

ACADEMIC SESSION 2025-27

Name : \_\_\_\_\_ Application No.:

**RNTSE : 2025**

**Resonance Nashik Talent Search Exam**

**QUESTION PAPER**

**For Students of Class 10<sup>th</sup> Std.**

**Exam Date : 6<sup>th</sup> Oct 2024**

**Duration : 90 Min.**

**Max. Marks : 210**



**Instructions :**

- 1) Paper contains four sections (I) Physics (II) Chemistry (III) Maths (IV) Biology.
- 2) Total number of questions 70. (Physics-15, Chemistry-15, Maths-25, Biology-15)
- 3) Single correct option type : out of four options given, only one option will be correct.
- 4) All questions are compulsory.
- 5) Each question carry +3 marks for correct option marked and -1, if incorrect option is marked. Zero mark if not attempted.
- 6) Use black / blue ball pen for filling OMR.
- 7) You must fill your enrollment number in the given appropriate box in the OMR.

**Resonance Eduventures Ltd. - Nashik Study Centre**

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## JEE Advanced 2024 Results @ Nashik



ANIRUDH MAHAPATRA

**AIR 325**



SMERA PANDA

**AIR 1484**



MANDAR DESHMUKH

**AIR 279**



SOHAM DOKHALE

**AIR 665**



PRATHMESH THORAT

**AIR 1874**



PRANAV PAWAR

**AIR 2091**



RUSHIKESH MUSALE

**AIR 2649**



SIDDHI BORASE

**AIR 2688**



PRATHMESH MAHAJAN

**AIR 2748**



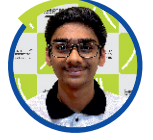
AAYUSH VANMALI

**AIR 2937**



SHAUNAK DAHIBATE

**AIR 4472**



HARSHVARDHAN

**AIR 5379**

## NEET 2024 Results @ Nashik



ADITYA LUGADE

**700 720**



OM MISHRA

**660 720**



PALAK YEOLE

**658 720**



PARTH KITTE

**653 720**



ARJUN BACHHAV

**656 720**



PURVA PATIL

**640 720**



ANANDITA BASTE

**627 720**



OMKAR GUNJAL

**621 720**



MADHAVI DEORE

**619 720**



SHIVAM THAKUR

**615 720**



VEDANT NIKAM

**611 720**



KANISHK AGARWAL

**610 720**

## MHT-CET 2024 Results @ Nashik



ANIRUDH MAHAPATRA

**99.9919 %ile**



MANDAR DESHMUKH

**99.9792 %ile**



PRANAV PAWAR

**99.9564 %ile**



SOHAM DOKHALE

**99.9333 %ile**



PARTH KITTE

**99.8931 %ile**



VEDANT NIKAM

**99.8642 %ile**



SHAUNAK DAHIBATE

**99.7223 %ile**



PALAK YEOLE

**99.6733 %ile**



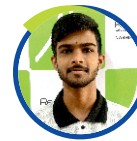
MALHAR PATWARDHAN

**99.6323 %ile**



RUSHIKESH MUSALE

**99.6201 %ile**



SAHIL BHOSLE

**99.5928 %ile**



JAYVARDHAN THORAT

**99.5515 %ile**

**22\* Resonites Secured 99%+**

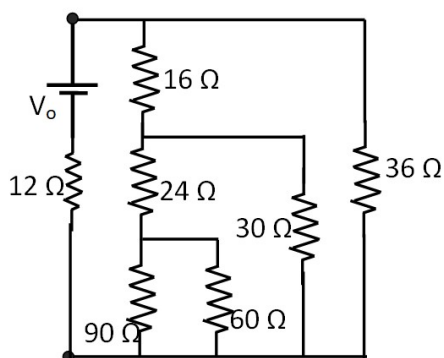
**32\* Resonites Secured 98%+**

**43\* Resonites Secured 97%+**

**59\* Resonites Secured 95%+**

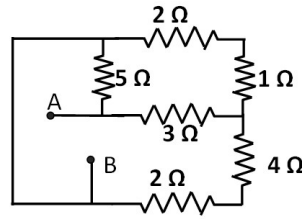
**Section-I (Physics)**

1. For the circuit diagram shown below, Value of resistors are mentioned in the figure. If  $V_0 = 90$  Volt then current in  $24 \Omega$  resistor will be

