

MHT CET MEMORY-BASED QUESTION PAPER 2021

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- Which of the following is a soft metal?
- Area under curve $x=y$ and $x = -1$ $x = 2$
- Which of following is alpha amino acid
- If $A \text{ adj} = [-10 \ 0 \ 0] [0 \ -10 \ 0] [0 \ 0 \ -10]$ Then $|A| = ?$
- Lesser acidic from, HF HCl HBr HI
- Polymer used for the shopping bag
- The polymer of the tyre? A.Neoprene, B.SBR
- The maximum area of the rectangle in the circle of radius r
- $a \cdot \sin(\theta) = b \cdot \cos(\theta)$ then $a \cos^2 \theta + b \sin^2 \theta =$ A. a/b
- Volume of bcc lattice
- What product is formed when vapour of phenol and hydrogen is passed over nickel catalyst (Ans . Cyclohexanol)
- A stone is projected in two ways : 1) Vertically upwards with velocity V . 2) With an velocity V which has angle 60° with vertical. What is the ratio of their Potential Energies at the highest point.
- Integration of $\int x \cdot [x] dx$ from 0 to 4, where $[]$ is greatest integer function.
- If velocity is given by $6t - t^2/2$, distance at $t=0$ is 0 then what is its distance at $t=3$ sec?
- $|\vec{a}|=5$, $|\vec{b}|=4$, $(\vec{a}+k\vec{b})$ and $(\vec{a}-k\vec{b})$ both are vectors which are perpendicular to each other. Value of k equals:
- Equation of pair of straight lines is $ax^2 + bxy - y^2 = 0$, what is the tangent of the angle between the two straight lines. [Ans. $b \div (1+a)$]
- Two particles of mass m are attached to ends of a massless rod of length l and are in rotation. The radius of gyration for axis through midpoint of the rod is k and angular momentum of this body is L . Then what is the angular frequency of the rotating body
- In a triangle with usual notations a^2 , b^2 , c^2 are in a.p. then the value of $\sin 3B \div \sin B$ equals
- Circle with centre $(2,5)$ has a chord whose midpoint is $(1,2)$ what is the equation of the chord.