

Composite Structures
Exam, Part I – 17.11.2014
No literature allowed

1. What are the most common reasons for the use of additives in thermoset resin systems? (6 p)
2. Describe the structure of the reinforcement products listed below. Use drawings as needed. List also advantages and disadvantages related to mechanical properties of the composite part made of these products
 - mat
 - plain weave
 - unidirectional (planar) reinforcement
 - knitting (knit) (6 p)
3. Describe shortly how a laminated plate fails in impact loading with different velocities (low/medium/high) of the impactor. (6 p)
4. Describe the principle of the resin transfer moulding (RTM) process. What are the advantages and disadvantages of the method? (6 p)