WS-2 7th foundation +

Thank

(14)

we know that [force] = MLT^{-2}

[Time] = T

$\therefore F \times T = [F][T] = MLT^{-2}T = MLT^{-1}$ which is dimensional formula for impulse.

(15)

$[F \times L] = [F] \times [L]$

$= MLT^{-2} \times L = ML^2T^{-2}$ which is dimensional formula for work energy.

(16)

Given $FL^{-1}T^2 = [P][L^{-1}][T^2]$

$= MLT^{-2}L^{-1}T^2$

$= M.$

(17)

$\left[\frac{BI^2}{BC^{-1}}\right] = [C^{-1}]$ = which is dimensional formula for freequency Because (denotes Time $\frac{1}{T} = f$

(5)

X - Force = $[x] = MLT^{-2}$

Y - Pressure = $[y] = ML^{-1}T^{-3}$

A - Area = $[z] = L^2$

$\therefore \left[\frac{2yz}{x}\right] = [2]\frac{[y][z]}{[x]} = \frac{ML^{-1}T^{-3}L^2}{MLT^{-2}}$

$= L^{-1}LT^{-1} = T^{-1}$

$[2] = M^0L^0T^0 = 1$

L Task

(14), (15), (16)

[force] = MLT^{-2} ; [Time] = T [velocity] = LT^{-1}

By doing option verification

From (c) $FTV^{-1} = [F][T][V]^{-1}$

$= MLT^{-2}T(LT^{-1})^{-1}$

$= MLT^{-1}L^{-1}T^1$

$= M$ = mass

(15)

From (d) $= FTV = [F][T][V]$

$= MLT^{-2} * LT^{-1}$

$= ML^2T^{-2} \Rightarrow$ Energy

(16)

From (c) $= FV = [F][V] = MLT^{-2}LT^{-1}$

$= MLT^{-3} =$ Power

(17)

$[P] = M \quad ; \quad [Q] = LT^{-1} \quad ; \quad [R] = ML^2T^{-2}$

$[S] = L.$

$\therefore \quad \frac{PQ}{R} = \frac{[P][Q]}{[R]} = \frac{M\,LT^{-1}}{ML^2T^{-2}} = L^{-1}T^{+1}$

$= [LT^{-1}]^{-1} = Q^{-1} \Rightarrow \underline{1} \times Q^{-1}$