

# MHT CET 2024 Question Paper (April 27 - Shift 2)

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**Ques 1. A rocket of initial mass 6000kg ejects gases at a constant rate of 16 kg/s with the constant relative speed of 11 km/s what is the acceleration of the rocket one minute after the blast.**

**Ans.  $A = 34.92 \text{ m/s}^2$**

**Ques 2. A coil has a resistance of 30 ohm and inductive reactance of 20 ohm at 50 Hz frequency. If an AC source of 200 volt 100 Hz is connected across the coil then how much current will be in the coil?**

**Ans.  $I = 4\text{A}$**

**Ques 3. The first member of the Paschen series in the hydrogen spectrum is of wavelength 18800 angstrom. What is the short wavelength limit of the Paschen series?**

**Ans.  $7.49 \times 10^{-7}$**

**Ques 4. Find the solubility product of  $\text{BaOH}_2$ ?  
Where ( $S = 1.73 \times 10^{-14}$ )**

**Ans.  $20.7 \times 10^{42}$**

**Ques 5. Which of the following is ferromagnetic:**

- A. Zinc**
- B. Copper**
- C. Magnease**
- D. Cromium**

**Ans. Cromium**

**Ques 6. What is the Oxidation state of Fe in  $\text{Fe}_3\text{O}_4$ ?**

**Ans. 8/3**

**Ques 7. Convert 72 degree Celsius to Fahrenheit.**

**Ans. 161.6 F**

**Ques 8. Menstrual blood is not clot due to the presence of \_\_\_\_\_?**

**Ans. Fibrinolysins**

**Ques 9. The mitral valve is also known as \_\_\_\_\_?**

**Ans. Bicuspid valve**