

Resonance[®]
Educating for better tomorrow

JEE

(Main)

PAPER-1 (B.E./B. TECH.)

2023

COMPUTER BASED TEST (CBT)

Memory Based Questions & Solutions

Date: 31 January, 2023 (SHIFT-1) | TIME : (9.00 a.m. to 12.00 p.m)
Duration: 3 Hours | Max. Marks: 300

SUBJECT: PHYSICS

Resonance Eduventures Ltd.
Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005
Ph. No.: +91-744-2777777, 2777700 | FAX No. : +91-022-39167222
To Know more : SMS RESO at 56677 | Website : www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLC024029
Toll Free : 1800 258 5555 | 7340010333 | [facebook.com/resonanceedu](https://www.facebook.com/resonanceedu) | twitter.com/resonanceedu | www.youtube.com/resonanceedu | [blog.resonance.ac.in](https://www.instagram.com/resonance.edu)

This solution was download from Resonance JEE (MAIN) 2023 Solution portal

PART : PHYSICS

1. In He⁺ atom a photon emits due to transition of electron from orbit n = 4 to n = 1. Find corresponding transition in H-atom for same photon.

- (1) 3 → 1 (2) 2 → 1 (3) 6 → 4 (4) 5 → 3

Ans. (2)

Sol. $E = -\frac{13.6\text{eV}}{n^2} z^2$

for helium z = 2

$$\Delta E = -13.6 \left(\frac{1}{4} - \frac{1}{16} \right) 2^2 = 13.6 \left[1 - \frac{1}{4} \right] = 13.6 \left[\frac{3}{4} \right] = 10.2 \text{ eV}$$

For hydrogen

For hydrogen

as for hydrogen, $z = 1$

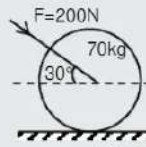
$$\text{For } n = 1 \quad E_1 = -13.6$$

$$\text{For } n = 2 \quad E_2 = \frac{-13.6}{4} = -3.4$$

$$E_1 - E_2 = -10.2 \text{ eV}$$

So corresponding transition is from $n = 2$ to $n = 1$

2. Find the Normal reaction on the given sphere of mass 70 kg :

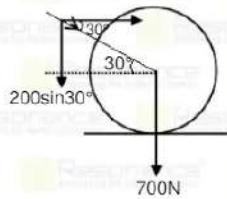


- (1) 800N (2) 1000N (3) 1500N (4) 1400N

Ans. (1)

Sol. $N = 200\sin 30^\circ + 700$

$$N = 800 \text{ Newton}$$



Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph. No.: +91-744-2777777, 2777700 | FAX No. : +91-022-39167222

To Know more : sms RESO at 56677 | Website : www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLC024029

Toll Free : 1800 258 5555 WhatsApp : 7340010333 Facebook : facebook.com/resonanceedu Twitter : twitter.com/resonanceedu YouTube : www.youtube.com/reswatch Blog : blog.resonance.ac.in

This solution was download from Resonance JEE (MAIN) 2023 Solution portal

PAGE # 1

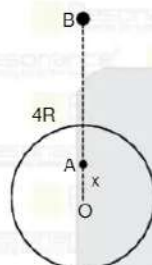
Resonance® Educating for better tomorrow | JEE (MAIN) 2023 | DATE : 31-01-2023 (SHIFT-1) | PAPER-1 | MEMORY BASED | PHYSICS

3. Find the value of x (distance of point from centre inside the earth) if gravity at x is 4 times of gravity at $4R$ (distance from centre of its earth) (R is radius of the earth)

- (1) $R/4$ (2) $R/8$ (3) $2R/3$ (4) $2R/3$

Ans. (1)

Sol.



$$4g_B = g_A$$

$$4 \cdot \frac{GM}{(4R)^2} = \frac{GM}{R^2} r$$

$$\frac{1}{4R^2} = \frac{r}{R^3}$$

$$r = \frac{R}{4}$$

4. In given figure mass is 490 gm, then find number of oscillations in $t = 14\pi$ sec.

(1) 22

(2) 20

(3) 15

(4) 32

Ans. (2)

