

# CBSE | DEPARTMENT OF SKILL EDUCATION

## AGRICULTURE (SUBJECT CODE – 408)

### MARKING SCHEME FOR CLASS X (SESSION 2022-2023)

Max. Time: 2 Hours

Max. Marks: 50

#### General Instructions:

1. Please read the instructions carefully.
2. This Question Paper consists of **21 questions** in two sections: Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **Out of the given (5 + 16 =) 21 questions, a candidate has to answer (5 + 10 =) 15 questions in the allotted (maximum) time of 2 hours.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A - OBJECTIVE TYPE QUESTIONS (24 MARKS):**
  - i. This section has 05 questions.
  - ii. Marks allotted are mentioned against each question/part.
  - iii. There is no negative marking.
  - iv. Do as per the instructions given.
7. **SECTION B – SUBJECTIVE TYPE QUESTIONS (26 MARKS):**
  - i. This section has 16 questions.
  - ii. A candidate has to do 10 questions.
  - iii. Do as per the instructions given.
  - iv. Marks allotted are mentioned against each question/part.

## **SECTION A: OBJECTIVE TYPE QUESTIONS**

<b>Q.No.</b>	<b>Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)</b>	
i.	ANSWER a. Turn on	<b>1</b>
ii.	ANSWER Smart, measurable, Achievable, Realistic And Timely.	<b>1</b>
iii.	ANSWER TRUE	<b>1</b>
iv.	ANSWER a. Internal	<b>1</b>
v.	ANSWER d. Extensive	<b>1</b>
vi.	ANSWER Icons	<b>1</b>

<b>Q. 2</b>	<b>Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)</b>	
i.	ANSWER a. Maize	<b>1</b>
ii.	ANSWER c. Anacardiaceae	<b>1</b>
iii.	ANSWER d. Seeds	<b>1</b>
iv.	ANSWER a. Bacteria	<b>1</b>
v.	ANSWER c. Viral disease	<b>1</b>
vi.	ANSWER d. Human milk	<b>1</b>

<b>Q. 3</b>	<b>Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)</b>	
i.	ANSWER b. Peas	<b>1</b>
ii.	ANSWER a. 10-12%	<b>1</b>
iii.	ANSWER a. Honeybee	<b>1</b>
iv.	ANSWER d. Rhizobium	<b>1</b>
v.	ANSWER a. Peas	<b>1</b>
vi.	ANSWER a. Seed	<b>1</b>

<b>Q. 4</b>	<b>Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)</b>	
i.	ANSWER c. Cucurbitaceae	<b>1</b>
ii.	ANSWER d. Black quarter	<b>1</b>

iii.	ANSWER a. Fowl pox	1
iv.	ANSWER c. Guinea pig	1
v.	ANSWER c. Strawberry	1
vi.	ANSWER d. Breeder seed	1

<b>Q. 5</b>	<b>Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)</b>	
i.	ANSWER c. Immature mango	1
ii.	ANSWER a. White button mushroom	1
iii.	ANSWER c. Mulberry	1
iv.	ANSWER c. PSB	1
v.	ANSWER a. New Delhi	1
vi.	ANSWER c. Karnal	1

## **SECTION B: SUBJECTIVE TYPE QUESTIONS**

**Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks)**

**Answer each question in 20 – 30 words.**

<b>Q. 6</b>	Entrepreneur- A self employed person who is always trying to make his /her business better by taking risks and trying new ideas an entrepreneur.	<b>2</b>
<b>Q. 7</b>	<b>ANSWER</b> <b>Monthly Maintenance of computer</b> i. Transfer photographs to computer and delete from drive ii. Organise photos into folders or albums iii. Clean up 'Download' folder iv. Uninstall unused programs and apps v. Run disk-cleaner software vi. Run full system virus scan	<b>2</b>
<b>Q. 8</b>	<b>ANSWER</b> <b>Stress:</b> Stress can be defined as our emotional, mental, physical and social reaction to any perceived demands or threats. <b>Simple ways of stress managements are:</b> Time management, physical exercise, healthy diet, Positive thinking, organising academic life, punctuality in doing work, adequate sleep, holidays with family and friends, discussion with family.	<b>2</b>
<b>Q. 9</b>	<b>ANSWER</b> <b>Qualities of a successful entrepreneur are:</b> • They are confident. They believe in themselves and their abilities. • They keep trying new ideas in their business. • They are patient. • They are creative and think differently about business ideas. • They take responsibility for their actions. • They take decisions after thinking about them. • They work hard. • They do not give up when they face a difficulty.	<b>2</b>

