



17582

14115

2 Hours/50 Marks

Seat No.

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- Instructions :** (1) **All** questions are **compulsory**.  
(2) Answer **each** next main question on **a new** page.  
(3) Illustrate your answers with **neat** sketches **wherever** necessary.  
(4) Figures to the **right** indicate **full** marks.  
(5) **Assume** suitable data, if **necessary**.  
(6) **Use** of Non-programmable Electronic Pocket Calculator is **permissible**.  
(7) Mobile Phone, Pager and any other Electronic Communication devices are **not permissible** in Examination Hall.

	MARKS
1. Attempt <b>any 7</b> questions :	<b>14</b>
i) What are the advantages and disadvantages of sun drying ?	<b>2</b>
ii) Write the working principle of air screen cleaner.	<b>2</b>
iii) Give the sequence of unit operation in PHT (Post Harvest Technology).	<b>2</b>
iv) What is bagging ? What are the different equipments used for packaging of seeds ?	<b>2</b>
v) State the principle of size reduction.	<b>2</b>
vi) State the importance of material handling equipments.	<b>2</b>
vii) What is canning ? Explain the role of canning in preservation of fruits and vegetables.	<b>2</b>
viii) What is importance of transportation of grains ?	<b>2</b>
ix) What are the different containers used for packaging of canned products ?	<b>2</b>
x) What are different methods used for determination of moisture content ?	<b>2</b>

P.T.O.



2. Attempt **any four** : **12**
- i) What is thin layer drying ? Explain empirical equation of drying. **3**
  - ii) Explain the construction and working principle of specific gravity separator. **3**
  - iii) Explain in brief about the operations in seed packaging. **3**
  - iv) Explain in detail about the construction and working principle of jaw crusher. **3**
  - v) Explain the construction and working principle of bucket elevator. **3**
  - vi) Explain the method of preparation of marmalade. **3**
3. Attempt **any four** : **12**
- i) Explain the construction and working principle of Tray dryer with neat figure. **3**
  - ii) What is storage ? State the necessary principles of good storage. **3**
  - iii) Explain the working principle of roller mill with neat sketch. **3**
  - iv) Explain in detail the material handling devices. **3**
  - v) Explain in detail the principle and process of canning. **3**
  - vi) Explain the method of preparation of jam. **3**
4. Attempt **any four** : **12**
- i) Discuss the effect of different factors on drying process. **3**
  - ii) Explain the construction and working principle of rotary dryer. **3**
  - iii) What is seed treatment ? Explain its benefits. **3**
  - iv) How much power is required to crush 2 t/hr. of a material if 80% of the feed passes through IS sieve number 480 (4.75 mm opening) and 80% of the product passes through. IS sieve number 50 (0.5 mm opening). Assume the work index of the material as 6.30 ? **3**
  - v) Explain the construction and working principle of magnetic separator. **3**
  - vi) Explain the method of preparation of jelly. **3**
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