

PHYSICS

023 - فرسٹ اینول - (نیم کلاس)

فزکس

Paper : I (Essay Type)

(پہلا گروپ)

پرچہ : I (انشائیہ طرز)

Time Allowed : 1.45 hours

وقت : 1.45 گھنٹے

Maximum Marks : 48

(حصہ اول - PART - I)

کل نمبر : 48

2- کوئی سے پانچ (5) سوالات کے مختصر جوابات لکھئے :

- Differentiate between base quantities and derived quantities.
- Define plasma physics.
- Write down two rules to identify the significant figures.
- Differentiate between vectors and scalars.
- Define position.
- Write down mathematical form of 3rd equation of motion.
- Write down two disadvantages of friction.
- Differentiate between centripetal force and centrifugal force.

3- کوئی سے پانچ (5) سوالات کے مختصر جوابات لکھئے :

- What is a solar cell? Write down its uses.
- Why an energy saver lamp is better than an electric lamp?
- Define power. Write down its SI unit.
- Define force of gravitation.
- What is meant by artificial satellites? Write down their uses.
- Why does the value of 'g' vary from place to place?
- Write difference between like and unlike parallel forces.
- Define centre of mass.

4- کوئی سے پانچ (5) سوالات کے مختصر جوابات لکھئے :

- What is meant by elastic limit?
- Define density and write its unit.
- Write four differences between solid and gas state of matter.
- What is meant by internal energy of a body?
- Define specific heat capacity.
- What is transfer of heat? Write its modes.
- Upon which factors radiation depend?
- Why does land breeze blow in the night?

(PART - II حصہ دوم)

Note : Attempt any TWO questions.

5. (a) Derive the second equation of motion with the help of speed-time graph.
- (b) 0.5 kg گرام ہاس کے جسم کو 50 cm ریڈیئس کے دائرے میں 3 ms^{-1} کی سپیڈ سے گھمانے کے لیے کتنی سینٹری فوگل کی ضرورت ہوگی؟
- (b) How much centripetal force is needed to make a body of mass 0.5 kg to move in a circle of radius 50 cm with a speed 3 ms^{-1} ?
6. (a) Explain any two states of equilibrium.
- (b) Calculate the value of 'g' at a height of 3600 km above the surface of the earth.
7. (a) Define and explain latent heat of fusion.
- (b) ایک طالب علم اپنے انگوٹھے سے 75 N کی فورس لگا کر اپنی ہتھیلی کو دباتا ہے۔ اس کے انگوٹھے کے نیچے 1.5 cm^2 ایریا پر لگنے والا پریشر کتنا ہوگا؟
- (b) A student presses her palm by her thumb with a force of 75 N. What would be the pressure under her thumb having contact area 1.5 cm^2 ?