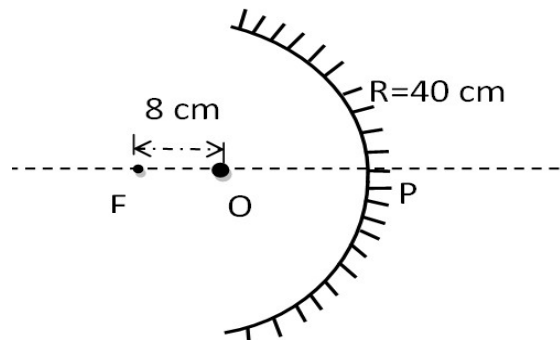


- (A) 1 A                      (B)  $\frac{15}{4}$  A                      (C) 0.5 A                      (D) 1.5 A
2. A car, moving with a speed of 50 km/hr can be stopped by applying brakes after at least 5m. If the same car is moving at a speed of 100 km/hr, the minimum stopping distance is
- (A) 10m                      (B) 20m                      (C) 24m                      (D) 5m
3. A ball is thrown vertically down with velocity of 5m/s from the top of a tower. With what velocity should another ball be thrown vertically down after 2 seconds from the top of the same tower, so that it can hit the first ball in a further 2 seconds (Take  $g = 10 \text{ m/s}^2$ )
- (A) 40 m/s                      (B) 55 m/s                      (C) 15 m/s                      (D) 25 m/s
4. Suppose you are given three resistances of values 2, 4, 6 ohms. Which of the following value is not possible to get by arranging resistances in various combinations ?
- (A) Less than 2                      (B) Equal to 4.4                      (C) Equal to 7.33                      (D) Equal to 6.75
5. When three identical bulbs are connected in series across a source voltage, the consumed power is 10W. If they are now connected in parallel across the same source then the consumed power will be :
- (A) 30W                      (B) 90W                      (C) 3.33W                      (D) 270W
6. A Train runs between two stations P and Q. It starts from P, accelerate for time 25 sec with acceleration  $2 \text{ m/s}^2$ . then it move with constant velocity for 2.5 min then decelerate with magnitude  $1 \text{ m/s}^2$  to stop at station Q. find distance between the two station P and Q.
- (A) 9000 m                      (B) 9075 m                      (C) 8750 m                      (D) 9375 m

7. In the circuit diagram, if a cell of emf 10 volt is connected between A and B then current through  $3\Omega$  resistor will be

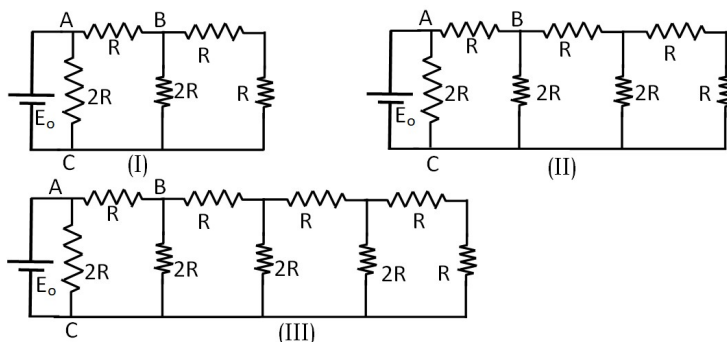


- (A)  $\frac{10}{3} A$                       (B)  $\frac{10}{9} A$                       (C) 2 A                      (D) 2.5 A
8. A man of height  $h$  walking away from a lamp post finds his shadow to be equal to his height when he is at a distance  $x$  from the lamp post. If the height of the lamp post is  $H$ , then  $x$  is
- (A)  $H + h$                       (B)  $H - h$                       (C)  $H-2h$                       (D)  $2H-h$
9. An object is at distance 8cm from focus of a concave mirror of radius of curvature 40 cm as shown below. Find distance of its image from Focus F.



- (A) 50 cm                      (B) 30 cm                      (C)  $\frac{40}{3}$  cm                      (D)  $\frac{40}{7}$  cm
10. A convergent lens (convex lens) of focal length  $f=30$  cm is kept fixed and an object is initially 40 cm from pole is moved to 60 cm from the pole, find displacement of image of the object in the lens
- (A) 15 cm                      (B) 60 cm                      (C) 40 cm                      (D) 20 cm
11. A car starts moving with acceleration  $0.5 \text{ m/s}^2$  for 20 sec then move with constant velocity find displacement in 1<sup>st</sup> 40 sec
- (A) 500m                      (B) 400m                      (C) 300 m                      (D) 350 m

12. Three different circuits (I, II and III) are constructed using identical batteries and resistors of  $R$  and  $2R$  ohm. What can be said about current in arm AB of each circuit? ( $I_I$ ,  $I_{II}$  &  $I_{III}$  are current in arm AB for circuit diagram I, II and III respectively)

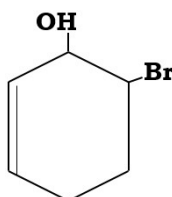


- (A)  $I_I > I_{II} > I_{III}$       (B)  $I_I < I_{II} < I_{III}$       (C)  $I_{II} < I_I < I_{III}$       (D)  $I_I = I_{II} = I_{III}$
13. A thin rod of length 10 cm is placed along the axis of a concave mirror of focal length 30 cm in such a way that one end of the image coincides with one end of the object. The length of the image may be
- (A) 7.5 cm      (B) 15 cm      (C) 12 cm      (D) both A & B
14. Find heat required to raise temperature of 100 g ice sample at  $-20^\circ\text{C}$  to  $30^\circ\text{C}$ . Given that specific heat capacity of water and ice are  $1 \text{ cal/g/}^\circ\text{C}$  and  $0.5 \text{ cal/g/}^\circ\text{C}$  respectively. Latent heat of fusion is  $80 \text{ cal/g}$
- (A) 4000 cal      (B) 12000 cal      (C) 16500 cal      (D) 11500 cal
15. An opaque sphere of radius  $R$  lies on a horizontal plane. On the perpendicular through the point of contact, there is a point source of light at a distance  $R$  above the top of the sphere (i.e.  $3R$  from the plane). Find the area of the shadow of the sphere on the plane
- (A)  $3\pi R^2$       (B)  $2\pi R^2$       (C)  $\sqrt{3}\pi R^2$       (D)  $4\pi R^2$

