

# Internal exam question

Modimate  
Date \_\_\_\_\_  
Page \_\_\_\_\_

B.Sc Sem 1 (2019, 2022)

Core paper (1)

Answer any ~~four~~ questions

2X5 = (10)

① Define scalar and vector fields

② What is a differential equation, what do you mean by its order and degree. Give examples

③ State and prove Stokes' Theorem

④ What do you mean by divergence and curl of a vector.

# Internal questions

B.Sc. Sem I (2019-2022)

Physics Core (2)

2x5 = 10

Answer any two questions

- (1) Describe with theory Rankin's method for the determination of  $\eta$  viscosity of a gas
- (2) Find the expression for the depression of a beam when it is supported at both ends and loaded at middle.
- (3) Describe Michelson Morley experiment and ~~discuss~~ discuss its negative result
- (4) Derive the expression for the variation of mass with velocity in relativistic theory