Paper: Physics		Total Marks: 40
Month Test: July		Obt. Marks: _____
Theme/Unit: _____		Grand Total: 40
Objective / Subjective:	ID: _____	Time: _____
Name: _____	class: 11th	Section: _____

Encircle the correct options. **/15**

1. The dot product of Force and displacement is.

a) Torque c) Displacement

b) Work d) Force

2.Suplimentry units are.

a) 2 c) 4

b) 3 d) 5

3. which is base quantity.

a) Time c) power

b) Force d) velocity

4. SI unit of intensity of light.

a) ampere c) candela

b) mole d) joule

5.Number of significant figure in 01.020mm are.

a) 2 c) 4

b) 3 d) 5

6. A vector in space has components.

a) 1 c) 3

b) 2 d) 4

7. Which one is vector quantity.

a) length c) velocity

b) volume d) work

8.The resultant of two forces 30N and 40N acting parallel to each otheris.

a) 10N
c) 70N
b) 50N
d) 90N

9. The scalar product of two vectors is maximum when they are.

a) Parallel
c) null
b) perpendicular
d) anti parallel

10. Torque acting on a body determine its .

a) linear acceleration
c) angular acceleration
b) impulse
d) linear momentum

11.If A×B =0 then angle between the vectors is.

a) 90
c) 0
b) 45
d) 60

12. j×i= ?

a) 0
c) k
b) 1
d) -k

13.The cross product to a vector F with itself results.

a) F
c) zero
b) 1
d) none

14.Pick out the scalar quantity.

a) power
c) momentum
b) torque
d) impulse

15.If the position vector R and F are in same direction then torque will be.

a) maximum
c) zero
b) minimum
d) negative

Q:2. Answer these following short questions. (7×2)

1.Write the dimension of pressure and density.

2.Define Radian and Steradian.

3.work is the dot product of Force and displacement how we can prove.

4.Define Torque and write its unit.

5.Is it possible to add scalar quantity into vector.

6.Two vectors A1×A2=0 write the there possible condition in which these vector gives us zero value.

7.can a vector magnitude greater than its rectangular components. Explain

Q:3: Long Questions. (6+5)

(a) Write and explain with the help of characteristics Scalar or Dot product. (6)

(b) Prove the Famous Einstein equation E=mc^2 is dimensionally correct. (5)