### Section-II (Chemistry)

16. Which of the following is correct IUPAC name of the given compound?

- (A) 2-bromo-hex-5-en-1-ol  
 (B) 6-bromo-hex-2-en-1-ol  
 (C) 1-bromo-hex-3-en-2-ol  
 (D) 2-bromohexenol



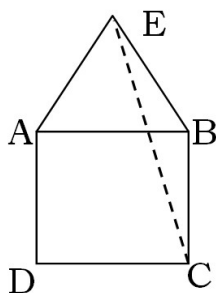
17. German silver is an alloy of which of the following elements?  
 (A) Cu, Ag      (B) Cu, Zn, Ni      (C) Cu, Sn, Zn      (D) Cr, Ag
18. Among the following given salt solutions, which of the following is acidic in nature?  
 (A)  $\text{Na}_2\text{CO}_3$       (B)  $\text{CH}_3\text{COOK}$       (C)  $(\text{NH}_4)_2\text{SO}_4$       (D)  $\text{Pb}(\text{OH})\text{Cl}$
19. The total number of  $\sigma$  (sigma) bonds present in butanoic acid ( $\text{C}_3\text{H}_7\text{COOH}$ ) is?  
 (A) 15      (B) 16      (C) 17      (D) 13

20. Which of the following Ionization values represents Alkali metals i.e. group 1 metals?
- | (IE) <sub>1</sub> | (IE) <sub>2</sub> | (IE) <sub>1</sub> | (IE) <sub>2</sub> |
|-------------------|-------------------|-------------------|-------------------|
| (A) x 500         | 1000              | (B) y 600         | 700               |
| (C) z 550         | 7500              | (D) M 700         | 500               |
21. Which of the following is most electronegative element?  
 (A) Li (B) Mg (C) H (D) Na
22. The oxidation number of four respective sulphur atoms present in tetrathionate ion ( $S_4O_6^{2-}$ ) is?  
 (A) 2.5, 0, 1, -2 (B) +5, 0, 0, +5 (C) 2.5, 2.5, 2.5, 2.5 (D) 2.5, 2, 0, -2.5
23. How many grams of  $NaHCO_3$  are required to neutralize 1ml of 0.0902M vinegar?  
 (A)  $8.4 \times 10^{-3} g$  (B)  $1.5 \times 10^{-3} g$  (C)  $7.58 \times 10^{-3} g$  (D)  $1.07 \times 10^{-3} g$
24. The types of colloidal solutions that foam and Sol of respectively are \_\_\_\_\_ and \_\_\_\_\_.  
 (A) Liquid in gas, solid in liquid (B) Solid in liquid, Gas in solid  
 (C) Gas in liquid, Solid in liquid (D) Solid in gas, liquid in solid
25. Oxidation number of underlined elements in  $\underline{N}_2O_5$ ,  $\underline{S}O_3^{2-}$ ,  $\underline{N}H_4^+$  are  
 (A) +5, +2, -3 (B) +6, -2, +3 (C) +6, +2, -3 (D) +5, +4, -3
26. 1g of a metal carbonate neutralizes completely 200ml of 0.1 M HCl. The equivalent weight of metal carbonate is –  
 (A) 25 (B) 50 (C) 100 (D) 75
27. The metal ion present in fire cracker if it burns with the emission of red light\_\_\_\_.  
 (A) Lithium (B) Copper (C) Iron (D) Sodium
28.  $aK_2Cr_2O_7 + bKCl + cH_2SO_4 \rightarrow xCrO_2Cl_2 + yKHSO_4 + zH_2O$  The above reaction balances when  
 (A) a = 2, b = 4, c = 6, and x = 2, y = 6, z = 3  
 (B) a = 4, b = 2, c = 6 and x = 6, y = 2, z = 3  
 (C) a = 6, b = 4, c = 6 and x = 6, y = 3, z = 2  
 (D) a = 1, b = 4, c = 6 and x = 2, y = 6, z = 3
29. When the following five anions are arranged in order of decreasing ionic radius, the correct sequence is –  
 (A)  $Se^{2-}, I^{-1}, Br^{-1}, O^{-2}, F^{-1}$  (B)  $Se^{2-}, I^{-1}, Br^{-1}, F^{-1}, O^{-2}$   
 (C)  $I^{-1}, Se^{2-}, Br^{-1}, F^{-1}, O^{-2}$  (D)  $I^{-1}, Se^{2-}, Br^{-1}, O^{-2}, F^{-1}$
30. 367.5 gram  $KClO_3$  when heated, how many grams of KCl and oxygen are produced respectively?  
 (A) 325g, 103.2g (B) 155.3g, 120g (C) 350.2g, 86g (D) 223.5g, 144g

