Test Jot Series

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Student Name:			**Class:**	9th
Paper Type:	**Chapter#6**		**Subject:**	**Physics (SNC)**
Paper Time:	**1 Hour**		**Maximum Marks:**	30

Q1. Choose the correct option. **(6X1=6)**

1. A wire is stretched by a weight w. If the diameter of the wire is reduced to half of its previous value, the extension will become:

(A) One half	**(B)** Double	**(C)** One Fourth	**(D)** Four times

2. What is the unit of spring constant k?

(A) N/m	**(B)** Kg/m	**(C)** M/n	**(D)** Ms/m

3. What is the spring constant of a spring that requires a force of 20N to extends by 0.1m?

(A) 200 N/m	**(B)** 100 N/m	**(C)** 50 N/m	**(D)** 20 N/m

4. What is the unit of density?

(A) kg/m^3	**(B)** gkm^3	**(C)** kg/l	**(D)** All of obove

5. What happens to the density of a substance when it's volume decreases?

(A) Density decreases	**(B)** Density increases	**(C)** Density remain same	**(D)** Density becomes zero

6. What is the pressure exerted by a force of 10N on an area of of $2m^2$?

(A) 5Pa	**(B)** 10Pa	**(C)** 20Pa	**(D)** 50Pa

Q2. Write down short answers of following questions. **(7X2=14)**

[i] State what do yo mean by elasticity of a solid.	**[ii]** What is the deformation of solids?
[iii] What is Hooke's law?	**[iv]** What is density? Write its unit.
[v] How will you measure the volume if the object is lighter than the liquid?	**[vi]** How does temperature effect pressure in liquids?
[vii] Write an example which applied pascal's law?	

Q3. Write detailed answers of the following questions.(Answer any 2) **(2X5=10)**

1. Briefly explain the following deforming force, elasticity, elastic limit.
2. A force of 20N is applied to a spring, causing it to extend by 0.2m. Calculate the spring constant of the spring if the force increased to 30N, what is the new extension of the spring?
3. A liquid of density $100/kgm^3$ is filled in a tank to a height of 5m. Calculate the pressure exerted by the liquid at t he bottom of the tank.