

19617

11920

3 Hours / 100 Marks

Seat No.

--	--	--	--	--	--	--	--	--

- Instructions :** (1) All Questions are *compulsory*.
(2) Answer each next main Question on a new page.

Marks

1. Answer any FIVE questions :

20

- (a) Differentiate dry and wet lamination. (upto 2 points)
- (b) Describe construction and 2 advantages of laminate.
- (c) Describe sterilization process.
- (d) Describe two characteristics of intelligent packaging.
- (e) Describe package designing procedure.
- (f) Describe scope of aseptic packaging.
- (g) Describe any two packaging requirements of dairy product.

2. Answer any TWO questions :

16

- (a) Describe construction & working of injection molding machine.
- (b) Describe one packaging properties of any four plastics.;
- (c) Describe packaging material life cycle.

- 3. Answer any TWO questions : 16**
- (a) Describe four application areas of plastic materials.
 - (b) Differentiate shrink and stretch wrapping technologies. (4 points)
 - (c) Describe features of two food packaging technologies.
- 4. Answer any TWO questions : 16**
- (a) Describe construction and working of blow film extruder.
 - (b) Describe construction and two advantages of tetrapak technology.
 - (c) Describe two characteristics each of MAP & CAP processes.
- 5. Answer any TWO questions : 16**
- (a) Describe classification, two advantages of polymers.
 - (b) Describe construction and working of blister packaging machines.
 - (c) Describe construction and two advantages of bag-in-box concept.
- 6. Answer any TWO questions : 16**
- (a) Describe construction and two applications of closure and liner.
 - (b) Describe working of HFF and VFF machine.
 - (c) Write packaging requirements for bakery and alcoholic products.
-