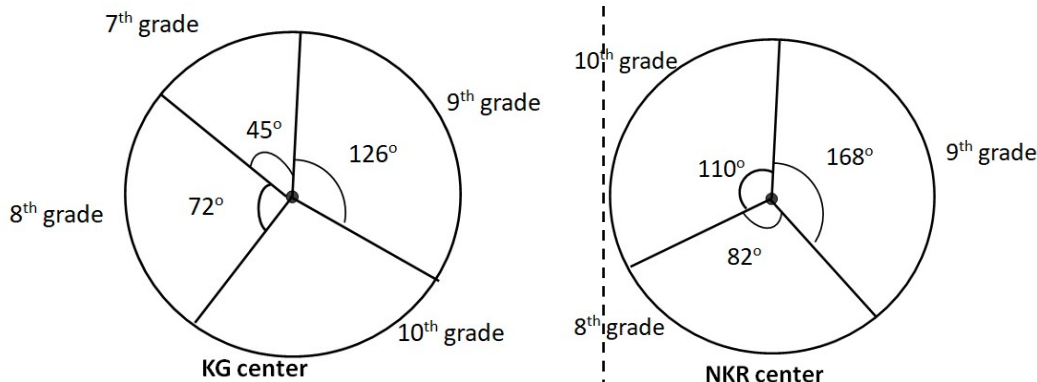


### Section-III (Math)

31. If  $\frac{10}{x+y} + \frac{2}{x-y} = 4$  also  $\frac{5}{x-y} - \frac{10}{x+y} = 2$  then find value of  $(2x-y)$   
 (A)  $\frac{199}{48}$  (B)  $\frac{361}{96}$  (C)  $\frac{355}{96}$  (D)  $\frac{63}{16}$
32. If  $y^2 - 2y - 7 = 0$ ,  $\alpha$  and  $\beta (< \alpha)$  are roots of the equation then value of  $(\alpha^3 - \beta^3)$   
 (A) 50 (B)  $4\sqrt{22}$  (C)  $4\sqrt{11}$  (D) 14
33. Each root of the equation  $x^2 + bx + c = 0$  is decreased by 1. The quadratic equation with these new roots is  $x^2 + 4x + 1 = 0$ . The numerical value of  $b + c$  is \_\_\_\_\_.  
 (A) 0 (B) 1 (C) 2 (D) -1
34. If  $x^{x^4} = 4$ , find value of  $(x^{x^2} + x^{x^8})$   
 (A) 258 (B) 514 (C) 278 (D) 298
35. If  $\alpha, \beta$  are the roots of a quadratic equation  $x^2 - 4x + 7 = 0$ , then the quadratic equation whose roots are  $(\alpha^2 - 4\alpha + 9)$  and  $(2\beta^2 - 8\beta + 11)$  is  
 (A)  $x^2 + x + 6 = 0$  (B)  $x^2 + x - 6 = 0$  (C)  $x^2 - 6x + 8 = 0$  (D)  $2x^2 + 2x - 9 = 0$
36. ABCD is a square and ABE is an equilateral triangle constructed externally then  $\angle DCE$  will be



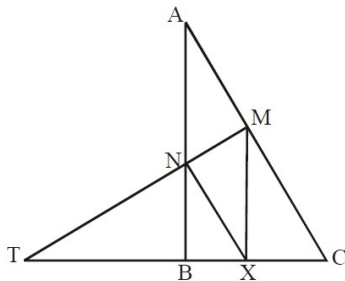
- (A)  $75^\circ$  (B)  $70^\circ$  (C)  $60^\circ$  (D)  $40^\circ$
37. Resonance Nashik has two branch in Nashik city, Named KG and NKR having total number of students in junior sections 400 and 240 respectively. Pie charts for Number of students of different grades are shown below.



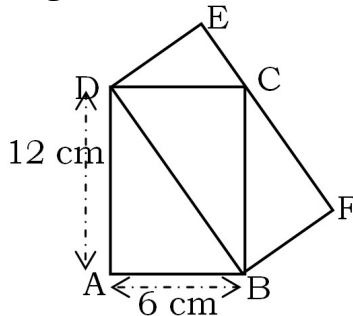
- How many more students at KG center than NKR center in 9th grade  
 (A) 32 (B) 56 (C) 28 (D) 64

38. If  $x^2 + \frac{1}{x^2} = 23$ , then the positive value of  $\left(x + \frac{1}{x} + 3\right)$  is  
 (A) 6 (B) 5 (C) 8 (D) 7

