

(2) got =a to any FIVE (5) questions:

(1) Define base units and derived units

(it) Define positive and negative zero error of vernier calipers.

(iii) Define prefixes and give two examples.

(iv) Define velocity and write its formula.

Convert 50 Kmh: to ms"! my

(vi) Define rest and motion.

(vii) Why rolling friction is smaller than the sliding friction? |

(viii) Define centripetal acceleration and write its formula.

(3.) Write short answers to any FIVE (5) questions:

CL) Differentiate between acceleration and velocity |

Lil) Define torque and write its equation.

(Hi) you mean by centre of gravity?

(iy) What do you know about "G"? What is its value?

Define artificial satellite.

(vi) Define orbital velocity and write its formula.

vii) Define power and write its formula.

\viii) What is meant by the efficiency of a system? |

4.) Write short answers to any FIVE (5) questions:

as Why strain has no unit? give reason.

(ii) Define elastic limit.

(iit) Write down the equation for work done

(iv) Define internal energy

(Vv) state factors affecting internal energy?

ay What is the effect of temperature on evaporation?

(viii) How does heat reach us from sun?

Why does land breeze blow in the night?

PART - II

Note: Attempt any Two questions.

(5.)(a) State Newton's first law of motion and explain with the an of two examples.

(b) A train starts from rest 1G ou Find its speed in Ail uni 100 m?

(6. | dat energy, ee an example and derive its equation.

(b) Find the magnitude and directon of a force, if its X-component is 12N and Y-component is SN. 5

(7 Jha) Sate Pascal's law and explain hydraulic press. . ®

(b) Calculate the increase in the length of an aluminium bar 2m long when heated from °C to. 20°C. The thermal coefficient of finear expansion of aluminium is $2 \times 10^{-5} \text{ } ^\circ\text{K}^{-1}$ 3.