

**ENGLISH LANGUAGE & LOGICAL REASONING**

1. **(B)** The passage explains that lions expanded into non-forest, low-quality habitats like wasteland and farmland, which are unsuitable for sustaining large populations. Hence range expansion did not translate into equivalent population growth.
2. **(C)** The passage emphasises rescues, medical care, management, and dependence on social tolerance. Therefore, Gujarat combines **active intervention + community acceptance**.
3. **(B)** The author notes lions are “not wary of people” and may display unprovoked aggression, making coexistence unstable. This reflects reduced fear due to familiarity.
4. **(B)** Scientific population estimates normally include margin of error (uncertainty). The article highlights the lack of such estimates.
5. **(B)** The author’s main worry is that without **large, high-quality forest habitats**, future lion populations will face conflict and disease pressure — not immediate relocation or hostility.
6. **(B)** Range growth > population growth suggests **habitat expansion alone is insufficient** for proportional increase — supporting the argument.
7. **(C)** Higher mortality in non-forest areas due to wells, electrocution, etc. strongly supports unsuitability.
8. **(B)** The argument depends on the assumption that **frequent exposure to humans alters lion behaviour**, making them more aggressive.
9. **(D)** Evidence that lions can thrive after relocation elsewhere undermines Gujarat’s stance that relocation is unnecessary.
10. **(A)** The author argues population growth without adequate habitat = future risks (conflict, disease). This counter-argument matches perfectly.

By Ready For Exam

**Legal Reasoning**

**11. Ans. (c)** As per the new law, the online platforms are liable in case of delivery failure. If it was pre-amendment time then (b) would have been the right option. Therefore, option (c) is the most appropriate answer.

**12. Ans. (d)** As per the new act, cases can be filed against the sellers in the city where the consumer is situated. All the other options are out of scope. Hence, the correct answer is option (d).

**13. Ans. (d)** Irrespective of the size of the establishment, every seller is entrusted to provide safe service/ products to the consumers. All the other options are out of scope. Hence, option (d) is the right answer.

**14. Ans. (c)** A consumer doesn't need to personally sue to file a complaint against a seller who is violating the law. Moreover, the passage is silent on a consumer's right regarding the price of a product. Hence, the correct answer is option (c).

**15. Ans. (c)** As per the new law, video conferencing of cases is permissible to eliminate the need of physical hearings or transfer petitions filed on grounds of jurisdiction or convenience of one party over another. Hence, the correct answer is option (c).

**16. Ans. (c)** Although the information was sensitive and non- public but Rachna eventually did not benefit anything from this, which is an essential requirement of insider trading. An act will be called insider trading if such information is provided to a third party who benefits from his investment activities post receiving such information.

**17. Ans. (a)** Although the information was sensitive and non- public and earlier Rachna did not benefit anything from this, but now she did benefit which is an essential requirement of insider trading. An act will be called insider trading if such information is provided to a third party who benefits from his investment activities post receiving such information.

**18. Ans. (a)** Mr. Aaroohi earlier managed the work of new business and had complete information about it therefore was connected to it and acquired it was the virtue of this connection. Thus, option (a) is right.

**19. Ans. (d)** An act will be called insider trading if such information is provided to a third party who benefits from his investment activities post receiving such information. In generic terms, insider trading means buying and selling of stocks and shares based on significant information which is publicly not available. This information results in investment in the same company which gives an unfair advantage and benefitted the person.

**20. Ans. (a)** The information was made public after Meghana had invested relying on it, therefore when she invested it was still sensitive and gave her an unfair advantage. Therefore, option (a) is the most appropriate answer.

**General Knowledge**

**21 → D**

All statements are correct.

- $-18^{\circ}\text{C}$  baseline & role of water vapor: True.

**22 → D**

- All statements correct (high GWP, ~12-year lifetime, wetlands major emitter).