Sol. $T = 2\pi \sqrt{\frac{M}{K_{eq}}}$

$$= 2\pi \sqrt{\frac{0.49}{4}} = \frac{22}{7} \times 0.7 = 0.7\pi$$

No. of oscillations = $\frac{14\pi}{0.7\pi} = 20$

Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph. No.: +91-744-2777777, 2777700 | FAX No. : +91-022-39167222

To Know more : sms RESO at 56677 | Website: www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLC024029

Toll Free : 1800 258 5555 | 7340010333 | [facebook.com/resonanceedu](https://www.facebook.com/resonanceedu) | [instagram.com/resonanceedu](https://www.instagram.com/resonanceedu) | www.youtube.com/resonance | www.resonance.ac.in | [blog.resonance.ac.in](https://www.resonance.ac.in/blog)

This solution was download from Resonance JEE (MAIN) 2023 Solution portal

PAGE # 2

Resonance Eduventures Ltd. | JEE (MAIN) 2023 | DATE : 31-01-2023 (SHIFT-1) | PAPER-1 | MEMORY BASED | PHYSICS

5. Speed of light in air is v . in another medium It is $V_{mod} = 0.2V$ find refractive index of medium

(1) 7

(2) 12

(3) 8

(4) 5

Ans. (4)

Sol. $\mu_{mod} = \frac{C}{V} = \frac{V}{0.2V} = 5$

$\mu_{mod} = 5$

6. If two batteries are connected in series and then parallel, the current in the circuit is same in both the cases then internal resistance of battery is : (external resistance is R)

(1) R

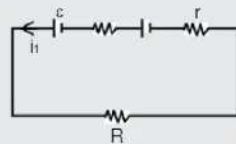
(2) $R/2$

(3) $3R$

(4) $R/4$

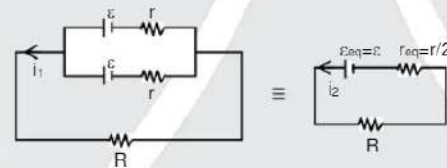
Ans. (1)

Sol. Let r is the internal resistance of battery.
In series



$$i_1 = \frac{2\varepsilon}{2r + R} \quad \dots(1)$$

In parallel



$$\varepsilon_{eq} = \frac{\varepsilon \times r + \varepsilon \times r}{r + r} = \varepsilon, \quad r_{eq} = \frac{r \times r}{r + r} = \frac{r}{2}$$

$$i_2 = \frac{\varepsilon}{R + \frac{r}{2}} = \frac{2\varepsilon}{2R + r} \quad \dots(ii)$$

From equation (1) and (2)

Given $i_1 = i_2$

$$\frac{2\varepsilon}{2r + R} = \frac{2\varepsilon}{2R + r}$$

$$2r + R = 2R + r$$

$$r = R$$

Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph. No.: +91-744-2777777, 2777700 | FAX No. : +91-022-39167222

To Know more : sms RESO at 56677 | Website: www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLC024029

Toll Free : 1800 258 5555 | 7340010333 | [facebook.com/ResonanceEdu](https://www.facebook.com/ResonanceEdu) | twitter.com/ResonanceEdu | www.youtube.com/resonance | blog.resonance.ac.in

This solution was download from Resonance JEE (MAIN) 2023 Solution portal

PAGE # 3



JEE (MAIN) 2023 | DATE : 31-01-2023 (SHIFT-1) | PAPER-1 | MEMORY BASED | PHYSICS

7. On increasing the temperature of a semiconductor :

- (i) Number density of free charge carrier will increase
- (ii) Number density of free charge carrier will decrease
- (iii) Resistivity of the semiconductor will increase
- (iv) Resistivity of the semiconductor will decrease

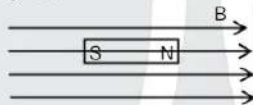
The correct statements will be :

- (1) only (iv) (2) only (i) (3) (i) and (iv) (4) (ii) and (iv)

Ans. (3)

Sol. If the temperature of a semiconductor is increased, number density of free charge carriers increases & resistivity decreases.

