

MIXED QUESTIONS

Directions (1-9): Read the following passage carefully and answer the questions.

There are several reasons to **(A) symbolic** the successful launch of the Axiom-4 (Ax-4) mission. First, it marks the beginning of India's human spaceflight. Though the mission was undertaken on a commercial flight operated by Houston-based private company Axiom Space, it is a collaboration between NASA, Indian Space Research Organisation (ISRO), European Space Agency (ESA), and SpaceX. Group Captain Shubhanshu Shukla, who's piloting the mission, has become only the second Indian to travel to space. And when the spacecraft docked at the International Space Station (ISS) on Thursday, he became the first ever Indian to visit NASA's

orbiting laboratory. Shukla's trip comes 41 years after cosmonaut Rakesh Sharma became the first Indian to fly to space aboard a Russian Soyuz in 1984. But Sharma's achievement was largely **(B) impacts** and of inspirational value as India did not at the time have the

infrastructure and the capability to make productive use of his learnings. In comparison, Shukla's trip will have huge practical implications. The experience Shukla will gain during his 14-day mission will help India's space efforts immensely. Axiom-4 has scheduled several experiments, the results of which would help ISRO execute its own manned spaceflight, Gaganyaan, two years later. ISRO's next big project, after Gaganyaan, is to build its own space station. That is a massive infrastructural endeavour. Shukla would be in a position to offer critical inputs here as well. There are at least seven experiments, relating to impacts on human health and growth of crops in microgravity environments, which ISRO has designed for the mission. One of the experiments relates to the study of the growth rate, cellular responses, and

biochemical activity of cyanobacteria — a group of bacteria that are known to produce energy through photosynthesis just like plants. There is growing interest in studying this microorganism as it may offer the key to deep space.

exploration and long-term presence of humans on the moon or other planets: a self-sustaining system for oxygen production without need for resupply from earth

Another experiment would look at the **(C) celebrate** of spaceflight on germination and growth of sprouts in space. There is another to study the impact on crop seeds as well. Then there is an experiment that will focus on the growth, metabolism, and genetic activity of microalgae, which are being studied for its potential as a sustained oxygen generation system as well as a food source in space. The zero-gravity conditions in space offer a unique setting for studies that are extremely difficult to do on Earth. For example, one of ISRO's experiments relates to the study of muscle behaviour. Muscle degradation can be because of natural causes; it

can also be affected by a person's weight. On Earth, it is very difficult to decouple these two causes because of gravity. Space's zero-gravity environment gets rid of the

weight factor and allows the study of changes in muscles purely due to natural reasons, which can lead to breakthroughs in the understanding of human health.

In the last few years, ISRO has carried out a number of important missions that have placed India in a very small group of countries with **cutting-edge** space capabilities.

Thus, Axom-4 is a/ an __ **(A)** __ forward. It's not just about sending an astronaut to space; it's about building a foundation for future space exploration and technological innovation. The mission's scientific objectives have the potential to benefit humanity.

Question 1:

The given passage has a **blank (A)** that can be filled with the following options. Choose the one that fits best to make the sentence coherent:

“Thus, Axom-4 is a/ an _____(A)_____ forward. It’s not just about sending an astronaut to space; it’s about building a foundation for future space exploration and technological innovation. The mission’s scientific objectives have the potential to benefit humanity.”

I. regression

II. giant leap

III. stepping stone

(a) Only I

(b) Both I and III

(c) Only II

(d) Both II and III

(e) All of I, II, and III

Question 2:

In the above passage, three words are highlighted and marked as A, B, and C, which may or may not be in their correct positions. You have to choose the correct option below to arrange the words coherently.

- (a) BAC
- (b) CBA
- (c) BCA
- (d) CAB
- (e) No arrangement required

Question 3:

What does the author primarily seek to convey through the passage?

- I. The Ax-4 mission marks India's independent debut in human spaceflight.
- II. The mission supports ISRO's scientific ambitions through meaningful experimentation.
- III. India's astronaut will play a key symbolic role in international diplomacy.

