

Gravitation Theory Test

1. Differentiate between mass and weight. 2
2. State Archimedes principle. 2
3. Two applications of Archimedes principle.
4. What are the two factors of buoyant force? 2
5. When the body pressure is more? While standing or walking? Why? 2
6. It is easier to swim in sea water rather than river water. Why? 2
7. RD of silver is 7.8. what does it mean? 2
8. If you double both of the masses and distance is doubled then what will be the new force?
9. Prove that the ratio of g on the earth and g on the moon is 6:1 .2
10. Prove that g doesn't depend on the mass of the object. 2
11. State conditions of floatation. 3
12. What is free fall? 1
13. Define relative density. what is the unit of that? 2
14. How does the weight of an object vary with different position on the earth? 3
15. Who formulate the universal law of gravitation? Why G is called universal gravitational constant? 2
16. If the earth attracts two objects of equal masses with equal force then are they placed same distance from the earth? Justify your answer. 2
17. Several phenomena of celestial bodies were believed to be unconnected but universal law of gravitation was successful to explain them.....mention any two phenomena 2
18. State universal law of gravitation.
19. A stone and the earth attract each other with an equal and opposite force. Why then we do see only the stone falling towards the earth and not the earth rising towards the stone?
20. Differentiate between G and g
21. What is the density of water at 4 degree celcius?
22. Prove that buoyant force= $V D g$
23. Buoyance force is also known as.....
24. How does a rubber tube help in floatation?
25. Give reason a ship has a broad base.