8. Find work required to rotate a magnet slowly from $\theta = 0$ to $\theta = 180^\circ$ in an uniform magnetic field B. magnetic moment of magnet is m.



- (1) 2 MB (2) MB (3) 3/2 MB (4) 2/3 MB

Ans. (1)

Sol. $\theta = 0 \rightarrow \theta = 180^\circ$

$$W_{\text{ext}} = U_f - U_i = (-MB \cos 180^\circ) - (-MB \cos 0)$$

$$W_{\text{ext}} = 2MB$$

9. In a LCR alternating series circuit, the reactance of the capacitor and inductor are respectively X_C and X_L then which quantity will be non-dimensional

- (1) RX_C (B) $\frac{R}{X_L X_C}$ (2) $\sqrt{X_C X_L}$ (4) $\frac{R}{\sqrt{X_C X_L}}$

Ans. (4)

Sol. Dimensions of both R & X are same so ratio of both will give dimension less quantity.

10. A lift is moving downwards with $a = 2 \text{ m/s}^2$ & $u = 2 \text{ m/s}$. Find the kinetic energy of lift after it covers a distance of 6 m. Given, mass of lift = 500 kg.

- (1) 2 kJ (2) 4 kJ (3) 7 kJ (4) 9 kJ

Ans. (3)

Sol. $v = 2 \text{ m/s}$ $a = 2 \text{ m/s}^2$

at $d = 6$

$$\text{Velocity} \quad v^2 = u^2 + 2as$$

$$v = \sqrt{4 + 2 \times 2 \times 6}$$

$$v = \sqrt{28}$$

$$\text{Then KE} = \frac{1}{2}mv^2$$

$$= \frac{1}{2} \times 500 \times (\sqrt{28})^2 = \frac{1}{2} \times 500 \times 28 = 500 \times 14 = 7000 \text{ J}$$

$$\text{K.E.} = 7 \text{ kJ}$$

Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph. No.: +91-744-2777777, 2777700 | FAX No. : +91-022-39167222

To Know more : sms RESO at 56677 | Website: www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLC024029

Toll Free : 1800 258 5555 | 7340010333 | [facebook.com/ResonanceEdu](https://www.facebook.com/ResonanceEdu) | twitter.com/ResonanceEdu | www.youtube.com/resonance | blog.resonance.ac.in

This solution was download from Resonance JEE (MAIN) 2023 Solution portal

PAGE # 4

11. Elastic balls each of mass m are falling from a height h and colliding with the surface at the rate of 200 balls/sec. The average force acting on the roof will be :

- (1) $200m\sqrt{2gh}$ (2) $400m\sqrt{2gh}$ (3) $100m\sqrt{2gh}$ (4) $300m\sqrt{2gh}$

Ans. (2)

Sol. Total momentum given to the roof will be = $n(2mV)$

$$F = \frac{dp}{dt} = (2mV) \frac{dn}{dt} = 200$$

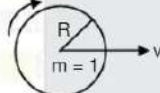
$$F = 2m\sqrt{2gh} \times 200 = 400m\sqrt{2gh}$$

12. A solid sphere of mass = 1kg is rolling (pure) with velocity v . If its kinetic energy is $k = 7 \times 10^{-3}$ Joule. Find v ?

- (1) 15 cm/s (2) 18 cm/s (3) 10 cm/s (4) 5 cm/s

Ans. (3)

Sol.



$$\text{K.E.} = \frac{1}{2}I\omega^2 + \frac{1}{2}mv^2 = \frac{1}{2}\left(\frac{2}{5}\right)MR^2\omega^2 + \frac{1}{2}mv^2$$

$$\text{K.E.} = \frac{1}{5}mv^2 + \frac{1}{2}mv^2 \quad (\because v = R\omega)$$

$$\frac{(2+5)mv^2}{10} = \text{KE} \Rightarrow \frac{7}{10} \times 1 \times v^2 = 7 \times 10^{-3} \Rightarrow v^2 = \sqrt{10^{-2}} \Rightarrow v = \frac{1}{10} \text{ m/s} \Rightarrow v = 10 \text{ cm/s}$$

