

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER – VI • EXAMINATION – SUMMER 2016

Subject Code: 3362305**Date: 23/ 05/2016****Subject Name: Secondary Processing Techniques****Time: 10:30 AM to 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of programmable & Communication aids are strictly prohibited.
5. Use of only simple calculator is permitted in Mathematics.
6. English version is authentic.

- Q.1** Answer any seven out of ten. **14**
1. List out the types of Calender rolls arrengment.
 2. Definition :- Encapsulation
 3. List out materials used in FRP process.
 4. Definition :- (1)open cell foam (2)K-factor
 5. List out the application of Vinyl dispersion process.
 6. Write down full form of FRP & GRP.
 7. List out the different post calendaring process.
 8. Write down the name of raw material used for manufacturing of PU foam.
 9. Give name of release agent and initiator used in casting process.
 10. Write down the function Blowing agent.
- Q.2** (a) Draw a figure of Ribbon mixture. **03**
- OR
- (a) Write down advantage & disadvantage of Foam process. **03**
- (b) Explain High speed fluidized mixer. **03**
- OR
- (b) Write down application of Foam process. **03**
- (c) Short note: - Banbary mixer. **04**
- OR
- (c) Discuss flexible foam of PU **04**
- (d) Draw a line diagram of Calendaring process. **04**
- OR
- (d) Discuss silicone foam process and its application. **04**
- Q.3** (a) List out casting mold material names. **03**
- OR
- (a) Write down application of casting. **03**
- (b) Discuss advantage and disadvantage of casting. **03**
- OR
- (b) Write down application of Encapsulation process. **03**
- (c) Short note:- Casting process **04**
- OR
- (c) Explain Encapsulation process in details. **04**
- (d) Write down application of FRP process. **04**

- OR
- (d) Discuss plastisol preparation method. **04**
- Q.4** (a) Explain Roll coating process. **03**
- OR
- (a) Write down knife coating process for vinyl dispersion process. **03**
- (b) Explain Rotational molding process for vinyl dispersion. **04**
- OR
- (b) Short note:-Slush molding process. **04**
- (c) Explain Pultrusion process in details. **07**
- Q.5** (a) Explain Filament winding process in details. **07**
- (b) Explain hand layup FRP process. **04**
- (c) Discuss Foam reservoir molding. **03**
