

1st Internal (SSIT POLYTECHNIC) 2023-2024(winter)

SUBJECT- ENGG PHYSICS

BRANCH-CIVIL ENGG ,EE ENGG & EE(I&C) ENGG(1st SEM)

TIME:1 HOURS

MAXIMUM MARKS:20

1. Answer all question:

2×5=10

- (a) Name two physical quantities whose dimensions are $ML^{-1}T^{-2}$.
- (b) Name two dimension less physical quantities.
- (c) Obtain the dimensions of (i) pressure and (ii) kinetic energy.
- (d) What is the mean by a unit?
- (e) What is the dimensional formula of (i) force and (ii) work?

2. Answer all question

5×2=10

(A) What are the fundamental base unit in the SI System?

(B) Define or verify the correctness of the equations $v^2 - u^2 = 2as$ and $s = ut + \frac{1}{2}at^2$ using dimensional analysis.

******* ALL THE BEST *******