

September 26, 2019

**Q.1) 'Exercise Malabar' is an exercise between navies of India and**

- a) USA and Japan
- b) Israel and France
- c) South Africa and Singapore
- d) Sri Lanka and Bangladesh

**Q.1) Solution (a)**

Source: <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1586112>

**Q.2) Which of the following statements with respect to 'CPGRAMS' is true?**

- a) It is a single window system for Candidates and Political Parties to apply for permissions
- b) It is a Vehicle Management System with the facility of Issuance of requisition letters for vehicles
- c) It is a Public Grievance Redressal System with respect to 'Right to Information (RTI)' matters
- d) None of the above

**Q.2) Solution (d)**

Centralized Public Grievance Redress And Monitoring System (CPGRAMS) is an online web-enabled system over NICNET developed by NIC, in association with Directorate of Public Grievances (DPG) and Department of Administrative Reforms and Public Grievances (DARPG). CPGRAMS is the platform based on web technology which primarily aims to enable submission of grievances by the aggrieved citizens from anywhere and anytime (24x7) basis to Ministries/Departments/Organisations who scrutinize and take action for speedy and favourable redress of these grievances. Tracking grievances is also facilitated on this portal through the system generated unique registration number.

**Issues which are not taken up for redress**

- Subjudice cases or any matter concerning judgment given by any court.
- Personal and family disputes.
- RTI matters.
- Anything that impacts upon territorial integrity of the country or friendly relations with other countries.

- Suggestions.

Source: <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1586145>

**Q.3) Consider the following statements with respect to 'Global Goalkeeper Award'**

1. The award celebrates a political leader who has "demonstrated their commitment to the Global Goals through impactful work in their country and/or globally.
2. It is a "special recognition" by the Bill and Melinda Gates Foundation.

**Select the correct statements**

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

**Q.3) Solution (c)**

Prime Minister Narendra Modi received the 2019 Global Goalkeeper Award for Swachh Bharat Mission from Bill and Melinda Gates Foundation.

Global Goalkeeper Award is a "special recognition" by the Bill and Melinda Gates Foundation. The award celebrates a political leader who has "demonstrated their commitment to the Global Goals through impactful work in their country and/or globally."

Source: <https://www.livemint.com/news/india/pm-narendra-modi-receives-global-goalkeeper-award-for-swachh-bharat-mission-dedicates-it-to-130-cr-indians-1569377162898.html>

**Q.4) Which of the following statements is/are correct?**

1. Article 35 of the UN Charter says that any member of the UN may take a dispute to the Security Council or General Assembly, if the parties to a dispute that has the potential for endangering international peace are not able to resolve the matter through negotiations between them.
2. Article 51 of the UN Charter says that a UN member has the "inherent right of individual or collective self-defence" if attacked, "till such time that the Security Council has taken measures necessary to maintain international peace and security".

Select the correct statements

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

**Q.4) Solution (c)**

**Article 35**

- Articles 33-38 occur in Chapter 6 titled "Pacific Settlement of Disputes". These six Articles lay out that if the parties to a dispute that has the potential for endangering international peace and security are not able to resolve the matter through negotiations between them, or by any other peaceful means, or with the help of a "regional agency", the Security Council may step in, with or without the invitation of one or another of the involved parties, and recommend "appropriate procedures or methods of recommendation". Specifically, Article 35 only says that any member of the UN may take a dispute to the Security Council or General Assembly.

**Article 51**

- This Article occurs in Chapter 7 titled "Action With Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression". The chapter assumes that the Security Council is already seized of the situation.
- Article 51 essentially says that a UN member has the "inherent right of individual or collective self-defence" if attacked, "till such time that the Security Council has taken measures necessary to maintain international peace and security". It says that exercise of this right must be immediately reported to the Security Council by the member, and "shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security".

Source: <https://indianexpress.com/article/explained/amit-shah-jawaharlal-nehru-pakistan-occupied-kashmir-6025723/>

**Q.5) Which of the following statements is/are correct?**

1. Methane can be synthesised with water and carbon dioxide in space.
2. Methane burns on its own upon coming in contact with oxygen.

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### Select the correct statements

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

### Q.5) Solution (a)

ISRO, is developing methane-powered rocket engines. Methane, which can be synthesised with water and carbon dioxide in space, is often described as the space fuel of the future. ISRO is developing two 'LOx methane' engines (liquid oxygen oxidiser and methane fuel) engines.

One of the two projects is trying to convert the existing cryogenic engine, which uses liquid hydrogen for fuel, into a LOx methane engine. The other is a smaller engine of 3 tonnes thrust, which will feature an electric motor.

ISRO currently prefers to use a fuel called Unsymmetrical Di-Methyl Hydrazine, along with Nitrogen tetroxide for oxidiser, in its liquid fuel (Vikas) engines, which are used in the lower stages of its rockets, PSLV and GSLV. This fuel, like all hydrazine-based fuels, is said to be highly toxic and cancer-causing. Globally, governments are keen on banning hydrazine. Besides, methane beats hydrazine on every other count, too. Apart from being non-toxic, it has a higher specific impulse (which means one kg of the gas can lift one kg of mass for a longer time), it is easy to store, does not leave a residue upon burning, less bulky, and, importantly, can be synthesised up in space.

For example, Mars has both water on its land and water in its atmosphere — fuel for a return journey from Mars can be produced right there with these. But on the flipside, methane-fired engines need an igniter to start the fire. Hydrazine fuels are hypergolic, which means they start burning on their own upon coming in contact with oxygen.

Source: <https://www.thehindubusinessline.com/news/national/isro-is-developing-a-methane-powered-rocket-engine/article29483292.ece>