Paper: _Physics_____		Total Marks: __12_____
Month Test: _November_____		Obt. Marks: _____
Theme/Unit: _5 – 9_____		Grand Total: __75_____
Objective:	ID: _____	Time: ____15 mins_____
Name: _____	class: __9th _____	Section: _____

Q. No. 1: Encircle the correct answer:

1. The value of g at a height one earth's radius above the surface of the earth is:
   a. 2g b. ½ g c. 1/3 g d. ¼ g
2. The orbital speed of a low orbit satellite is _____ ms^{-1}.
   a. Zero b. 8 c. 800 d. 8000
3. Earth's gravitational force of attraction vanishes at _____ km.
   a. 64000 b. Infinity c. 1000 d. None
4. The kinetic energy of a body of mass 2kg is 25J. Its speed is _____ ms^{-1}.
   a. 5 b. 12.5 c. 25 d. 50
5. Which one of the following converts light energy into electrical energy.
   a. Electric bulb c. Photocell
   b. Electric generator d. None
6. The work done in lifting a brick of mass 2kg through a height of 5m above ground will be _____ J.
   a. 2.5 b. 10 c. 100 d. 50
7. The density of substance can be found with the help of:
   a. Pascal's law c. Archimedes principle
   b. Hooke's law d. Principle of flotation
8. Melting point of nitrogen is _____:
   a. -201°C b. -219°C c. 327°C d. 1083°C
9. Heat of vaporization of Gold is _____ kJ.
   a. 210 b. 858 c. 10500 d. 1580
10. Normal human body temperature is _____.
    a. 15°C b. 37°C c. 98.6°C d. 37°C
11. In solids heat is transformed by:
    a. Radiation c. Conduction
    b. Convection d. None
12. Land breeze blows from:
    a. Sea to land during night c. Land to sea during night
    b. Sea to land during day d. Land to sea during day

Paper: _Physics_____		Total Marks: __63_____
Month Test: _November__		Obt. Marks: _____
Theme/Unit: _5 – 9_____		Grand Total: __75_____
Subjective:	ID: _____	Time: __2 hour__
Name: _____	class: __9th _____	Section: _____

Short Answers: /30

Q. No. 1:

i. State kinetic molecule model of matter?
ii. Describe fourth state of matter?
iii. State law of gravitation?
iv. Write names of four forms of energy?
v. Write two parts of solar house heating system?
vi. Define pressure and write its unit?
vii. Differentiate b/w stress and strain?
viii. Convert 100°F into celcius scale?
ix. Define convention?
x. What causes a glider to remain in air?
xi. What do you know about greenhouse effect?
xii. On which two factors flowing ratio depends in solid objects?
xiii. What is meant by convection current?
xiv. State principle of rotation?
xv. Why are metals good conductor of heat?

Long Questions:

1) a: Define young's modulus and derive its mathematical equation. /6

   b: How much heat is refuined to increase the temperature of 0.5 kJ of water from 10°C to 65°C. /5

2) a: Explain volumetric thermal expansion and also derive its equation. /6

   b: Calculate power of a pump which can lift 200kg of water through a height of 6m in 10 seconds? /5

3) How mass of earth can be determined? /6

   b: How much heat is lost in an hour through a glass window measuring 2m by 2.5m when inside temperature is 25°C and that of outside is 5°C. the thickness of glass is 0.8 cm and value of K for glass is 0.8 $Wm^{-1}k^{-1}$? /5