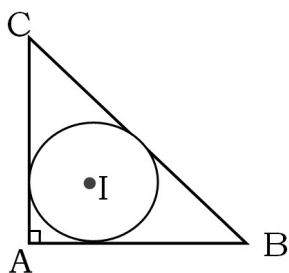
39. Let X be any point on the side BC of a triangle ABC. If XM, XN are drawn parallel to BA and CA meeting CA, BA in M, N respectively; MN meets CB produced in T. Then:



- (A)  $(TB)^2 = TX \times TC$  (B)  $(TC)^2 = TB \times TX$   
 (C)  $(TX)^2 = TB \times TC$  (D)  $(TX)^2 = 2(TB \times TC)$
40. There are two rectangle ABCD and BDEF as shown. If dimension of ABCD is 12cm×6cm then find Side length BF will be



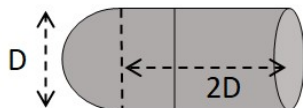
- (A)  $6\sqrt{2}$  (B)  $\frac{6}{\sqrt{2}}$  (C)  $6\sqrt{5}$  (D)  $\frac{12}{\sqrt{5}}$
41. In  $\Delta ABC$ ,  $\angle A = 90^\circ$  and I is the in centre. The perpendicular distance of I from BC is  $\sqrt{8}$ . Then AI is equal to



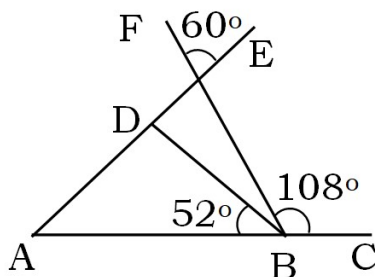
- (A)  $\sqrt{8}$  (B) 3 (C)  $\sqrt{12}$  (D) 4
42. There are three natural numbers. The second is greater than the first by the amount the third is greater than the second. The product of the two smaller numbers is 85 and the product of the two larger number is 115. If the numbers are x, y, z with  $x < y < z$  then the value of  $(3x + y + 7z)$  is  
 (A) 116 (B) 119 (C) 121 (D) 78



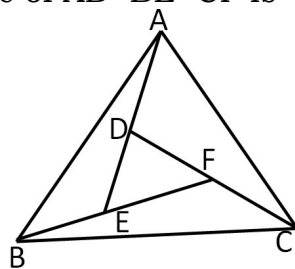
43. The radii of two concentric circles are 10cm and 6cm. AB is diameter of the bigger circle BD is tangent to the smaller circle touching it at D. Find length of AD.  
 (A)  $4\sqrt{13}$  (B)  $3\sqrt{13}$  (C)  $4\sqrt{15}$  (D)  $3\sqrt{15}$
44.  $A = (2 + 1) (2^2 + 1) (2^4 + 1)(2^8 + 1) \dots (2^{2048} + 1)$ . The value of  $(A+1)^{\frac{1}{2048}}$  is  
 (A)  $2^{4096}$  (B) 2048 (C) 4 (D) 2
45. Find surface area of a design shown below is made up of a solid cylinder of diameter D and length 2D and a hemisphere of diameter D as shown



- (A)  $\frac{3\pi D^2}{2}$  (B)  $\frac{11\pi D^2}{4}$  (C)  $\frac{7\pi D^2}{2}$  (D)  $\frac{7\pi D^2}{4}$
46. Find value of  $\sqrt{2020\sqrt{2021\sqrt{2022\times 2024+1+1+1}}}$   
 (A) 2021 (B) 2022 (C) 2023 (D)  $\sqrt{2020\times(1+\sqrt{2021})}$
47. For the diagram shown below ADE and ABC are straight line. Some angles are mentioned in the diagram. Choose **incorrect** statement

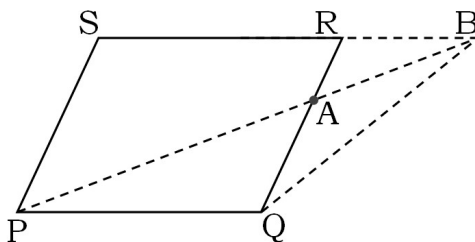


- (A)  $\angle DAB = 48^\circ$  (B)  $\angle DBF = 20^\circ$  (C)  $\angle EDB = 100^\circ$  (D)  $AD < BD$
48. In the adjoining figure ABC, DEF are equilateral triangles. AB= 9 cm and DE= 4cm. Then the possible value of AD+BE+CF is

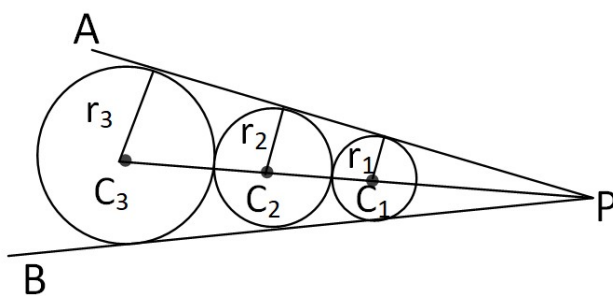


- (A) 8.1 cm (B) 7.4 cm (C) 7.2 cm (D) 6.9 cm

49. PQRS is a parallelogram, A is a point on RQ such that  $RA : AQ = 1:2$   
PA is produced to meet SR line at B as shown in diagram. If area of  $\Delta AQB = 24$   
 $\text{cm}^2$  then



