



(Following Paper ID and Roll No. to be filled in your Answer Book)

**PAPER ID : 187603**

Roll No.

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## B. Tech.

(SEM. VI) THEORY EXAMINATION, 2014-15  
**ADDITIVES & COMPOUNDING**

Time : 2 Hours]

[Total Marks : 50

Note : Attempt all questions.

- 1 Write brief note on **any Four** by explaining the function and mechanism additives given below.
  - (a) Antioxidants
  - (b) Lubricants
  - (c) Fire Retardants
  - (d) Coupling agents
  - (e) Plasticizers
  - (f) Reinforcing fillers.
  
- 2 Attempt **any two** of the following:-
  - (a) State in a point wise fashion the difference between distributive and Dispersive mixing with examples of mixers.
  - (b) Describe the need for compounding in PVC with role of each ingredient.
  - (c) Describe the compounding ingredients of a Phenol formaldehyde molding power with reasons and amount.

- 3** Attempt **any two** parts of the following-:
- (a) Describe the Banbury mixers with a neat sketch and applicability.
  - (b) Discuss the construction and function of a Two Roll mill with applications.
  - (c) Describe pelletizers with sketch.
- 4** Attempt **any two** of the following-:
- (a) Write a brief note on significance of polymer blends by giving at least three examples.
  - (b) Discuss the case study of ABS in terms of morphology and properties.
  - (c) Narrate limitations of polymer blending and role of compatibilizers.
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