Gravitation test paper for class 9 science

Question 1

Define

i) Buoyancy
ii) Factor of buoyant force
iii) Archimedes Principle and its use

Question 2

Explain why

1) Pressure on ground more when man is walking than he is standing?

2) A bucket of water is lighter when in water than when it is taken out of water?

3) An iron nail floats on mercury but sink in water

4) It is easy to walk on sand with flat shoes than with high heel shoes?

Question 3

A iron cube of side 10 c m is kept on a horizontal table. If the density of iron is 8000 kg/m^3. Find the pressure on the portion of the table where cube is kept

Take g=10m/s^2

Question 4

The dimension of wooden block is 2m X .25 m X .10 m. If relative density of wood is 0.6 calculate the mass of the block in kg

Question 5

Differentiate between density and relative density

Question 6

A 100 cm^3 block has a mass of 395g. Find its relative density

Question 7

A block of wood is kept on the table top. The mass of wooden block is 5 kg and its dimension are 40 cmX20cmX10 cm. Find the pressure exerted by the wooden block on the table if it made it lie on the table top with its sides of dimension

1) 20 cm × 10 cm

2) 40 cm × 20 cm

Take g=9.8 m/s^2