

NEW STANDARD ACADEMY

Marks: 60

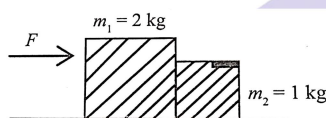
Date : 29-07-24

CLASS : 11TH NEET

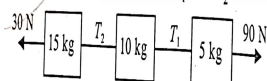
Time: 3 HRS

PHYSICS

- Blocks are in contact on a frictionless table. A horizontal force $F = 3 \text{ N}$ is applied to one block as shown. The force exerted by the smaller block m_2 on block m_1 is

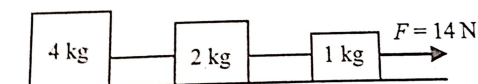


- In figure below find t_1 and t_2

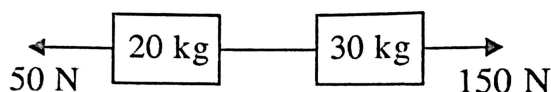


- In the arrangement shown in figure. The strings are light and inextensible. The surface over which blocks are placed is smooth. Find.

- (1) the acceleration of each block
- (2) the tension in each string.



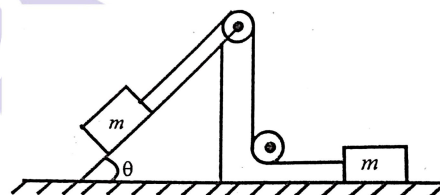
- For figure show find tension in string connecting the blocks?



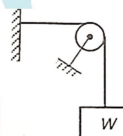
- The ratio of the weight of a man in a stationary lift and in a lift accelerating downwards with a uniform acceleration 'a' is 3:2. The acceleration of the lift is?
- The mass of a lift is 600 kg and it is moving upwards with a uniform acceleration of 2 m/s^2 . Then the tension in the cable of the lift is?
- The mass of a body measured by a physical balance in a lift at rest is found to be m . If the

lift is going up with an acceleration a , its mass will be measured as

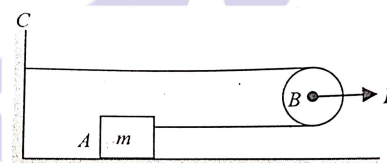
- For the system shown in the figure, the pulleys are light and frictionless. The tension in the string will be



- In the situation shown in figure the block of weight W' is suspended from a string. The pulley is frictionless and massless. Calculate the tension in the string and the force exerted by the clamp on the pulley.



- A block 'A' of mass m is tied to a fixed point on a horizontal table through a string passing round a massless smooth pulley B. A force F is applied by the experimenter to the pulley. Find acceleration of pulley.



CHEMISTRY

- What is system? Explain its types
- What do you understand by thermodynamic process. Write its types
- Define work & derive equation (Mathematical form) For pressure- volume [Expansion work]
- During a chemical reaction increase in the volume of a system is 100 cm^3 at 740 mm

Atmospheric pressure .Calculate the work done during the expansion

5. Define extensive and intensive properties with their examples.
6. What do you mean by state function and path function? Write example of each.
7. Write the first law of thermodynamic and derive its mathematic expression.
8. What is heat? What will the change in heat at constant pressure and constant volume?
9. A gas occupies 2L at STP. It is provided 300 joule heat so that its volume becomes 2.5 L at 1 atm calculate the change in its internal energy.
10. Write the main characteristics of internal energy with its definition.

BIOLOGY

1. Give the name of group which body is a dorsoventrally flattend , with two example.
2. How do endoparasites (Platyhelminthes) protect themselves? Inside the host
3. Draw the structure of Flame cell also give its function.
4. Give the scientific name of these flat worm
a the liver fluke
b the pork tape worm
c the beef tapeworm
d the blood fluk
5. Which type body of organisation present in roundworm explain with example.
6. Which type digestive track is present in roundworm explain?
7. Give the name of filarial worm. What is the symptoms of disease caused by this organism.
8. What is metameric segmentation give its example.
9. What is the difference between male and female Ascaris .
10. What is a characteristic feature of Annelida.