

## SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Define compounding. Discuss in detail the compounding on rigid PVC pipes including the mixer to be used.

Q.24 Discuss the construction and working of a kneader.

Q.25 Discuss the construction and working of a banbury mixer.

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Roll No. ....

## 5th Sem / Plastic Technology

### Subject : Compounding and Formulation of Plastic

Time : 3 Hrs.

M.M. : 60

## SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 Flame retardants are used

- a) To ignite flame      b) To retard flame
- c) Both (a) & (b)      d) None of these

Q.2 Blowing agents are an example of

- a)  $\text{Ca(OH)}_2$       b)  $\text{CaCO}_3$
- c)  $\text{NaHCO}_3$       d) All of these

Q.3 Function of processing aids in plastic is

- a) To improve process ability
- b) Increase the flexibility
- c) To improve viscosity of plastic melts
- d) All of these

Q.4 Function of fillers in plastic is

- a) To improve hardness
- b) Improve flexibility
- c) Both (a) & (b)
- d) None of these

Q.5 Usually ribbon blenders are used for

- a) Rubber                      b) Thermoplastic
- c) None of these              d) All of these

Q.6 Examples of fillers are

- a) Wood Flour                  b) Sand
- c) Clay                          d) All of these

### SECTION-B

**Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Define compounding of plastics.

Q.8 Define thermoplastic with two example.

Q.9 Write two examples of plasticizers.

Q.10 Write two example of lubricants.

Q.11 Write two example of extenders.

Q.12 Write two examples of fillers.

### SECTION-C

**Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 State the role of plasticizers.

Q.14 What are blowing agents.

Q.15 What are mold releasing agents.

Q.16 Explain the principle of compounding with suitable example.

Q.17 Draw a neat and labelled sketch of ribbon blender.

Q.18 Difference between intensive and extensive dry mixer.

Q.19 Explain the roll of antistatic agents in plastics.

Q.20 Define dyes and colourants.

Q.21 Explain service life of plastics and their applications.

Q.22 Draw neat and labelled sketch of two roll mill.