- (a) Only I
- (b) Both I and II
- (c) Only II
- (d) Both II and III
- (e) None of the above

Question 4:

Which of the following cannot be inferred from the passage?

- I. Microalgae and cyanobacteria may assist in long-duration space missions.
- II. The Gaganyaan mission has already been launched by ISRO.
- III. Zero gravity provides an experimental advantage over terrestrial settings.

- (a) Only II
- (b) Only III
- (c) Both II and III
- (d) Both I and II
- (e) None of the above

Question 5:

Based on the passage, which of the following is most accurate?

- (a) Rakesh Sharma contributed to scientific experimentation aboard ISS.
- (b) ISRO designed experiments to support Gaganyaan based on earlier astronaut data.
- (c) The Ax-4 mission includes multiple plant and human biology-related experiments.

(d) ISRO's experiments have little to do with sustainability in space.

(e) None of the above

Question 6:

Choose the word that best describes the tone of the author in the given passage.

- (a) Expository and admiring
- (b) Neutral and informative
- (c) Disparaging and sarcastic
- (d) Apathetic and neutral
- (e) Humorous and light-hearted.

Question 7:

Which of the following statements is “**TRUE**” based on the passage?

I. Group Captain Shukla is the first Indian to visit the International Space Station.

II. Rakesh Sharma’s mission laid the technical groundwork for India’s current space program.

III. One experiment aboard Ax-4 is related to muscle degeneration in microgravity.

(a) Only I

(b) Both I and III

(c) Only II

(d) All I, II, and III

(e) Both II and III

Question 8:

Why is cyanobacteria being studied in the Ax-4 mission?

- (a) It can act as a high-protein space food supplement.
- (b) It holds potential as a source of nuclear energy.
- (c) It might enable oxygen production in long-term space habitats.

(d) It is linked with shielding astronauts from radiation.

(e) None of the above

In the last few years, ISRO has carried out a number of important missions that have placed India in a very small group of countries with **cutting-edge** space capabilities.

Question 9:

Which of the following options is the most appropriate **Synonym(s)** of the word “**cutting-edge**”, as used in the passage?

I. sprouting

II. obsolete

III. pioneering

(a) Only I

(b) Only III

(c) Only II

(d) Both I and III

(e) Both I and II

Directions (10-14): The passage given below contains some blanks wherein the words have been removed. Find the word from the given options that is suitable for each blank and mark that as your answer.

For many clued-in on technology directions, Gartner's top strategic technology trends serve as a barometer. Not surprisingly, the very first trend they highlight for 2025 is agentic artificial intelligence (AI). In their words, "Agentic AI has the potential to perform as a highly ____**(A)**____ teammate by providing insights from derivative events that are often not visible to human teammates." To elaborate, with the ubiquitous use of generative AI, the first level was ____**(B)**____ querying, wherein natural language processing (NLP) is used for replies. Now, we are witnessing the transition to the next level — solving more ____**(C)**____ problems autonomously. And this, also known as agentic AI, involves deep, iterative reasoning and multiple steps. For instance, a major Indian bank has announced its intent to use agentic AI for customer service automation. The system, going beyond straightforward question answering, could potentially check the outstanding balance and recommend which accounts to pay off, and then complete transactions based on

the client's response. Or it could pertain to autonomous fraud detection, triggered by an anomalous login or atypical behaviours, resulting in an instant customer alert, or rapid ____**(D)**____ like freezing the account. This could involve behavioural biometrics and ____**(E)**____ forecasts leveraging financial crime databases.

In their words, “Agentic AI has the potential to perform as a highly ____ **(A)** _____ teammate by providing insights from derivative events that are often not visible to human teammates.”

Question 10:

Which of the following best fits in **Option A**?