13. In Amplitude modulation, $A_c = 15 \sin(1000\pi t)$, $A_m = 10 \sin(4\pi t)$. Determine the Range of frequency ?

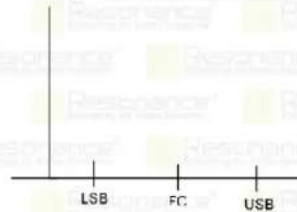
- (1) 178Hz – 195Hz (2) 498Hz – 502Hz (3) 408Hz – 402Hz (4) 200Hz – 302Hz

Ans. (2)

Sol. $\omega_c = 1000\pi$

$$f_c = \frac{\omega_c}{2\pi} = \frac{1000\pi}{2\pi} = 500\text{Hz}$$

$$f_m = \frac{4\pi}{2\pi} = 2\text{Hz}$$



Range = 498Hz – 502Hz

Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph. No.: +91-744-2777777, 2777700 | FAX No. : +91-022-39167222

To Know more : sms RESO at 56677 | Website : www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLC024029

Toll Free : 1800 258 5555 | 7340010333 | [facebook.com/resonanceedu](https://www.facebook.com/resonanceedu) | twitter.com/ResonanceEdu | www.youtube.com/showwater | [blog.resonance.ac.in](https://www.blog.resonance.ac.in)

This solution was downloaded from Resonance JEE (MAIN) 2023 Solution portal

PAGE # 5

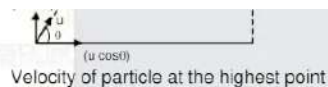
14. A particle is projected from ground with speed u at highest point of its Path speed is $\frac{\sqrt{3}u}{2}$. Find time of flight of the particle :

- (1) $\frac{u}{g}$ (2) $\frac{\sqrt{3}u}{g}$ (3) $\frac{u}{2g}$ (4) $\frac{u}{\sqrt{3}g}$

Ans. (1)

Sol.





Velocity of particle at the highest point

$$u \cos \theta = \frac{\sqrt{3}}{2} u$$

$$\cos \theta = \frac{\sqrt{3}}{2}$$

$$\theta = 30^\circ$$

$$T = \frac{2u \sin \theta}{g} \Rightarrow T = \frac{2u \sin 30}{g} \Rightarrow T = \frac{u}{g}$$

15. A source emits light of power 15 kW. Number of photons ejected per sec. from the source is 10^{16} . Find nature of emitted light :

(1) Ultra violet rays (2) X-rays (3) Infra rays (4) gamma rays

Ans. (4)

Sol. $E = \frac{hc}{\lambda}$

$$E = \frac{nhc}{\lambda} = 15 \text{ kW}$$

$$\frac{nhc}{\lambda} = 15 \times 10^3 \Rightarrow \frac{10^{16} \times 6.63 \times 10^{-34} \times 3 \times 10^8}{\lambda} = 15 \times 10^3 \Rightarrow \lambda = \frac{6.63}{4} \times 10^{-13}$$

$$= 1.32 \times 10^{-13} = 1.32 \times 10^{-6} \mu\text{m}$$

16. Ratio of C_p and C_v depends upon temperatures according to the following relation :

(1) $\gamma \propto T$ (2) $\gamma \propto 1/T$ (3) $\gamma \propto \sqrt{T}$ (4) $\gamma \propto T^0$

Ans. (4)

Sol. $\gamma = \frac{C_p}{C_v}$

Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph. No.: +91-744-2777777, 2777700 | FAX No. : +91-022-39167222

To Know more : sms RESO at 56677 | Website : www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLC024029

Toll Free : 1800 258 5555 | 7340010333 | [facebook.com/ResonanceEdu](https://www.facebook.com/ResonanceEdu) | [twitter.com/ResonanceEdu](https://www.twitter.com/ResonanceEdu) | www.youtube.com/resonance | [blog.resonance.ac.in](https://www.blog.resonance.ac.in)

This solution was download from Resonance JEE (MAIN) 2023 Solution portal

PAGE # 6

Resonance Eduventures Ltd. | JEE (MAIN) 2023 | DATE : 31-01-2023 (SHIFT-1) | PAPER-1 | MEMORY BASED | PHYSICS

