128

JAYA ENGG COLLEGE

DEPARTMENT OF AERONAUTICAL ENGG

INTERNAL ASSESMENT -II MODEL EXAM -II

DATE: 11-3-15 AE2451 Composite materials & structures TIME :3HRS

SEM :8 YEAR:4

PART-A (10*2=20 MARKS)

1.Write assumption made on classical laminate theory.
2. Define cross ply and angle ply laminate.
3.Define quasi-isotropic laminate.
4.What is hybrid laminate?
5.Draw tsai hill and wu graph
6.Classify various fabrication process.
7.Write two types of filament winding.
8.What is vaccum bag molding?
9.What is auto clave molding?
10.Write advantages of pultrusion.

Part B (5*16=80marks)

11.a)Explain classical laminate theory.

(or)

11.b)Derive governing equation for laminated plate.

12.a) (i)Explain maximum stress theory
(ii)Explain maximum strain theory

(or)

12.b)Explain t-sai hill and wu theory.

13.a) Explain various types of laminate

(or)

13.b)Explain spry lay up and hand up.

14.a)Explain RTM with neat diagram.

(or)

14.b)Explain pultrusion process with neat diagram.

15.a) Explain filament winding process with neat diagram. (or)

15.a) Explain typical injection molding process with neat diagram.