- I. Area of  $\Delta ARB$  will be  $12 \text{ cm}^2$   
 II. Area of  $\Delta PAQ$  will be  $36 \text{ cm}^2$   
 III. Area of quadrilateral PSRA will be  $96 \text{ cm}^2$
- (A) All correct (B) none correct  
 (C) Only I correct (D) only I & III correct
50. Sivaji sir, Mathematics teacher at Resonance Nashik center gave a Math Assignment comprising total 50 question printed in 3 pages, to three students of winner batch Smera, Siddhi and Ashish shewale one page each. Smera couldnot solve 7 questions of her page but solved rest of the question of the page. Smera forwarded her page to siddhi she solved all the 7 unsolved question of 1<sup>st</sup> page got from smera. However siddhi couldnot solve 5 question of her page and forwarded to Ashish who solved only 4 of the unsolved questions of siddhi's page and also he couldn't solve 4 Question of his own page. Ashish forwarded his page as well as siddhi's page to smera who solved all the five unsolved questions( 4 of ashish's and 1 of siddhi's page). If ashish and siddhi solved equal number of questions while smera has solved 2 question more than them. How many questions was printed in smera's page initially she got.
- (A) 24 (B) 20 (C) 18 (D) 19
51. Three circle  $C_1, C_2, C_3$  with radii  $r_1, r_2, r_3$  are placed as shown in figure PA and PB are common tangent to all the three circle. Then  $r_2 = ?$



- (A)  $\sqrt{r_1 r_3}$  (B)  $\sqrt{\frac{r_1^2 + r_3^2}{2}}$  (C)  $\frac{r_1 r_3}{(\sqrt{r_1} + \sqrt{r_3})^2}$  (D) none
52. **Resonance Nashik** conduct entrance Exam for admission in **NEET batch** every Sunday in month of November and December, On 1<sup>st</sup> Sunday of November month total **121 students** appear in the exam which has maximum marks 100 (with no fractional marking). No three students are awarded same marks, No students got marks 91 or above also none has scored marks in single digit. What is **smallest possible** number of pairs of students who have scored same marks
- (A) 39 (B) 40 (C) 41 (D) 42

53. If  $a, b, c, d$  are positive integer such that  $a = bcd$ ,  $b = cda$ ,  $c = dab$  and  $d = abc$  then the value of  $\frac{(a+b+c+d)^4}{(ab+bc+cd+da)^2} = ?$
- (A) 12                      (B) 16                      (C) 18                      (D) 24
54. If  $\frac{a}{b} = \frac{5}{6}$ , then consider following statements
- (i)  $\frac{(a+b)}{a} = \frac{11}{5}$                       (ii)  $\frac{(a+2b)}{b} = \frac{17}{6}$
- (iii)  $\frac{(a^2+b^2)}{ab} = \frac{61}{30}$                       (iv)  $\left(\frac{2b^2-a^2}{b^2}\right) = \frac{37}{36}$
- (A) All correct                      (B) only i & ii correct  
(C) Only i, ii & iii correct                      (D) only i, ii & iv correct
55. A wooden cube of radius 4 cm is painted red externally. Then it is cut symmetrically in smaller cubes of side length 1 cm each. Consider the following statements
- I. There will be total 64 smaller cubes  
II. There will be four cubes having red painted face on three sides  
III. There will be 8 cubes which will not have any red painted face
- Then correct statements are
- (A) All correct                      (B) only I correct  
(C) Only I & II correct                      (D) only I & III correct

#### Section-IV (Biology)

56. Grafting is possible among dicot plants but not in monocot plants. This is due to presence of one of the following conditions in dicot plant.
- (A) Presence of open vascular bundles                      (B) Presence of collenchyma tissues  
(C) Presence of intercalary meristem                      (D) Larger diameter of stem
57. Eukaryotic cells contain several membrane bound subcellular structures called Organelles. The vacuole is one such organelle found in both animal and plant cells. Which of the following statements are true for vacuoles?
- I. Contain cell sap.  
II. Provide turgidity to the plant cell.  
III. Plant cell vacuoles are smaller than animal cell vacuoles.  
IV. Vacuoles store amino acids, sugar, acids and contain protein.
- (A) I, II, III & IV                      (B) I, II & III only                      (C) I, II & IV                      (D) II, III & IV only
58. The unique mammalian characteristics are :
- (A) Hairs, pinna and mammary glands  
(B) Hairs, pinna and indirect development  
(C) Pinna, monocondylic skull and mammary glands  
(D) Hairs, tympanic membrane and mammary glands

