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BSC. SECOND SEMESTER EXAMINATIONS: 2016/2017

DEPARTMENT OF FOOD PROCESS ENGINEERING

FPEN 406: FOOD PACKAGING (2 Credits)

INSTRUCTIONS: ANSWER ANY FOUR QUESTIONS

TIME ALLOWED: TWO (2) HOURS

- 1. Write an essay on the basic functions of food packaging, illustrating your points with typical packaging materials as examples and the considerations in their selection for specific food applications.
- 2. Write brief comments on the principles and applications of the following:
 - a. Modified Atmosphere Packaging
 - b. Active Packaging
 - c. Intelligent or Smart Packaging
- 3. Discuss the application of plastics as packaging material and illustrate their advantages, disadvantages.
- 4. Write brief notes on the regulatory and safety issues of food packaging materials
- 5. Explain the following terms:
 - a. Primary and secondary packaging
 - b. Fick's first law of diffusion
 - c. Time-temperature indicator (TTI)
 - d. Edible film
 - e. Mechanical and Barrier properties of packaging material
 - f. Hürdle technology

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