

Please find below the snapshots for the same:

<b>Row Labels</b>	<b>JCECEB ANM GNM Set 7 – Batch 2 – 11-Dec-21</b>
Change of Key	0
Multiple Answer	0
No Change	6
Nullified	0
<b>Grand Total (Unique Questions Claimed)</b>	<b>6</b>

1) Why stars twinkle in the night sky?

- A) Due to refraction
- B) Due to dispersion
- C) Due to repulsion
- D) Due to reflection

1) रात को आकाश में तारे क्यों टिमटिमाते हैं?

- A) अपवर्तन के कारण
- B) परिक्षेपण के कारण
- C) प्रतिकर्षण के कारण
- D) परावर्तन के कारण

Domain Name	Batch	Question No
JCECEB_ANM or GNM	Batch 2	Q2822607

Number of Claims: 1

Declared Answer Key: A

Candidate Claim: A

Final Answer: A

**Explanation:**

The framing of the question and the answer options is appropriate to arrive at the correct answer. Since, there is no discrepancy found between the claimed answer option and the declared answer key, there is no change in the answer key.

**Conclusion:**

The final answer is option A. There is no change in the answer key.

2) Nuclear reactor works on the principle of

- A) Nuclear diffusion
- B) Nuclear fermentation
- C) Nuclear fission**
- D) Nuclear fusion

2) नाभिकीय रिएक्टर निम्नलिखित में से किस सिद्धांत पर कार्य करता है?

- A) नाभिकीय विसरण
- B) नाभिकीय किण्वन
- C) नाभिकीय विखंडन**
- D) नाभिकीय संलयन

Domain Name	Batch	Question No
JCECEB_ANM or GNM	Batch 2	Q2822605

Number of Claims: 1

Declared Answer Key: C

Candidate Claim: A

Final Answer: C

**Explanation:**

The energy in the reactor of a nuclear power station is produced by the process of nuclear fission

**Nuclear reactors operate on the principle of nuclear fission, the process in which a heavy atomic nucleus splits into two smaller fragments.**

**Reference:**

<https://books.google.co.in/books?id=hANKCgAAQBAJ&printsec=frontcover&dq=nuclear+reactor+works+on+the+principle+of&hl=en&sa=X&ved=0ahUKEwiurL6cxPPnAhVcxzgGHRQtAYYQ6AEIMTAB#v=onepage&q=nuclear%20reactor%20works%20on%20the%20principle%20of&f=false>

[https://books.google.co.in/books?id=rWl\\_CwAAQBAJ&printsec=frontcover&dq=nuclear+reactor+works+on+the+principle+of&hl=en&sa=X&ved=0ahUKEwiurL6cxPPnAhVcxzgGHRQtAYYQ6AEIazAI#v=snippet&q=nuclear%20fission&f=false](https://books.google.co.in/books?id=rWl_CwAAQBAJ&printsec=frontcover&dq=nuclear+reactor+works+on+the+principle+of&hl=en&sa=X&ved=0ahUKEwiurL6cxPPnAhVcxzgGHRQtAYYQ6AEIazAI#v=snippet&q=nuclear%20fission&f=false)

<https://www.britannica.com/technology/nuclear-reactor>

**Conclusion:**

The final answer is Option C. There is no change in the answer key.

3) Aliphatic hydrocarbons are

(i) Saturated molecules

(ii) Unsaturated molecules

Choose the CORRECT option from the options given.

A) (ii) only

B) (i) only

**C) both (i) and (ii)**

D) neither (i) nor (ii)

3) ऐलिफेटिक हाइड्रोकार्बन हैं

(i) संतृप्त अणु

(ii) असंतृप्त अणु

दिए गए विकल्पों में से **सही** विकल्प का चयन कीजिए।

A) केवल (ii)

B) केवल (i)

**C) (i) और (ii) दोनों**

D) न ही (i) और न ही (ii)

Domain Name	Batch	Question No
JCECEB_ANM or GNM	Batch 2	Q2822140

Number of Claims: 2

Declared Answer Key: C

Candidate Claim: B

Final Answer: C

**Explanation:**

Aliphatic hydrocarbons have been classified into saturated and unsaturated hydrocarbons hence include both molecules.

## Saturated and Unsaturated Aliphatic Hydrocarbons

Aliphatic compounds may be saturated or unsaturated. Saturated hydrocarbon contains mainly of **alkanes** which are open chain hydrocarbons containing carbon-carbon single bond. Most of the time the bond exists in the form of a covalent bond. These compounds are inert in nature and do not readily react with acid, bases or other reagents.

