

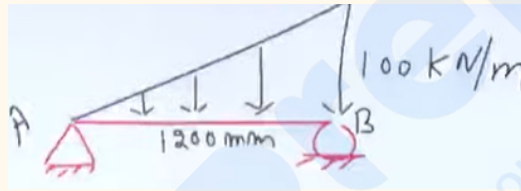
GATE 2024 Question Paper Feb 3 (Mechanical Engineering)

GATE General Aptitude Questions

Ques 1. What are the number of numbers possible divisible by 3 if we choose 4 numbers from the set $S = \{4,5,7,8,9\}$

Ans. 1

GATE Core Discipline Questions



Ques 1. , find the maximum bending energy

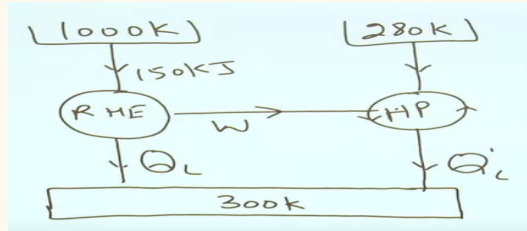
Ans. 9.23

Ques 2. Find the diameter of the punch, if the diameter of the blank is 20mm(blanking operation is going on). Given the clearance value is 0.04mm

Ans. 20.08 mm

Ques 3. $T_{min} = 300\text{ K}$, $T_{max} = 1200\text{ K}$, $Q = 1200\text{ KJ}$. Find work done.

Ans. 900 KJ



Ques 4. find total heat

Ans. 1620

Ques 5. A cube of the dimension $(20*20*20)$ is mold to sphere having diameter 20mm and the pouring temperature both are same. What is the ratio of the solidification time of the cubical casting: spherical casting

Ans. 32/3