

B TECH
(SEM VI) THEORY EXAMINATION 2017-18
EPBM & FOOD QUALITY (SET A)

Time: 3 Hours**Total Marks: 100****Note:** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief.****2 x 10 = 20**

- a) Define Specific heat.
- b) What is strain time effect?
- c) Define viscosity of agriculture products.
- d) What is compressor?
- e) What is E.M.C.?
- f) Define drying.
- g) Define PFA act.
- h) Define AGMARK.
- i) Define BIS.
- j) Define FPA.

SECTION B**2. Attempt any three of the following:****10 x 3 = 30**

- a) At 60°C, Henderson constant C and n are $7.4 \times 10^{-4} \text{ K}^{-1}$ and 0.56 respectively. The equilibrium moisture content corresponding to 40% calculate relative humidity?
- b) What is screening. Explain the type of screening?
- c) Define the quality control. Explain the concept, objectives and need of quality control.
- d) Explain the Food Laws and Regulations used now days in India.
- e) What is the angle of repose and its type? What are the methods of measurement of angle of repose?

SECTION C**3. Attempt any one part of the following:****10 x 1 = 10**

- a) Write short note on following.
 - i. Drag coefficient.
 - ii. Rolling resistance.
 - iii. Terminal velocity.
 - iv. St. Venant body.
 - v. Angle of internal friction.
- b) What do you mean by BIS and AGMARK?

4. Attempt any one part of the following:**10 x 1 = 10**

- a) What do you mean by physical properties of biological material?
- b) Describe the HACCP (Hazard Analysis and Critical Control Point) and ISO-9000 series?

5. Attempt any one part of the following:**10 x 1 = 10**

- a) What is the requirement and sampling procedure for granular and powdered materials?
- b) What are the thermal properties of biological material?

6. Attempt any *one* part of the following:

10 x 1= 10

- a) What do you understand by aerodynamic characteristics?
- b) Discuss different Internal and External damage occurring in food product during transportation?

7. Attempt any *one* part of the following:

10 x 1= 10

- a) What do you understand by Aerodynamic characteristics? Discuss relation between drag coefficients and terminal velocity.
- b) Explain the drying and its type. Write the types of dryer.