paper code: P119-154 (T1)

SOLUTION AND MARKING SCHEME

OCTOBER 2018 / IN - SEM (T1)

F. Y. M. TECH. (DESIGN ENGINEERING) (SEMESTER - I)

COURSE NAME: MECHANICS OF COMPOSITE MATERIALS

COURSE CODE: MEPA11184B, (PATTERN 2018)

[Max. Marks: 20]

Q.1) Correct and neat Sketch: **2 mks.**
Process: **4 mks**
Advantages and Limitations: **2 mks**
Applications with example: **2mks**

OR

Q.2) Correct and neat Sketch: **2 mks.**
Process: **4 mks**
Advantages and Limitations: **2 mks**
Applications with example: **2mks**

Q.3) (a) Derivation for volume fractions of voids : **4 mks**
Procedure to determine experimental density of composite laminate: **2 mks.**

(b) Thermoset (def and example): **1mks** and
Thermoplastic polymers(def and example): **1 mks**
Differentiation 2 points: **2 mks**

OR

Q.4) (a) **ANS:** Density of composite= 1.6 g/cc: **3mks**

Void fraction= 0.0625: **3 mks**

(b) ROM for strength: **2mks**
ROM for Modulus: **2mks**