



IV SEMESTER B.TECH. (PRINT AND MEDIA TECHNOLOGY)

END SEMESTER EXAMINATIONS, APRIL 2018

SUBJECT: PE - I PACKAGING MATERIALS [PMT 4002]

REVISED CREDIT SYSTEM (27/04/2018)

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

- ❖ Answer **ALL** the questions.
- ❖ Missing data may be suitable assumed.

- 1A.** What is packaging? Explain its importance.
- 1B.** “Glass as a material has some unique properties that cannot be surpassed or even matched by any other material” – Justify this statement
- 1C.** Briefly explain the theories of Adhesion
- [02 + 04 + 04]**
- 2A.** Which qualities are required for timbers used in packaging?
- 2B.** Explain four essential properties of paper and board used in packaging industry.
- 2C.** Explain the cushioning material's characteristics
- [02 + 04 + 04]**
- 3A.** Which types of films are used for making laminates?
- 3B.** Explain the properties and applications of HM/HDPE in the packaging industry.
- 3C.** Which factors determine the design of cushioning materials? Explain.
- [02 + 04 + 04]**
- 4A.** List the different properties of Polystyrene
- 4B.** Which plastic material is having the latest trend gaining momentum in the market? Give its properties and applications.
- 4C.** With a neat sketch explain heat lamination.
- [02 + 04 + 04]**
- 5A.** Which are the critical considerations in the lamination process?
- 5B.** How are black plates produced? Explain the different steps involved.
- 5C.** Explain the functions of cushioning materials.
- [02 + 04 + 04]**