Hydrocarbon molecules with at least one double bond are called unsaturated meaning that more hydrogen atoms can be added to these molecules. Such molecules are much more reactive than saturated ones. This is because the double bond is less than twice as strong as a single bond., making it easier to break one part of the double bond apart than it would be to break a single bond.

**1. Aliphatic or Open Chain compounds:** Organic compounds in which the carbon atoms are linked to each other to form open chains (saturated or branched) are known as *aliphatic or open chain compounds*. These may be either saturated or unsaturated. These compounds are also known as *acyclic* compound. These hydrocarbons were found from fats, that's why they are also known as aliphatic compounds. Methane is known as the originator of all aliphatic hydrocarbons. Some other compounds are :

**Reference:**

<https://byjus.com/chemistry/aliphatic-hydrocarbons/#saturated-and-unsaturated-aliphatic-hydrocarbons>

[https://www.google.co.in/books/edition/Study\\_Material\\_Based\\_On\\_NCERT\\_Science\\_CI/6TFREAAAQBAJ?hl=en&gbpv=1&dq=Aliphatic+hydrocarbons+classified+into+saturated+and+unsaturated+hydrocarbons+ncert&pg=PA54&printsec=frontcover](https://www.google.co.in/books/edition/Study_Material_Based_On_NCERT_Science_CI/6TFREAAAQBAJ?hl=en&gbpv=1&dq=Aliphatic+hydrocarbons+classified+into+saturated+and+unsaturated+hydrocarbons+ncert&pg=PA54&printsec=frontcover)

**Conclusion:**

The final answer is option C there is no change in the answer key.

4) If  $\alpha$  and  $\beta$  are the roots of the equation  $x^2 + px + q = 0$  then the value of  $(\alpha^2/\beta) + (\beta^2/\alpha)$  is

- A)  $(p^2 - 2pq)/q$   
 B)  $(p^3 - 3pq)/q$   
**C)  $(3pq - p^3)/q$**   
 D)  $(p^2 + 2pq)/q$

4) यदि समीकरण  $x^2 + px + q = 0$  के मूल  $\alpha$  और  $\beta$  हैं, तो तब  $(\alpha^2/\beta) + (\beta^2/\alpha)$  का मान है

- A)  $(p^2 - 2pq)/q$   
 B)  $(p^3 - 3pq)/q$   
**C)  $(3pq - p^3)/q$**   
 D)  $(p^2 + 2pq)/q$

Domain Name	Batch	Question No
JCECEB_ANM or GNM	Batch 2	Q2822344

Number of Claims: 1

Declared Answer Key: C

Candidate Claim: A

Final Answer: C

**Explanation:**

Handwritten derivation:

$$x^2 + px + q = 0$$

$$\alpha + \beta = -p \quad \alpha\beta = q$$

$$\frac{\alpha^2}{\beta} + \frac{\beta^2}{\alpha} = \left( \frac{\alpha^3 + \beta^3}{\alpha\beta} \right)$$

$$(\alpha + \beta)^3 = \alpha^3 + \beta^3 + 3\alpha\beta(\alpha + \beta)$$

$$-p^3 = \alpha^3 + \beta^3 + 3q(-p)$$

$$\alpha^3 + \beta^3 = 3pq - p^3$$

$$\left( \frac{\alpha^3 + \beta^3}{\alpha\beta} \right) = \frac{3pq - p^3}{q}$$

**Conclusion:**

The final answer is option C. There is no change in the answer key.

5) Fill in the blank with the correct pronoun:

I lost the pen \_\_\_\_\_ I bought yesterday.

- A) who
- B) where
- C) which**
- D) whom

Domain Name	Batch	Question No
JCECEB_ANM or GNM	Batch 2	Q2819225

Number of Claims: 1

Declared Answer Key: C

Candidate Claim: Wrong Framing of Question,

Final Answer: C

**Explanation:**

The question has been framed correctly and candidate should not face any difficulty in arriving at the correct answer.

**Conclusion:**

The final answer is option C. There is no change in the answer key.

6) Identify the meaning of the underlined phrase:

The outing had been planned, but it did not come off.

- A) go well
- B) arrive on time
- C) become dislodged
- D) take place**

Domain Name	Batch	Question No
JCECEB_ANM or GNM	Batch 2	Q2819223

Number of Claims: 7

Declared Answer Key: D

Candidate Claim: A,B, None of These

Final Answer: D

**Explanation:**

As per the given explanation, option D is correct as it means something did not happen, occur, as in The trip came off on schedule.

The phrase means take place.

**Reference:**

<https://idioms.thefreedictionary.com/come+off>

**Conclusion:**

The final answer is option D. There is no change in the answer key.