<b>Q. 10</b>	<b>ANSWER</b> <b>We can become responsible about our own environment by :</b> 1. Re-using paper, glass, plastic, water, etc. 2. taking cloth bags to market carrying fruits and vegetables. 3. donate things we do not use such as clothes, books, furniture, food, etc. 4. Buy and eat seasonal fruits and vegetables from local growers. 5. Repair leaking taps and pipes to avoid wasting water. 6. Sort and treat garbage before disposing	<b>2</b>
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**Answer any 4 out of the given 6 questions in 20 – 30 words each (2 x 4 = 8 marks)**

<b>Q. 11</b>	<b>ANSWER</b> <b>High yielding varieties of rice:</b> Mahamaya, GK 5003, Pusa 33, Pusa 169, Mehsuri, JKRH-401, Gurjari, GR-6, Dandi, Pusa 33, HKR-127, Bhrigu Dhan, Himalaya 2216, SKAU 23, SKAU 27, GK 5003, Gauri, Sweta , Ratnagiri 24, Rajeshwari, PR 108, PR 109, PMK 2, Pant Dhan 10, Pant Dhan 11, VL Dhan 221, IR 20, Jayanthi <b>Basmati varieties of rice :</b> Basmati 370, Pusa Basmati 1, Taraori Basmati (Karnal local), Pusa Sugandh 3, Pusa Sugandh 4, Pusa Sugandh 6, PRH 10, Pant Dhan 15, Punjab Basmati-1, Pusa basmati 1121, Pusa basmati 6, Pusa Basmati 1509	<b>2</b>																								
<b>Q. 12</b>	<b>ANSWER</b> <b>Major diseases of pulses:</b> Wilt, <i>Ascochyta</i> blight, yellow mosaic, powdery mildew, rust, cercospora leaf spot etc. <b>Major diseases of oilseeds:</b> Downy mildew. Yellow mosaic, white rust, alternaria leaf blight, tika leaf spot etc.	<b>2</b>																								
<b>Q. 13</b>	<b>ANSWER</b> <b>Advantages of inbreeding</b> 1. Due to increase in homozygosity, the stamping ability or prepotency of inbred line increases. 2. It helps to eliminate lethals and semi lethals due to homozygosity. 3. It increases genetic variance between lines and reduces genetic variance within lines.	<b>2</b>																								
<b>Q. 14</b>	<b>ANSWER</b> The <b>basic steps involved in ice cream manufacture</b> include mixing of ingredients, pasteurization, homogenization, ageing, freezing, hardening and storage	<b>2</b>																								
<b>Q. 15</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">S. No.</th> <th style="width: 35%;">Type of milk</th> <th style="width: 25%;">Milk fat (% not less than)</th> <th style="width: 35%;">Milk SNF (% not less than)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Double toned milk</td> <td>1.5</td> <td>9.0</td> </tr> <tr> <td>2.</td> <td>Toned milk</td> <td>3.0</td> <td>8.5</td> </tr> <tr> <td>3.</td> <td>Standardized milk</td> <td>4.5</td> <td>8.5</td> </tr> <tr> <td>4.</td> <td>Full cream milk</td> <td>6.0</td> <td>9.0</td> </tr> <tr> <td>5.</td> <td>Skimmed milk</td> <td>Not more than 0.5</td> <td>8.7</td> </tr> </tbody> </table>	S. No.	Type of milk	Milk fat (% not less than)	Milk SNF (% not less than)	1.	Double toned milk	1.5	9.0	2.	Toned milk	3.0	8.5	3.	Standardized milk	4.5	8.5	4.	Full cream milk	6.0	9.0	5.	Skimmed milk	Not more than 0.5	8.7	<b>2</b>
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<b>Q. 16</b>	<b>ANSWER</b> <b>Major classes of seed are:</b> Nucleus seed, Breeder's seed, Foundation seed & Certified seed.	<b>2</b>																								

