

Bachelor of Animal Science
First Year Second Semester Examination – December/January/2017/18

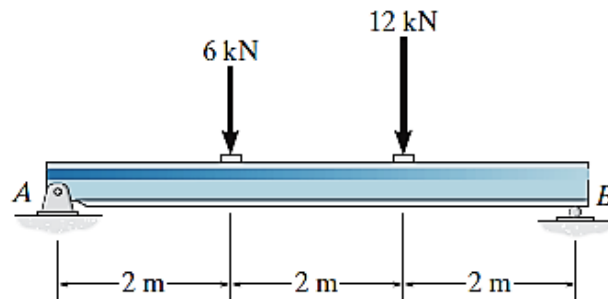
Basics in physics (ANS 107- 0)
Section III – Essay Questions

Instructions

Answer all questions.

No. of questions : One (01)
No. of pages : One (01)
Time : Thirty (30) Minutes
Total marks allocated : 50 %

01. Answer following question based on the information in the given diagram below. The beam is in equilibrium. Neglect the weight of the beam for the calculation.



- Name the type of external forces acting on the beam. (10 marks)
- Find out the reaction forces act on each support (at point A and B). (20 marks)
- Consider a middle point in between point A and B. Name this point as C. Draw a diagram of the suitable segment and mark all the internal and external forces acting on it. (15 marks)
- Calculate the internal forces at point C. (25 marks)
- Draw shear force and bending moment diagram from point A to B. (Consider the upward forces as positive) (20 marks)
- Find out the shear force and bending moment at a point 5 m away from point A. (10 marks)

[End of section III]