59. The ascent of xylem sap in plants is mainly accomplished by the  
 (A) Root pressure  
 (B) Size of the stomatal aperture  
 (C) Distribution of stomata on the upper and lower epidermis  
 (D) Cohesion and adhesion between water molecules
60. Which part of the brain is responsible for thermoregulation?  
 (A) Corpus callosum (B) Medulla oblongata  
 (C) Cerebrum (D) Hypothalamus
61. In his classic experiments on pea plants, Mendel did not use :  
 (A) Seed colour (B) Flower position (C) Seed shape (D) Pod length
62. A typical mature embryo sac in angiosperm contains:  
 (A) 8-nucleate and 8-celled (B) 8-nucleate and 7-celled  
 (C) 7-nucleate and 8-celled (D) 7-nucleate and 7-celled
63. Match the organisms in List I with their respective mode of nutrition in list II:

**List - I**

**Organisms**

- (a) Euglenoid  
 (b) Dinoflagellate  
 (c) Slime mould  
 (d) Plasmodium

**List - II**

**Mode of Nutrition**

- (I) Parasitic  
 (II) Saprophytic  
 (III) Photosynthetic  
 (IV) Switching between photosynthetic and heterotrophic mode

Choose the correct answer from the options given below:

- (A) a-III, b-IV, c-II, d-I (B) a-IV, b-II, c-I, d-III  
 (C) a-IV, b-III, c-II, d-I (D) a-IV, b-II, c-III, d-I

64. How many different kinds of gametes will be produced by a plant having the genotype AABbCC ?  
 (A) Two (B) Nine (C) Four (D) Three
65. Which among the following is not a prokaryote?  
 (A) Mycobacterium (B) Saccharomyces  
 (C) Oscillatoria (D) Nostoc

66. Match List I with List II :

**List - I**

- (a) Squamous Epithelium  
 (b) Ciliated Epithelium  
 (c) Glandular Epithelium  
 (d) Compound Epithelium

**List - II**

- (I) Goblet cells of alimentary canal  
 (II) Inner lining of pancreatic ducts  
 (III) Walls of blood vessels  
 (IV) Inner surface of Fallopian tubes

Choose the correct answer from the options given below :

- (A) a-II, b-III, c-I, d-IV (B) a-II, b-IV, c-III, d-I  
 (C) a-III, b-I, c-II, d-IV (D) a-III, b-IV, c-I, d-II



67. Which of the following statements wrongly represents the nature of smooth muscle?  
 (A) These muscles are present in the wall of blood vessels  
 (B) These muscles have no striations  
 (C) They are involuntary muscles  
 (D) Communication among the cells is performed by intercalated discs
68. In which disorder change of single base pair in the gene for beta globin chain results in change of glutamic acid to valine ?  
 (A) Thalassaemia (B) Sickle cell anaemia  
 (C) Haemophilia (D) Phenylketonuria
69. Match List I with List II:

**List - I**

**List - II**

- |                 |  |
|-----------------|--|
| a. Pons         | I. Provides additional space for Neurons, regulates posture and balance. |
| b. Hypothalamus | II. Controls respiration and gastric secretions.                         |
| c. Medulla      | III. Connects different regions of the brain.                            |
| d. Cerebellum   | IV. Neuro secretory cells  |

Choose the correct answer from the options given below :

- |                            |                            |
|----------------------------|----------------------------|
| (A) a-II, b-III, c-I, d-IV | (B) a-III, b-IV, c-II, d-I |
| (C) a-I, b-III, c-II, d-IV | (D) a-II, b-I, c-III, d-IV |

70. Match the following hormones with the respective disease :

- |                     |                         |
|---------------------|-------------------------|
| (a) Insulin         | (i) Addison's disease   |
| (b) Thyroxin        | (ii) Diabetes insipidus |
| (c) Corticoids      | (iii) Acromegaly        |
| (d) Growth Hormones | (iv) Goitre             |
|                     | (v) Diabetes mellitus   |

Select the correct option.

- |                            |                            |
|----------------------------|----------------------------|
| (A) a -v, b-iv, c-i, d-iii | (B) a-ii, b-iv, c-i, d-iii |
| (C) a-iv, b-I, c-ii, d-iii | (D) a-ii, b-iv, c-iii, d-i |

**SPACE FOR ROUGH WORK**



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8390890444, 8390870444 | CIN: [U80302RJ2007PLC024029](https://www.mca21.gov.in/cin/U80302RJ2007PLC024029)

**RNTSE 24-25 PAPER-X<sup>th</sup>**

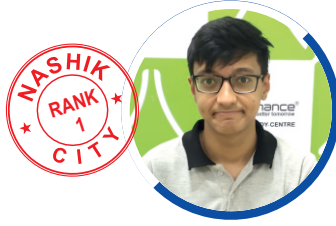
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YEAR 2024



**ANIRUDH MAHAPATRA**  
**AIR 325**

YEAR 2023



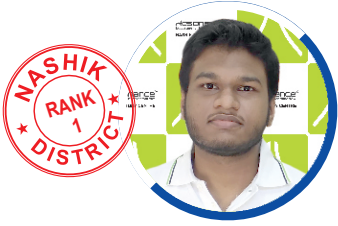
**ABHISHEK GUPTA**  
**IIT-DELHI / AIR - 166**