Answer any 3 out of the given 5 questions in 50– 80 words each (4 x 3 = 12 marks)

Q. 17	<p><b>ANSWER</b></p> <p><b>Major pests of rice:</b> Stem borer and Leaf folder</p> <p><b>Major diseases of rice-</b> Leaf and neck blast and Bacterial leaf blight</p> <p><i>Description about shoot borer</i></p> <p><b>Nature of damage</b> - Symptoms of stem borer damage are deadhearts and whiteheads. Whiteheads are discolored panicles with empty or partially filled grains. Larvae feed on the tissues around the node.</p> <p><b>Management</b> - Adopt seedling root dip treatment in 0.05% Chlorpyriphos emulsion for one minute before transplanting in endemic areas. Apply Carbofuran 3G @ 20 kg ha<sup>-1</sup> or Phorate 10 G @ 12.5 kg ha<sup>-1</sup> or Fenitrothion 50EC @ 0.1%.</p>	4
Q. 18	<p><b>ANSWER</b></p> <p><b>Major pests of mango:</b> Mango leaf hopper , mealy bug, stone weevil, fruit fly</p> <p><b>Major diseases of mango:</b> Powdery mildew &amp; Anthracnose</p> <p><b>Symptoms of malformation-</b> Plants both in nursery and field are affected by this malady. The symptoms of this malady are characterized by the transformation of inflorescence into compact mass with predominating male flowers</p>	4
Q. 19	<p><b>ANSWER</b></p> <p><b>Different processed milk products are</b> - Cheese, ice cream, milk powder, paneer, ghee, dhahi etc.</p> <p><b>Ghee</b></p> <p>Ghee is 99.5 per cent milk fat.... manufactured by either cream or butter. Cream from milk is churned into butter followed by conversion into ghee. The cream is placed in a metal vessel and melted at low heat. Then it is boiled to about 110 to 120°C with constant stirring over a low fire to evaporate the moisture and prevent scorching. The clear fat is filtered into glass bottles or plastic pouches containers. The colour of cow ghee is deep yellow while that from buffalo milk is white. The taste is usually characteristic of the milk fat.</p>	4
Q. 20	<p><b>ANSWER</b></p> <p><b>Honey bee castes</b></p> <p>Every honey bee colony comprises of a single queen, a few hundred drones and several thousand worker castes of honey bees. Queen is a fertile, functional female, worker is a sterile female and the drone is a male insect.</p> <ol style="list-style-type: none"> <li>1. <b>Duties of a queen</b> - The only individual which lays eggs in a colony. (Mother of all bees).</li> <li>2. <b>Duties of a drone</b> - Their important duty is to fertilize the queen.</li> <li>3. <b>Duties of a worker</b> -First three weeks- house hold duty and Rest of the life- out door duty.</li> </ol>	4

Q. 21	<p><b>ANSWER</b></p> <p><b>Characteristics/attributes of quality seed</b></p> <p><b>1. Genetic purity:</b> Genetic purity refers to the percentage of contamination ....of the seed planted must equal or exceed ... generation of propagation. For example, <b>Breeder seed 100%, Foundation seed 99%, certified seed 98%.</b></p> <p><b>2. Physical purity:</b> Physical purity of seed is the proportion of pure seed component ....crop should be <b>98% and seed lot should be free from .....other field impurities.</b></p> <p><b>4. Germination percentage:</b> <b>The quality seed should have germination percentage according to the standard of Indian ..... in the field.</b></p> <p><b>5. Vigour:</b> Seed vigour is the sum total of those properties ..... lot during germination and seedling emergence. In general it is the potential of seed .....good yield.</p> <p><b>6. Viability:</b> The viability of the seed is a measure of seed .... conditions. It is measured through tetrazolium chloride test.</p> <p><b>5. Moisture content:</b> The moisture content is the amount of water ..... have optimum moisture content in good quality seed. <b>For example, Cereals: 10-12 %, Pulses: 7-9% and Oilseeds:6-7%, Vegetables: 5%</b></p>	4
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