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B.E. / B.Tech (Full Time) End Semester Examinations Nov. /Dec. 2011
Printing Technology Branch
V Semester
PT 9302 –Packaging Technology (R 2008)

43

Time: 3 Hrs.

Answer all questions

Max. Marks 100

Part A (10x2=20 Marks)

1. Define "Packaging."
2. A particular food has an Aw of 0.36. What does this mean and what kind of package might this suggest to you?
3. A package communicates in many ways besides the actual written text. Name the six avenues of communication.
4. What are the principal requirements for an aerosol propellant?
5. Which packaging design colors best match the following characteristics?
(a) Appetizing (b) Enjoy (c) Original (d) Urban
6. Briefly explain the packaging technique used for 'paneer'.
7. What is a package design brief? Why is it important?
8. Define the terms "elongation" and "yield"
9. What is the difference between compression strength and stacking strength?
10. What are the advantages and disadvantages of set up boxes?

Part B (5X16=80 Marks)

11. Describe the manufacturing process of composite cans? Briefly explain the advantages and disadvantages of the composite cans.
12. (a)(i) Write short notes on the following (4x4=16)
(a) Brand Equity (b) Brand reposition (c) Brand extension (d) Brand Promise
(OR)
12. (b) Name the six ways of extending the natural shelf life of foods. For each of the methods, briefly note the mechanisms by which the keeping quality of a food product is increased.

(P.T.O.)

13. (a) A package design should start with a clear statement of what the package is supposed to achieve. Briefly explain some examples of package design objectives?

(OR)

13. (b) (i) Briefly explain the components in the Universal Product Code (UPC) (4)

(ii) With neat diagram explain the operating principles of an auger filler and volumetric filling. (12)

14. (a) In the packaging industry the paper board is now picking up. Justify your answer with some examples? What might be the reasons for this trend?

(OR)

14. (b) (i) Explain the structural difference between a blister package and skin package. (12)

(ii) What are the advantages of HFFS machine over a VFFS machine? (4)

15. (a) (i) Draw the profile of airplane carton structure and label it properly (4)

(ii) Describe any three characterization tests for paper board. (12)

(OR)

15(b) (i) How high can an RSC style corrugated box be safely stacked in a warehouse if it must carry entire load? (8)

Given: Gross weight 40 lbs.

Inside dimensions of the box are 20"x 14"x10"; board 'C' flute

The thickness of the box is measured to be 0.16"

The ECT value for the box is 40 pounds/inch and burst strength is 200 psi.

Assume factor of safety. (Average conditions)

(ii) Explain the various factors influencing box stack strength. (8)