17. A wire has length 1 m at temperature 210°C . If the temperature of wire is reduced to 160°C the wire get compressed. Now, if a block of mass 'm' gets hang to this wire then its length again extend to initial length. Find mass of block.

given, Area of wire = $3 \times 10^{-6} \text{ m}^2$; Young modulus = $2 \times 10^{11} \text{ N/m}^2$

$$\alpha = 2 \times 10^{-5} / ^\circ\text{C}$$

(1) 20 kg (2) 60 kg (3) 70 kg (4) 80 kg

Ans. (2)

Sol. As

$$\frac{\Delta \ell}{\ell} = \alpha \Delta T \Rightarrow \frac{\Delta \ell}{\ell} = 2 \times 10^{-5} \times (210 - 160)$$

$$\frac{\Delta \ell}{\ell} = 2 \times 10^{-5} \times 50 = 10^{-3}$$

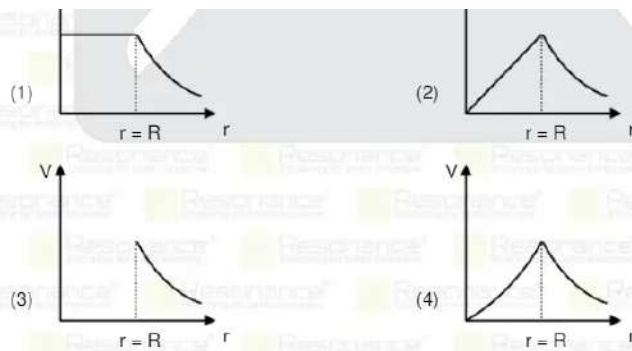


as young modulus $y = \frac{F}{A} \times \frac{\ell}{\Delta \ell}$

$$\text{so, } 2 \times 10^{11} = \frac{mg}{3 \times 10^{-6}} \times 10^3 \Rightarrow \frac{2 \times 10^{11} \times 3 \times 10^{-6} \times 10^{-3}}{10} = m \Rightarrow m = 60 \text{ kg}$$

18. Which of the flowing best represent the potential of isolated charged spherical conductor as a function of r, where r is the radial distance :





Ans. (1)

Sol. $V_{in} = \frac{KQ}{R}$ & $V_{out} = \frac{KQ}{r}$

Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph. No.: +91-744-2777777, 2777700 | FAX No. : +91-022-39167222

To Know more : sms RESO at 56677 | Website : www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLC024029

Toll Free : 1800 258 5555 | 7340010333 | facebook.com/ResonanceIndia | twitter.com/ResonanceIndia | www.youtube.com/resonance | blog.resonance.ac.in

This solution was download from Resonance JEE (MAIN) 2023 Solution portal

PAGE # 7

Resonance® Educating for better tomorrow | JEE (MAIN) 2023 | DATE : 31-01-2023 (SHIFT-1) | PAPER-1 | MEMORY BASED | PHYSICS

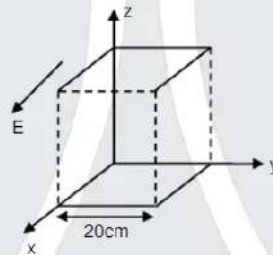
19. If drift velocity of electron inside a wire is V_d . what will the new drift velocity if area of cross-section is doubled keeping the current constant?

- (1) $2V_d$ (2) $\frac{V_d}{4}$ (3) $\frac{V_d}{2}$ (4) $\frac{V_d}{\sqrt{2}}$

Ans. (3)

Sol. $I = neAV_d$
 $neAV_d = ne(2A)V'$
 $\Rightarrow V' = \frac{V_d}{2}$

20. Electric field in a region is $4000x^2\hat{i}$ N/c. the flux through the cube shown in figure is $\frac{P}{5}$ nm²/C. Find P?



- (1) 32 (2) 60 (3) 15 (4) 100

Ans. (1)

Sol. $E = 4000x^2\hat{i}$
 $E = 160$ N/c
 $\phi = \vec{E} \cdot \vec{A} = 160 \times (0.2)^2$
 $\phi = 6.4$
 $P/5 = 6.4$
 $P = 6.4 \times 5 = 32$

21. What will be the effect in resistance of semiconductor on increasing the temperature?
 (1) increase (2) decrease (3) constant (4) None of these

Ans. (2)

Sol. Resistance will decrease
 Temp. \uparrow $R \downarrow$

22. **Assertion** : Wave nature of electron explains interference and diffraction.

