NDA-CDS 2 2024

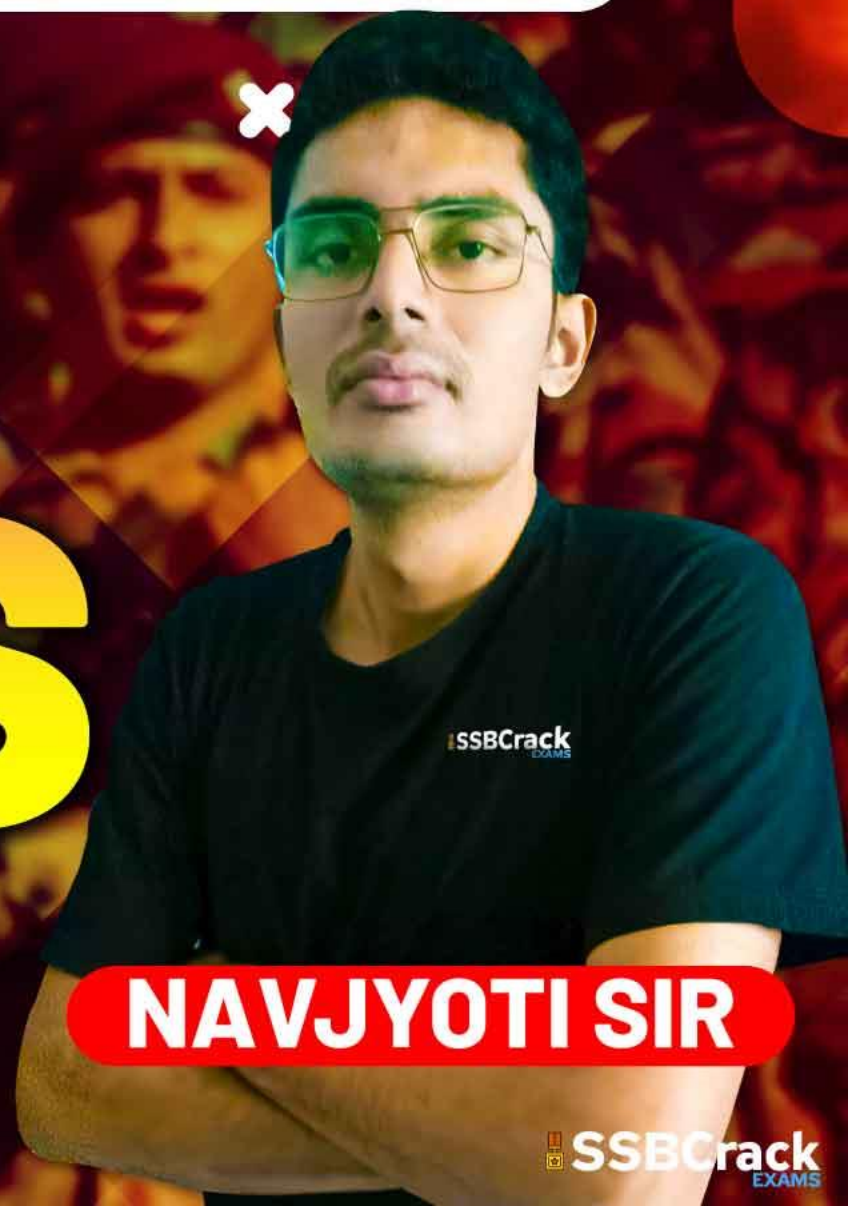
GS

LIVE

PHYSICS

REVISION

CLASS 7



NAVJYOTI SIR

SSBCrack EXAMS

13 August 2024 Live Classes Schedule

8:00AM	13 AUGUST 2024 DAILY CURRENT AFFAIRS	RUBY MA'AM
9:00AM	13 AUGUST 2024 DAILY DEFENCE UPDATES	DIVYANSHU SIR

SSB INTERVIEW LIVE CLASSES

9:00AM	OVERVIEW OF GROUP TASKS	ANURADHA MA'AM

NDA 2 2024 LIVE CLASSES

11:00AM	GK - GEOGRAPHY REVISION - CLASS 1	RUBY MA'AM
12:00PM	PHYSICS REVISION - CLASS 7	NAVJYOTI SIR
1:00PM	MATHS REVISION - CLASS 7	NAVJYOTI SIR
2:00PM	BIOLOGY REVISION - CLASS 7	SHIVANGI MA'AM
5:30PM	ENGLISH - REVISION - CLASS 3	ANURADHA MA'AM

