

SECTION-D

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

Q.23 Discuss construction and types of calendaring process with label diagram.

Q.24 Write short note on :

- a) Mastication and role of two roll mill in rubber processing
- b) Basic concept of rubber elasticity

Q.25 Explain :

- a) Properties and applications of EPDM rubber.
- b) Non sulphur vulcanisation

No. of Printed Pages : 4

222263-C

Roll No.

6th Sem/ Plastic Engineering Subject : Rubber Technology

Time : 3 Hrs.

M.M. : 60

SECTION-A

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

Q.1 The process involved in converting rubber into thin sheet or coating it on fabric is called_____.

- a) Extrusion b) Calendering
- c) Mastication d) Vulcanisation

Q.2 Crack growth is minimum for _____ rubber.

- a) Natural Rubber b) SBR
- c) CR d) NBR

Q.3 The rubbers are _____ in nature.

- a) Semiconductors b) Conductors
- c) Insulators d) None of these

Q.4 Which tree gives out the latex to obtain natural rubber?

- a) Eucalyptus b) Hevea brasiliensis
- c) Anogeissus d) Astragalus

Q.5 Addition of _____ results in the vulcanization of rubber.

- a) Nitrogen b) Sulphur
c) Carbon monoxide d) Particulate matter

Q.6 _____ is an example of reinforcing filler.

- a) Carbon black b) China clay
c) Barium sulphate d) Chalk

SECTION-B

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

Q.7 Give name of two synthetic rubbers.

Q.8 Write two examples of antioxidants.

Q.9 Name two plasticizers used in rubber industry.

Q.10 Write two applications of Nitrile rubber.

Q.11 Name two rubber materials used in tyre manufacturing.

Q.12 Define Latex.

SECTION-C

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

Q.13 Discuss various grades of natural rubber.

Q.14 Explain scope & advantages of synthetic rubber over natural rubber.

Q.15 Give properties and applications of chloroprene rubber.

Q.16 Explain chemistry and technology of sulphur vulcanisation of rubbers.

Q.17 Explain various types of carbon black and non-black fillers.

Q.18 Explain physical aspect of vulcanisation.

Q.19 Write any four properties and applications of Poly-Acrylic rubber.

Q.20 Explain Banbury mixer with neat sketch.

Q.21 Discuss plasticizers, softeners and chain extenders with example.

Q.22 Discuss batch curing and continuous vulcanisation techniques.