>A</td>
</tr>
<tr>
<td>Which one of the following is a part of the Congo Basin?</td>
<td></td>
<td></td>
<td>The Congo Basin spans across six countries—Cameroon, Central African Republic, Democratic Republic of the Congo, Republic of the Congo, Equatorial Guinea and Gabon. Hence option A is correct.</td>
</tr>
<tr>
<td>99</td>
<td>Geograph y</td>
<td>Diff.</td>
<td>D</td>
</tr>
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<td>Consider the following statements: 1. Amarkantak Hills are at the confluence of Vindhya and Sahyadri Ranges. 2. Biligirirangan Hills constitute the easternmost part of Satpura Range. 3. Seshachalam Hills constitute the southernmost part of Western Ghats. How many of the statements given above are correct?</td>
<td></td>
<td></td>
<td>Statement 1 is incorrect: The Amarkantak region is a unique natural heritage area and is the meeting point of the Vindhya and the Satpura Ranges, with the Maikal Hills being the fulcrum. Statement 2 is incorrect: The Biligirirangana Hills or Biligirirangan Hills is a hill range situated in south-western Karnataka, at its border with Tamil Nadu (Erode District) in South India. Statement 3 is incorrect: The Anaimalai or Anamala Hills, also known as the Elephant Mountains, are the range of mountains that form the southern portion of the Western Ghats and span the border of Tamil Nadu and Kerala in Southern India</td>
</tr>
<tr>
<td>100</td>
<td>Geograph y</td>
<td>Med.</td>
<td>D</td>
</tr>
<tr>
<td>With reference to India's projects on connectivity, consider the following statements: 1. East-West Corridor under Golden Quadrilateral Project connects Dibrugarh and Surat. 2. Trilateral Highway connects Moreh in Manipur and Chiang Mai in Thailand via Myanmar. 3. Bangladesh - China -India - Myanmar Economic Corridor connects Varanasi in Uttar Pradesh with Kunming in China. How many of the above statements are correct?</td>
<td></td>
<td></td>
<td>Statement 1 is incorrect: The East-West corridor of the Golden Quadrilateral superhighway connects Silchar, Porbandar pair of cities. The NS-EW Corridor (North–South–East–West Corridor) is India’s largest ongoing highway project. Statement 2 is incorrect: India–Myanmar–Thailand Trilateral Highway (IMT Highway), 1,360 km (850 mi) long route, is a highway under upgrade under India’s Look East policy that will connect Moreh, India with Mae Sot, Thailand via Myanmar. Statement 3 is incorrect: The 2800 km BCIM corridor proposes to link Kunming in China's neighboring country.</td>
</tr>
<tr>
<td>a. Only one</td>
<td>b. Only two</td>
<td>c. All three</td>
<td>d. None</td>
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<td><strong>Yunnan province with Kolkata, passing through nodes such as Mandalay in Myanmar and Dhaka in Bangladesh before heading to Kolkata.</strong></td>
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