CDS 2 2024 LIVE CLASSES

11:00AM	GK - GEOGRAPHY REVISION - CLASS 1	RUBY MA'AM
12:00PM	PHYSICS REVISION - CLASS 7	NAVJYOTI SIR
2:00PM	BIOLOGY REVISION - CLASS 7	SHIVANGI MA'AM
3:00PM	MATHS REVISION - CLASS 7	NAVJYOTI SIR
5:30PM	ENGLISH - REVISION - CLASS 3	ANURADHA MA'AM

SSBCrack EXAMS

REVISION TOPICS :

- **Miscellaneous Topics**

Nucleus –

Heat Transfer –

1. Which one of the following energy is stored in the links between the atoms ?

(a) Nuclear energy

(b) Chemical energy

(c) Potential energy

(d) Thermal energy

bonds

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   (a) Nuclear energy

   (b) Chemical energy

   (c) Potential energy

   (d) Thermal energy

ANSWER : C

2. Which of the following statements about latent heat for a given substance is/are correct ?

1. It is fixed at a given temperature.
2. It depends upon the temperature and volume.
3. It is independent of temperature and volume.
4. It depends on the temperature but independent of volume.

Select the correct answer using the code given below :

(a) 2

(b) 1 and 3

(c) 4 only

(d) 1 and 4

$H = mL$

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Select the correct answer using the code given below :

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(b) 1 and 3

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(d) 1 and 4

ANSWER : D

3. Thermal capacity of a body depends on the

(a) mass of the body only

(b) mass and shape of the body only

(c) density of the body

(d) mass, shape and temperature of the body

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(d) mass, shape and temperature of the body

ANSWER : A

4. In which of the following phenomena do heat waves travel along a straight line with the speed of light ?

(a) Thermal conduction

(b) Thermal convection

(c) Thermal radiation

(d) Both, thermal conduction and radiation

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(b) Thermal convection

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ANSWER : C

5. Which of the following statements about specific heat of a body is/are correct ?

1. It depends upon mass and shape of the body
2. It is independent of mass and shape of the body
3. It depends only upon the temperature of the body

Select the correct answer using the code given below :

(a) 1 only

(b) 2 and 3

(c) 1 and 3

(d) 2 only

H = mass x specific heat (s) x change in temp.

$$s = \frac{H}{m(\Delta T)}$$

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2. It is independent of mass and shape of the body
3. It depends only upon the temperature of the body

Select the correct answer using the code given below :

(a) 1 only

(b) 2 and 3

(c) 1 and 3

(d) 2 only

ANSWER : D

The hydrogen bomb and the uranium bomb are based, respectively on

(a) nuclear fusion and fission

(b) fission and thermonuclear fusion

(c) geothermal fission and fusion

(d) geothermal fusion and fission

parts of nuclear reactor — (coolant, control rods) and functions

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(c) geothermal fission and fusion

(d) geothermal fusion and fission

Answer: (A)

Consider the following statements about the microphone and the speaker of a mobile phone :

1. The microphone converts sound to a mechanical signal.
2. The microphone converts sound to an electrical signal.
3. The speaker converts a mechanical signal to sound.
4. The speaker converts an electrical signal to sound.

Which of the statements given above are correct?

(a) 1 and 3

(b) 1 and 4

(c) 2 and 3

(d) 2 and 4

Consider the following statements about the microphone and the speaker of a mobile phone :

1. The microphone converts sound to a mechanical signal.
2. The microphone converts sound to an electrical signal.
3. The speaker converts a mechanical signal to sound.
4. The speaker converts an electrical signal to sound.

Which of the statements given above are correct?

(a) 1 and 3

(b) 1 and 4

(c) 2 and 3

(d) 2 and 4

Answer: (D)

3. Nuclear energy is generated by

(a) nuclear fission and its expression was proposed by Einstein.

(b) nuclear fission and its expression was proposed by Rutherford.

(c) nuclear fusion and its expression was proposed by Bohr.

(d) nuclear fusion and its expression was proposed by Heisenberg.

$E = mc^2$

(Einstein)

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(c) nuclear fusion and its expression was proposed by Bohr.

(d) nuclear fusion and its expression was proposed by Heisenberg.

Answer: (A)

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In which of the following phenomena do heat waves travel along a straight line with the speed of light ?

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Answer: (C)

Which of the following represents a relation for 'heat lost = heat gained'?

(a) Principle of thermal equilibrium

(b) Principle of colors

(c) Principle of calorimetry

(d) Principle of vaporization

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(c) Principle of calorimetry

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Answer: (C)