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| Question | **With reference to the Enhanced Collaborative Autonomous Rover System (ECARS), consider the following statements:**1. It is a multi-terrain manned ground vehicle for a wide range of military situations.
2. It is developed by the Defence Research and Development Organisation (DRDO).

**Which of the statements given above is/are correct?** |
| Type | multiple\_choice |
| Option | 1 only |
| Option | 2 only |
| Option | Both 1 and 2 |
| Option | Neither 1 nor 2 |
| Answer | 4 |
| Solution | * The Enhanced Collaborative Autonomous Rover System (ECARS), a cutting-edge 4×4 **multi-terrain unmanned ground vehicle (UGV). The speed of the system ranges between 16 and 20 km per hour, with a payload capacity of 350 kg and towing payload capacity of 500 kg. Hence, statement 1 is not correct.**
* ECARS UGV is armed with an enhanced collision avoidance system and advanced mission planning capabilities, rendering it a dependable resource for a wide range of military situations.
* **It is developed by Pune’s Kalyani Strategic Systems Ltd, a fully-owned subsidiary of Bharat Forge. Hence, statement 2 is not correct.**

**A key feature of ECARS is its compatibility with various systems, including Remote Controlled Weapon Stations (RCWS), water jet machines** and capability of transporting heavy materials. This makes ECARS a key tool for border surveillance and more. |
| Positive Marks | 2 |
| Negative Marks | 0.67 |

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| Question | **With reference to the Snakes, consider the following statements:**1. All snakes are diurnal.
2. All snakes are cold-blooded and must regulate their body temperatures.
3. All snakes shed their skin because it does not grow with their body size.

**Which of the statements given above is/are correct?** |
| Type | multiple\_choice |
| Option | 2 and 3 only |
| Option | 1 and 3 only |
| Option | 3 only |
| Option | 1, 2 and 3 |
| Answer | 1 |
| Solution | * **Snake:** There are more than 35,000 species of the snake around the world, of which only 600 are venomous. Of these 600, 330 species are found in India. The most commonly found dangerous snakes are the ones we call the big four — krait, Russel’s viper, saw-scaled viper and Indian-spectacled cobra.
* Snakes have some clear differences from other reptiles. They have no limbs, no moveable eyelids, and no ear openings. About 600 species are venomous, and only about 200—seven percent—are able to kill or significantly wound a human.
* Their upper and lower jaw separate to allow snakes to consume prey up to three times larger than the diameter of their head. Snakes eat their prey whole.
* **Most snakes are nocturnal. Hence, statement 1 is not correct.** Their tongue is used to smell their air.
* **Snakes are cold-blooded**, or ectotherms, and must sun themselves to regulate their body temperatures. **Hence, statement 2 is correct.**
* While most snakes lay eggs, some give live birth. Snakes shed their skin because it doesn't fit anymore or because it's old or worn out. When snakes grow, their skin does not, so they outgrow it. When this happens, they shed their outer layer of skin. Snakes can shed their skin as often as once a month, although it's usually only a handful of times a year at most. **Hence statement 3 is correct.**

There are more than 3,000 species of snakes on the planet and they’re found everywhere except in Antarctica, Iceland, Ireland, Greenland, and New Zealand. They live almost everywhere, in deserts, forests, oceans, streams, and lakes. Snakes cannot survive in places where the ground stays frozen year-round so there **are no snakes in Antarctica.** Radio telemetry has been used to study the movement patterns of snakes to tackle India‘s huge snakebite problem. |
| Positive Marks | 2 |
| Negative Marks | 0.67 |

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| Question | **Which of the following are essential growth conditions required for Coffee cultivation?**1. Direct Sunlight is necessary for the Coffee plantation.
2. Coffee plant needs abundant rainfall.
3. Fertile soils rich in iron and potash are most suitable for its cultivation.
4. Coffee can not tolerate water stagnation.

