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Hours) Sub ? ype

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(2) Write short answers to any Four (4) questions: -

i.) Differentiate between Geo physics and plasma physics.

(ii); Define acceleration ?and write down its SI unit.

. (vii) Differentiate between testa

(ii) State Newton's second law of motion. '

Write the number of significance figures in each case.

(i) 275.00 (ii) 0.027

(v.) Define base units. Write down the base units of temperature and electric current.

Differentiate between circular motion and rotatory ? motion.

(vii, SI unit of force is Newton. Define calc on Oil!

(3] ?Write ieee our (4) questions:

epi 8 unlike parallel forces.

is meant by rigid body and line of action of force?

Why are vehicles made heavy at the bottom?

Why we cannot feel gravitational force around us?

What is meant by gravitational field strength? - @

a What is the difference between artificial and natural satellite?

(vi) Define work On what factors work depends.

vii) Describe Einstein's mass energy equation,

(4] Wie short answers to eny Four (Gh questions: (to

(i. Deine princiale of flactation ?

ea.)

Wity is water not suitable to be used ima barometer?

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Why does the alnosphtere p me

Witte down applicatio i mat ey ?.

ei amd heat?

sue flow fram hat. ?Sady to cald

ae of heat does nat take place i in gases?

= What is greenhouse effect?

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Note: Attempt any TWO questions.

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(a) State Newton's first law motion and explain witht the .

help of two examples.

{b) Find the retardation oraduced when 2 car moving at

3 velocity of 30ms" slows down uniformly to: Tims?

itt 5s.?

(a) Explain the mation of astificial satellites and derive

the formula of acbital speed near Earth.

(o} Find the magnitude and direction of force, if pitt

x-component is 12N y-com onent IS oa

length?at 30°

(a) State Pascal's law and

C. The coefficient of expansion of brass is 1.9×10^{-5} ;

find

(b) A brass rod of length 100 cm is heated from 20°C to 120°C . Find the increase in length.

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