**23 → C**

- $\text{N}_2\text{O}$  is emitted from agriculture and is ozone-depleting.
- BUT methane has higher GWP than  $\text{N}_2\text{O}$  → so statement 2 is incorrect.

**24 → B**

- Aerosols can cause cooling → Statement 2 wrong.
- 1 and 3 correct.

**25 → B**

Anthropogenic:  $\text{CO}_2$ ,  $\text{CH}_4$ ,  $\text{SF}_6$

Water vapor not included.

**26 → A**

Statement 3 wrong: ozone differs by altitude.

**27 → D**

$\text{SF}_6$  has the highest lifetime (~3,200 years).

**28 → D**

All three are correct.

**29 → A**

Aircraft contrails contribute mostly to radiative forcing, not  $\text{CO}_2$

**30 → B**

- Ice-albedo is POSITIVE feedback → so statement 2 incorrect.

**31. Answer: A (1 and 3 only)**

**Explanation:**

- **Statement 1:** *LVM3 uses the CE-20 engine in its upper stage* — This is **correct**. The passage clearly states that the C25 upper stage is powered by the CE-20 cryogenic engine.
- **Statement 2:** *Can carry more than 10 tonnes to LEO* — **Incorrect**. LVM3 can carry **up to 8 tonnes** to LEO as per passage and external ISRO data.
- **Statement 3:** *Uses two solid boosters* — **Correct**, supported by the passage which mentions S200 twin boosters.

**32. Answer: B (Only two pairs are correct)**

**Explanation:**

- **Chandrayaan-2** — Launched using LVM3 ✓ (Given)
- **OneWeb Satellites** — Launched using LVM3 ✓ (Given)
- **Mars Orbiter Mission (Mangalyaan)** — Launched using PSLV, NOT LVM3 ✗

Thus only **two** pairs match.

**33. Answer: D (Both B and C)**

**Explanation:**

- **S200** — Solid boosters (not liquid).
- **L110** — Uses liquid propellants (passage states: liquid core stage).
- **C25** — Cryogenic, uses liquid oxygen + liquid hydrogen.

Thus **both L110 and C25** use liquid propellants.

**34. Answer: B (Cryogenic)**

**Explanation:**

The CE-20 engine is a **cryogenic engine**, functioning with liquid hydrogen and liquid oxygen.

**35. Answer: B (Safe crew module delivery to LEO)**

**Explanation:**

The passage explains that LVM3 is essential for **Gaganyaan** because:

- It can safely deliver **crew modules to low earth orbit**.
- It has higher safety margins required for human missions.

**36. Answer: C (Deploying deep-sea research modules)**

**Explanation:**

The passage does NOT mention anything about deep-sea research modules.  
Other options are mentioned:

- Heavy satellites
- Human spaceflight
- Commercial launches

**37. Answer: B (Mega constellation deployment)**

**Explanation:**

The OneWeb missions (36 satellites each) used LVM3 for **large LEO constellation deployment**, placing India in global commercial competition.

**38. Answer: A (Eliminating dependence on foreign heavy-lift launchers)**

**Explanation:**

The passage states India earlier relied on **Ariane-5** for heavy communication satellites; LVM3 ended that dependency.

**39. Answer: C (S200)**

**Explanation:**

The S200 boosters are:

- Among the **largest solid rocket boosters in the world**.
- This is stated in the passage.

**40. Answer: C (NGLV)**

**Explanation:**

The passage states that LVM3 will remain India's workhorse until the **Next Generation Launch Vehicle (NGLV)** becomes operational.

## Quantitative Technique

### Passage-I

**Explanation :**

COFFEE	P	Q	R
Espresso	240	420	440
Cappuccino	101	770	90
Lette	150	168	504

41. A,  $(770 - 680 = 90)$

42. C,  $67 \times 100 / 101 = 66.33\%, = 66\%$

43. A, 101

44. D, 1358

45. A  $90: 150 = 3:5$

46. A

47. C

48. B

49. D

50. D