Reason : Davission and Germer experiment explain the wave nature of electron.

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A)
 (2) Both (A) and (R) true but (R) is NOT the correct explanation of (A)
 (3) (A) is true but (R) is false.
 (4) (A) is false but (R) is true.

Ans. (1)






Sol. Both are correct

Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005


Ph. No.: +91-744-2777777, 2777700 | FAX No. : +91-022-39167222

To Know more : sms RESO at 56677 | Website : www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLC024029

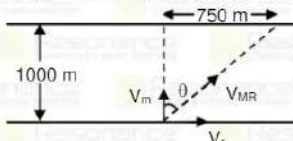
Toll Free : 1800 258 5555  7340010333  [facebook.com/ResonanceEdu](https://www.facebook.com/ResonanceEdu)  twitter.com/ResonanceEdu  www.youtube.com/resonance  blog.resonance.ac.in

This solution was download from Resonance JEE (MAIN) 2023 Solution portal

PAGE # 8

 | JEE (MAIN) 2023 | DATE : 31-01-2023 (SHIFT-1) | PAPER-1 | MEMORY BASED | PHYSICS

23. A man can swim with a speed of 4 km/hr in still water. He tries to cross a river flowing with a speed of V_r in the shortest possible time and drifts 750 m away as shown. The width of river is 1000 m. Find V_r .



- (1) 2/5 km/hr (2) 2 km/hr (3) 3 km/hr (4) 3/2 km/hr

Ans. (3)

Sol. $\tan\theta = \frac{V_r}{V_m} = \frac{750}{1000} \Rightarrow V_r = \frac{75}{100} \times 4 \Rightarrow V_r = 3 \text{ km/hr}$

24. Surface tension of water drop of radius $r = 1 \text{ mm}$ is 0.07 N/m . 1000 similar drops are combined to form a bigger drop. If u_1 is the surface energy of 1000 similar drops and u_2 is the surface energy of bigger drop. Find change in energy.

- (1) 590 μJ (2) 672 μJ (3) 792 μJ (4) 829 μJ

Ans. (3)



Sol.

1000 drops

Using volume conservation

$$1000 \times \frac{4}{3} \pi r^3 = \frac{4}{3} \pi R^3$$

$$R = 10 r$$

$$R = 10 \times 1 \text{ mm} = 10 \text{ mm}$$

as surface energy $U = S(4\pi r^2)$

when S is surface energy & r is radius

$$U_1 = 0.07 (4\pi \times (1 \times 10^{-3})^2) \times 1000 \quad U_2 = 0.07 (4\pi (10 \times 10^{-3})^2)$$

$$U_1 - U_2 = 0.07 \times 4\pi [10^{-6} \times 10^3 - 10^{-4}]$$

$$0.07 \times 4\pi [10^{-3} - 10^{-4}] = 0.01 \times 4 \times \frac{22}{7} \times 10^{-3} \left[1 - \frac{1}{10}\right]$$

$$= 0.01 \times 4 \times 22 \times 10^{-3} \times \frac{9}{10} = 792 \times 10^{-6} \text{ J} = 792 \mu\text{J}$$

25. A free neutron decays to a proton but a free proton does not decay to a neutron. This is because
- (1) neutron is a composite particle made of a proton and an electron whereas proton is fundamental particle
- (2) neutron is an uncharged particle whereas proton is a charged particle
- (3) neutron has larger rest mass than the proton
- (4) weak forces can operate in a neutron but not in a proton.






Ans. (3)

Resonance Eduventures Ltd.