**Select the correct answer using the code given below.** |
| Type | multiple\_choice |
| Option | 1 and 2 only |
| Option | 3 and 4 only |
| Option | 2, 3 and 4 only |
| Option | 1 and 4 only |
| Answer | 3 |
| Solution | * **Coffee is a tropical plantation crop.** Its seeds are roasted, ground and are used for preparing a beverage. There are three varieties of coffee i.e. **arabica, robusta and liberica.** India mostly grows superior quality coffee, arabica, which is in great demand in International market.
* Essential growth conditions required for the cultivation of coffee are as follows:
	+ Climate: Coffee is a **tropical plant** which is also grown in semi-tropical climate. The coffee tree requires heat, humidity and abundant rainfall.
	+ Temperature: Coffee requires an average temperature between 20°-27°C. Although it grows in day temperature over 32°C in the Arabian Peninsula. Growth is most rapid during hot rainy season and during cool dry season berries ripen and ready for picking. Bright sunshine and warm weather are necessary for the harvesting.
	+ Coffee **needs abundant rainfall,** i.e., 100 to 200 cm annually. The hill slopes which receive orthographic rainfall are thus best for coffee cultivation. **Hence statement 2 is correct.**
	+ Shade: **Direct sunlight is harmful for coffee plants**; therefore, these are planted under shade of taller trees such as bananas. In Brazil, leguminous plants are used which not only provide shade but also enrich soil with nitrogen. **Hence statement 1 is not correct.**
	+ **Topography:** Generally, coffee is grown on **slopes having height between 600 to 1,800 meters.** The suitability of slopes for coffee is because these are well-drained and also cooler. **Water stagnation is very harmful for coffee plants;** therefore, hill slopes are best suitable for it. **Hence statement 4 is correct.**
	+ **Soils:** The ideal soil is one with a good **sub-surface drainage.** The presence of humus, nitrogenous matter, potash, iron in the soil is an advantage. **Well-drained volcanic soils** are also suitable. **Hence statement 3 is correct.**

In **India**, **Coffee** is cultivated in the highlands of **Western Ghats** in Karnataka, Kerala and Tamil Nadu. Karnataka alone accounts for more than two-third of total production of coffee in the country. |
| Positive Marks | 2 |
| Negative Marks | 0.67 |

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| Question | **The 'State of the Rhino 2023' report was released recently. In this context, consider the following statements:**1. The 'State of the Rhino' report is released annualy by the World Wide Fund for Nature.
2. The greater one-horned rhinos, which are native to India are categorised as 'endangered' on the IUCN Red List.

**Which of the statements given above is/are correct?** |
| Type | multiple\_choice |
| Option | 1 only |
| Option | 2 only |
| Option | Both 1 and 2 |
| Option | Neither 1 nor 2 |
| Answer | 4 |
| Solution | * Every September, the **International Rhino Foundation (IRF)** publishes its signature report, **State of the Rhino**, which documents current population estimates and trends, where available, as well as key challenges and conservation developments for the five surviving rhino species in Africa and Asia. **Hence statement 1 is not correct.**
* There are five species of rhino namely **Black rhino, Greater one-horned rhino, Javan rhino, Sumatran rhino and White rhino.** Out of them, three rhino species are found in Asia namely Sumatran rhino, Javan rhino and Greater one-horned rhino (Indian rhino).
* Three species of rhino—black, Javan, and Sumatran—are critically endangered.

**Indian rhino is largest of all rhino species** and commonly found in India (Assam, West Bengal and Utter Pradesh), Nepal, Bhutan, and Pakistan. It is identified by a single black horn and a grey-brown hide with skin folds. It is **presently classified as 'vulnerable' on the International Union for Conservation of Nature (IUCN) Red List. Hence statement 2 is not correct.** |
| Positive Marks | 2 |
| Negative Marks | 0.67 |

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| Question | **With reference to Co-operative Societies, consider the following statements:**1. The right to form co-operative societies is a fundamental right.
2. The Parliament is empowered to make laws regulating the multi-state cooperative societies.