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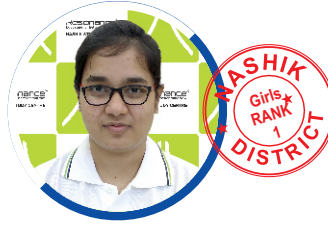
**ARYA JOSHI**  
**IIT-BOMBAY / AIR - 536**

YEAR 2020



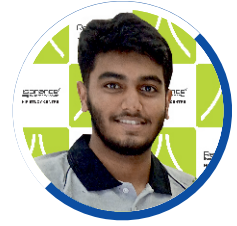
**SUMIT BERA**  
**IIT-ROORKEE /**  
**AIR - 366**

YEAR 2020



**PARUL SINGH**  
**IIT-KANPUR**  
**(RANK-1 GIRLS)**

YEAR 2021



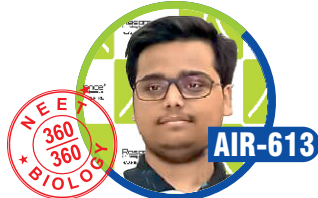
**SUYASH MORE**  
**MARKS - 99.86%ile**  
**MHT-CET**

YEAR 2024

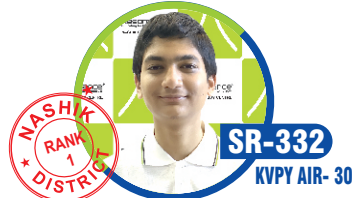
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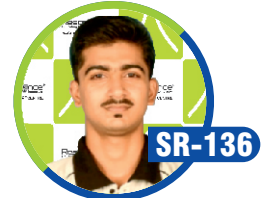
**ADITYA LUGADE**  
**700/720 NEET 2024**  
**99.99%ile**



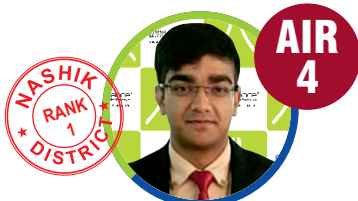
**JAYANT**  
**KEM MUMBAI-2021**



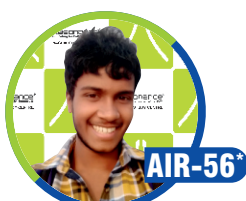
**PRAJWAL**  
**LTM MUMBAI-2020**



**DEEPAK**  
**KEM MUMBAI-2019**



**ABHIGYAN**  
**AFMC-PUNE 2016**



**KANISHK**  
**BJ PUNE-2017**



**MOHINI**  
**KEM MUMBAI-2017**



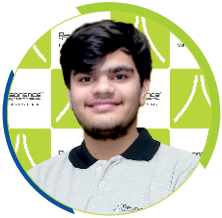
**YASH CHANDAK**  
**NAIR MUMBAI-2017**  
**AIIMS AIR-1347**

# KOTA 2023 RESULTS

## JEE (Main) 2023 RESULT

AIR **5**

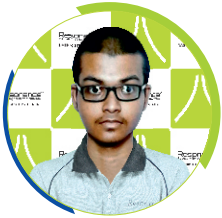
300/300 Marks



KAUSHAL VIJAYVERGIYA

AIR **26**

100%ile



SOHAM DAS

AIR **29**

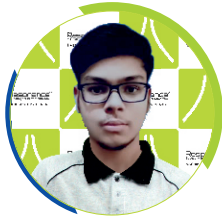
100%ile



ASHIK STENNY

AIR **31**

100%ile



KRISH GUPTA

AIR **34**

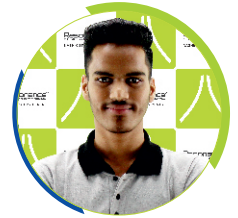
100%ile



MAYANK SONI

AIR **50**

100%ile (Maths)



HARSHAL LASOD

## JEE (Adv.) 2023 RESULT

8 STUDENTS IN TOP-50 AIRs | 15 STUDENTS IN TOP-100 AIRs

AIR **7**



BIKKINA A.  
CHOWDARY

AIR **22**



DESHANK P.  
SINGH

AIR **26**



MAYANK  
SONI

AIR **29**



TANISHQ M.  
MANDHANE

AIR **32**



KRITIN  
GUPTA

AIR **33**



NAMAN  
GOYAL

AIR **37**



S S  
SUMEDH

AIR **44**



KAUSHAL  
VIJAYVERGIYA

## NEET (UG) 2023 RESULT

7 Students  $\geq$  700 Marks



AIR (UR) **60**

SRIJAN  
MH



AIR (UR) **89**

SHIVAM  
KUMAR RAI



AIR (UR) **98**

AIJAZ AARYAN  
JUMKHAN



AIR (UR) **135**

SAYALI  
MAHINDRAKAR



AIR (UR) **150**

PRANJAL  
SINGH



AIR (UR) **197**

ARMAN  
MITTAL



AIR (UR) **258**

KRISHNA  
AGARWAL