22390

12425

3 Hours / 70 Marks Seat No. | | | | | | | | |

Instructions – (1) All Questions are *Compulsory.*

(2) Answer each next main Question on a new page.

(3) Illustrate your answer with neat sketches wherever necessary.

(4) Assume suitable data, if necessary.

(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

(6) Abbreviations used are their usual meanings.

Marks

1. Attempt any FIVE of the following: **10**

a) State the full form of LDPE, PS, PET and PP.

b) Enlist two applications of HDPE.

c) Define thermosetting polymer.

d) State the full form of PF, UF, MF and PU

e) Define additives.

f) Enlist any four plasticizers.

g) Enlist any four compounding equipments.

Marks

2. Attempt any THREE of the following: **12**

a) State any four properties and four applications of PS.

b) Define engineering.

c) State any four properties and four applications of silicone.

d) State any four properties and four applications of bismelamide.

3. Attempt any THREE of the following: **12**

a) State any four properties and four applications of LDPE.

b) State any four properties and four applications of acrylonitrile butadiene styrene.

c) Define specialty polymers. Enlist any four specialty polymers.

d) Explain function of heat and light stabilizers State their one example each.

4. Attempt any THREE of the following: **12**

a) State any four properties and four applications of polymethyl methacrylate

b) State any four properties and four applications of polypheny-leneoxide.

c) Explain function of fillers and colorants. State their one example each.

d) Describe the working of two roll mill with neat labelled figure.

e) State any four properties and four applications of polyacrylonitrile.

5. Attempt any TWO of the following: **12**

a) Explain manufacturing principle of PVC. State it's any four properties and four applications.

b) Describe manufacturing principle of nylon 6. State it's any four properties and four applications.

c) Explain the principle of manufacturing of urea formaldehyde (UF) with reaction involved in it. States its two properties and two applications.

Marks

6. Attempt any TWO of the following: **12**

a) Illustrate manufacturing principle of cellulose nitrate with its structure. State it's any two properties and two applications.

b) Explain the principle of manufacturing of ethylene vinyl acetate with reaction involved in it. States its two properties and two applications.

c) Describe the working of ribbon blender with neat labelled figure. State it's any two applications.

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