**Which of the statements given above is/are correct?** |
| Type | multiple\_choice |
| Option | 1 only |
| Option | 2 only |
| Option | Both 1 and 2 |
| Option | Neither 1 nor 2 |
| Answer | 3 |
| Solution | * The 97th Constitutional Amendment Act of 2011 gave a constitutional status and protection to cooperative societies. In this context, it made the following three changes in the Constitution:
	+ It made the right to form co-operative societies a fundamental right (Article 19). **Hence, statement 1 is correct.**
	+ It included a new Directive Principle of State Policy on the promotion of cooperative societies (Article 43-B).
	+ It added a new Part IX-B in the Constitution which is entitled as “The Cooperative Societies” (Articles 243-ZH to 243-ZT).
* The new Part IX-B contains various provisions to ensure that the cooperative societies in the country function in a democratic, professional, autonomous and economically sound manner.
* **It empowers the Parliament in respect of multi-state cooperative societies** and the state legislatures in respect of other co-operative societies to make the appropriate laws regulating Cooperative Societies in India. **Hence, statement 2 is correct.**
	+ State Cooperative Societies Acts of individual states

Multi-State Cooperative Societies Act, 2002 for the multi-state Cooperative societies with Area of operation in more than one State. |
| Positive Marks | 2 |
| Negative Marks | 0.67 |

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| Question | **"The Act made the Legislative Business to be conducted in public instead of in secret and reports of proceedings were officially published. Standing orders were adopted to conduct and regulate proceedings. The Bills were referred to Select Committees before being passed by the Council. It gave the legislature for the first time the right to frame its own rules and procedure."****Which of the following acts is being described in the above-given passage?** |
| Type | multiple\_choice |
| Option | Pitt's India Act of 1784 |
| Option | Charter Act of 1833 |
| Option | Charter Act of 1853 |
| Option | Government of India Act of 1858 |
| Answer | 3 |
| Solution | * Under **the Charter Act of 1853**, discussions in the Council, when acting in its legislative capacity, became oral instead of in writing. Bills passed through the usual three stages and were referred to Select Committees.
* **The legislative business was conducted in public instead of in secret and reports of proceedings were officially published. Standing orders were adopted to conduct and regulate proceedings.**
* The new Council conceived its duties not to be confined only to legislation but also began to assume the character of a miniature representative assembly, assembled for the purpose of enquiry into and redress of grievances.
* **The Act of 1853 gave the legislature for the first time the right to frame its own rules and procedure.** Shri Prasanna Kumar Tagore was appointed to the post of Clerk of the Council and he went on to provide the Council with a parliamentary form of procedure and encouraged it to assert its independence as a separate organ of government.

The public was allowed to witness the proceedings of the Council and press reporting was permitted in 1856. Despite the progressive establishment of legislative practices and procedures, there was, however, no Indian participation in the Council. **Hence the correct answer is option (c)** |
| Positive Marks | 2 |
| Negative Marks | 0.67 |

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| Question | **Consider the following statements about the office of the High Court in India:**1. The power to extend the jurisdiction of High court is vested with the Parliament.
2. The judges of a high court are appointed by the Governor of the respective states.
3. A High Court can settle dispute between two states.

**Which of the statements given above is/are correct?** |
| Type | multiple\_choice |
| Option | 1 only |
| Option | 1 and 2 only |
| Option | 2 and 3 only |
| Option | 1, 2 and 3 |
| Answer | 1 |
| Solution | * The **Parliament can extend** the jurisdiction of a high court to any union territory or exclude the jurisdiction of a high court from any union territory. **Hence statement 1 is correct.**
* The judges of a high court are **appointed by the President**.
* The chief justice is appointed by the President after consultation with the chief justice of India and the governor of the state concerned.
* For appointment of other judges, the chief justice of the concerned high court is also consulted.
* In case of a common high court for two or more states, the governors of all the states concerned are consulted by the president. **Hence statement 2 is not correct.**

When there is a dispute which arises **between the States of India** or between the State Government and the Union Government then it is the jurisdiction of **the Supreme Court** under **Article 131** of the Constitution that gives it the power to resolve these kinds of disputes. **Hence statement 3 is not correct**. |
| Positive Marks | 2 |
| Negative Marks | 0.67 |