Reg. Office & Corp. Office : CG Tower, A-46 & 52, IPIA, Near City Mall, Jhalawar Road, Kota (Raj.) - 324005

Ph. No.: +91-744-2777777, 2777700 | FAX No. : +91-022-39167222

To Know more : sms RESO at 56677 | Website : www.resonance.ac.in | E-mail : contact@resonance.ac.in | CIN : U80302RJ2007PLC024029

Toll Free : 1800 258 5555  7340010333  [facebook.com/ResonanceEdu](https://www.facebook.com/ResonanceEdu)  twitter.com/ResonanceEdu  www.youtube.com/resonance  blog.resonance.ac.in

This solution was download from Resonance JEE (MAIN) 2023 Solution portal

PAGE # 9

TARGET: JEE (ADV.) 2023

Polish your subject knowledge with the guidance of
Top Notch Sr. Faculty of Resonance

SPARK

15 WEEKS COMPAC COURSE
OFFLINE / ONLINE

CLASS
STARTS

6th FEBRUARY
2023

ACADEMIC FEATURES

- Course Duration: **15 Weeks**
- Total No. of Lectures: **234** (P: 79 | C: 78 | M: 76)
- Duration of One Lecture: **1.5 hrs.** (90 Minutes)
- Classroom Teaching Hours: **351 Hrs.**
- Testing Duration: **60 Hrs.**
- Total Academic Hours: **411 Hrs.**

Course Features

- Study Material
- Back up support of recorded lectures
- 2000+ Questions
- Part Test Syllabus Test Series

Facilities for Offline Students

- 24x7 Online Computer Lab
- Self Study Modules for theory & tests



TARGET: JEE (Main) 2023

Boost your Percentile with

PERCENTILE BOOSTER COURSE

8 WEEKS COMPAC COURSE
OFFLINE / ONLINE

CLASS
STARTS

6th FEBRUARY
2023

COURSE FEATURES

- Complete Course Coverage
- 26 Chapter wise Test
- Regular Practice through 35 Daily Online Practice Test
- 5 Full Syllabus Test
- 3 Joint Preparatory Test
- Approx 2500 practice Que.
- 113 Teaching hours
- 99 Tasting Hours
- Regular Test discussion classes for concept clearance
- Back up support of recorded lectures



RESONites ने फिर लहराया सफलता का परचम

STUDENTS FROM CLASSROOM PROGRAM (OFFLINE/ ONLINE)

AIR

AIR

6
KARTHIKEYA POLISETTY
 Roll No.: 21925115
AIR-1
 GEN-EWS

8
DHEERAJ KURUKUNDA
 Roll No.: 21925914

Students in TOP-100 All India Ranks (AIRs)

| | | | | | |
|-------------------------------------|-----------------------------------|-------------------------------------|----------------------------------|--|-------------------------------------|
| | | | | | |
| AIR-11 | AIR-15 | AIR-35 | AIR-50 | AIR-54 | AIR-58 |
| DEVVISHU MALJI Roll No.: 2191044 | ARSHIF AHMAD Roll No.: 2192596 | SANKAR SHRIVYA Roll No.: 2192515 | ANURAG GARG Roll No.: 2192092 | SAKSHITA S. NAYAK Roll No.: 2192964 | KARISHK SHARMA Roll No.: 2192644 |

ADMISSIONS OPEN FOR ACADEMIC SESSION 2023-24

TARGET: JEE (Adv.) 2024
 for Class XII Passed Student
VISHESH COURSE
 MODE: OFFLINE / ONLINE
 CLASS STARTS
10th & 17th April

TARGET: JEE (Main) 2024
 for Class XII Passed Student
ABHYAAS COURSE
 MODE: OFFLINE / ONLINE
 CLASS STARTS
10th & 24th April

SCHOLARSHIP ON THE BASIS OF JEE (MAIN) 2023 %ILE / AIR

Resonance Eduventures Limited

REGISTERED & CORPORATE OFFICE: CG Tower, A-46 & 52, IPHA, Near City Mall, Jhalawar Road, Kota (Rajasthan) - 324005
 Tel. No.: 0744-2777777, 2777700 | CIN: U80302RJ2007PLC024029

Social Media Connect

facebook.com/ResonanceEdu |
 03007 41444 |
 youtube.com/ResonanceEdu |
 in.linkedin.com/school/resonance-eduventures-184/ |
 twitter.com/ResonanceEdu