I. adept

II. competent

III. proficient

(a) Only III

(b) Both I and III

(c) All of I, II and III

(d) Both II and III

(e) None of the above

To elaborate, with the ubiquitous use of generative AI, the first level was _____**(B)**_____ querying, wherein natural language processing (NLP) is used for replies.

Question 11:

Which of the following best fits in **Option B**?

- I. rudimentary
- II. cohesive
- III. dousing

- (a) Only I
- (b) Both I and III
- (c) Only III
- (d) Both I and II
- (e) None of the above

Now, we are witnessing the transition to the next level — solving more _____**(C)**_____ problems autonomously.

Question 12:

Which of the following best fits in **Option C**?

I. subtle

II. intricate

III. nuanced

(a) Only II

(b) Both I and II

(c) Both II and III

(d) All of I, II and III

(e) None of the above

Or it could pertain to autonomous fraud detection, triggered by an anomalous login or atypical behaviours, resulting in an instant customer alert, or rapid _____**(D)**_____ like freezing the account.

Question 13:

Which of the following best fits in **Option D**?

- I. remediation
- II. endurance
- III. rectification

- (a) Only I
- (b) Both I and III
- (c) Only II
- (d) Both II and III
- (e) None of the above

This could involve behavioural biometrics and ____**(E)**____ forecasts leveraging financial crime databases.

Question 14:

Which of the following best fits in **Option E**?

- I. prognostic
- II. predictive
- III. cursory

- (a) Both II and III
- (b) Both I and II
- (c) Only III
- (d) All I, II and III
- (e) None of the above

Directions (15-19): In the following questions, a set of sentences is given and are jumbled. You are required to rearrange the given sentences properly to form a meaningful paragraph. Answer the following questions based on the rearranged sequence.

P. The update follows a £24 million investment in security upgrades at the airport, which included the installation of eight advanced 3D scanners and two additional lanes.

Q. In addition to this change, travellers are no longer required to take out large electronic devices such as iPads, tablets, or laptops during security checks.

R. Passengers can now carry liquid containers of up to two litres through security without needing to remove them from their bags.

S. These new measures not only offer greater convenience and flexibility for passengers but also enhance safety standards through the use of cutting-edge 3D scanning technology.

T. Edinburgh Airport has become the first in Scotland to lift the long-standing 100ml liquid rule for hand luggage.

Question 15:

Which of the following options is the **SECOND** statement, after the correct rearrangement?

(a) P

(b) S

(c) R

(d) Q

(e) T

Question 16:

Which of the following options is the **FOURTH** statement, after the correct rearrangement?

(a) Q

(b) T

(c) P

(d) R

(e) S

Question 17:

Which of the following options is the **FIRST** statement, after the correct rearrangement?

(a) T

(b) P

(c) R

(d) S

(e) Q

Question 18:

Which of the following options is the **FIFTH (LAST)** statement, after the correct rearrangement?

(a) P

(b) S

(c) R

(d) T

(e) Q

Question 19:

Which of the following options is the **THIRD** statement, after the correct rearrangement?

(a) S

(b) P

(c) T

(d) R

(e) Q

Directions (20-24): In each of the questions, a sentence has been divided into four parts, one of which may contain an error. Identify that fragment and mark it as your answer. Mark (E) if the sentence contains no error.

Question 20:

Despite the growing emphasis on financial literacy, some people experience (A)/ psychological barriers that prevent them from taking control of its (B)/ finances, including anxiety about money, a fear of making mistakes, (C)/ or a learned helplessness developed from repeated economic hardship. (D)

- (a) A
- (b) B
- (c) C
- (d) D
- (e) No error

Question 21:

Experts have risen concerns that the massive increase (A)/ in spending on defense over the past three years has come (B)/ at the expense of crucial sectors (C)/ like education, healthcare, and environmental protection. (D)

- (a) A
- (b) B
- (c) C
- (d) D
- (e) No error

Question 22:

The sanctions package announced by (A)/
the EU included a ban on transactions (B)/
related to energy imports from the (C)/
sanctioned country, significantly impacting
its economy. (D)

- (a) A
- (b) B
- (c) C
- (d) D
- (e) No error

Question 23:

In policy debates, economic concerns are (A)/ frequent combined with national security (B)/ arguments to justify (C)/ decisions on trade, technology, and immigration. (D)

(a) A

(b) B

(c) C

(d) D

(e) No error

Question 24:

One of the concern voiced by educators is (A)/ that the shift to remote learning may widen (B)/ the achievement gap between (C)/ students with access to technology and those without. (D)

- (a) A
- (b) B
- (c) C
- (d) D
- (e) No error

Directions (25-27): Select the starter/connectors from the given options which can be used to form a single sentence from the two sentences given below, implying the same meaning as expressed in the statement sentences.

Question 25:

(i) The government launched an ambitious digital literacy program targeting rural areas.

(ii) Millions of citizens were trained in using essential digital tools.

(a) However

(b) Even though

(c) Consequently

(d) Moreover

(e) None of the above

Question 26:

- (i) The startup raised significant funding in its first round.
- (ii) It still struggled to achieve market penetration.

- (a) Similarly
- (b) Nevertheless
- (c) Also
- (d) Therefore
- (e) None of the above

Question 27:

- (i) The company launched a sustainability initiative to reduce its carbon footprint.
- (ii) It started sourcing materials from eco-friendly suppliers.

- (a) Otherwise
- (b) On the contrary
- (c) Additionally
- (d) Despite
- (e) None of the above

Direction (28-30): In the questions given below, parts of sentences have been divided and put in Columns I and II. You are required to match the parts given in Column I to that of those in Column II to make grammatically correct sentences and mark the option containing the best combinations as your answer.

| Column 1 | Column 2 | Question 28: |
|---|--|-----------------------|
| (A) The new strategic framework adopted at the summit calls on member states to invest in their security not only | (D) its spending on vital social programs like healthcare, education, and rural development. | (a) A-E, B-D and C-F |
| (B) The government has refused to increase defense allocations, arguing that doing so would compromise | (E) as more individuals retire early while contributions from the working-age population stagnate. | (b) A-E, B-F and C-D |
| (C) Policy delays in implementing retirement age reforms are essentially leading to even higher pension spending, | (F) through military spending, but also by strengthening critical infrastructure, countering misinformation, and boosting energy resilience. | (c) A-F, B-D and C-E |
| | | (d) A-F, B-E and C-D |
| | | (e) None of the above |

| Column 1 | Column 2 | Question 29: |
|---|--|---|
| (A) The region's freshwater supply is largely replenished by snow and glacier melt, meaning even slight | (D) everything possible to achieve universal digital literacy, especially in underserved and remote areas. | (a) A-E, B-F and C-D (b) A-D, B-F and C-E (c) A-D, B-E and C-F (d) A-E, B-D and C-F (e) None of the above |
| (B) If we are serious about ensuring equitable access to education, we need to do | (E) variations in seasonal temperatures can significantly impact water availability for agriculture and drinking purposes. | |
| (C) Healthcare systems need to do everything possible to achieve early detection and timely | (F) treatment of chronic diseases, which are rapidly becoming the leading cause of death worldwide. | |

| Column 1 | Column 2 | Question 30: |
|---|--|--|
| (A) Mounting public outrage over environmental violations by large corporations | (D) but the government said last month it plans to revise policies to strengthen oversight and environmental safeguards. | (a) A-F, B-D and C-E (b) A-E, B-F and C-D (c) A-D, B-E and C-F |
| (B) Although it presents itself as a land of opportunity, the nation has a long history of | (E) has prompted the creation of a new task force aimed at tightening enforcement of pollution controls and revising outdated regulations. | (d) A-E, B-D and C-F (e) None of the above |
| (C) Many environmental activists have expressed concern over the lack of regulation in the mining sector, | (F) strict immigration policies that have, at various times, targeted specific ethnicities or nationalities through quotas and exclusions. | |