Test Booklet No. _____

This booklet consists of 100 questions and __ printed pages.

RGUCET/2025/16-21

Series A

RGUCET 2025

Common Entrance Test, 2025

MASTER OF SCIENCE IN: GENETICS AND PLANT BREEDING; PLANT PATHOLOGY; SOIL SCIENCE AND AGRICULTURAL CHEMISTRY; AGRICULTURAL ECONOMICS; AGRONOMY; ENTOMOLOGY

Full Marks: 100 **Time: 2 Hours**

Roll No. | | | | | | | | |

Day and Date of Examination: _____

Signature of Invigilator(s) _____

Signature of Candidate _____

General Instructions:

PLEASE READ ALL THE INSTRUCTIONS CAREFULLY BEFORE MAKING ANY ENTRY.

1. DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO.
2. Candidate must write his/her Roll Number on the space provided.
3. This Test Booklet contains 100 Multiple Choice Questions (MCQs) from the concerned subject. Each question carries 1 mark. There shall be negative marking of 0.25 against each wrong attempt.
4. Please check the Test Booklet to verify that the total pages and total number of questions contained in the test booklet are the same as those printed on the top of the first page. Also check whether the questions are in sequential order or not.
5. Candidates are not permitted to enter into the examination hall after the commencement of the entrance test or leave the examination hall before completion of Examination.
6. Making any identification mark in the OMR Answer Sheet or writing Roll Number anywhere other than the specified places will lead to disqualification of the candidate.
7. Candidates shall maintain silence inside and outside the examination hall. If candidates are found violating the instructions mentioned herein or announced in the examination hall, they will be summarily disqualified from the entrance test.
8. In case of any dispute, the decision of the Entrance Test Committee shall be final and binding.
9. The OMR Answer Sheet consists of two copies, the Original copy and the Student's copy

1	*A sentence has been given in Direct Speech. Out of the four alternatives suggested select the one which best expresses the same sentence in Indirect Speech.* He asked, "Have you completed your homework?"				b
	a) He asked had I completed my homework.	b) He asked if I had completed my homework	c) He asked whether I have completed my homework.	d) He asked if I have completed my homework.	
2	Identify the word which is NOT a synonym of the word eloquence				c
	a) persuasiveness	b) expressiveness	c) hesitation	d) articulacy	
3	Re-arrange the following parts of a sentence in their correct sequence to form a meaningful sentence. (1) for organizations which provide (2) services to customers on a face-to-face basis, (3) employees with whom they deal is very important (4) the quality of the relationship between customers and Choose the correct answer from the options given below:				a
	a) (1), (2), (4), (3).	b) (3), (1), (2), (4).	c) (2), (4), (1), (3).	d) (4), (1), (3), (2)	
4	Select the most appropriate **ANTONYM** of the underlined word. She was <u>elated</u> about her promotion, but her colleague felt quite disheartened.				b
	a) Cheerful	b) Discourage	c) Delighted	d) Cheerful	
5	Select the correct preposition: She is good _____ mathematics.				d
	a) in	b) for	c) on	d) at	
6	Match the following terms related to the production function (List I) with their descriptions (List II) **List I** / **List II** A. Mean — i. Most frequent value B. Mode — ii. Middle value when arranged in order C. Median — iii. Arithmetic average D. Range — iv. Difference between highest and lowest values				c
	a) A - iii, B - ii, C - i, D - iv	b) A - ii, B - iii, C - iv, D - i	c) A - iii, B - i, C - ii, D - iv	d) A - i, B - ii, C - iii, D - iv	
7	Two statements labelled as Assertion (A) and Reason (R) are given. Read both the statements carefully and select the correct answer with the help of the codes. **Assertion (A):** A histogram is used to represent the frequency distribution of continuous data. **Reason (R):** Bar graphs are used to display discrete data in rectangular bars with spaces between them.				a
	a) Both A and R are true, and R is	b) Both A and R are true, but R is	c) A is true, but R is false.	d) A is true, but R is false.	

<table>
<tr><td></td><td>the correct explanation for A.</td><td>not the correct explanation for A.</td><td></td><td></td><td></td></tr>
<tr><td>8</td><td colspan="4">Statement: All squares are rectangles.
Conclusion: Some rectangles are not squares.</td><td>a</td></tr>
<tr><td></td><td>a) Logically true</td><td>b) Logically false</td><td>c) Uncertain</td><td>d) Inconclusive</td><td></td></tr>
<tr><td>9</td><td colspan="4">In a class, Akshay ranks 11th from the top and 27th from the bottom. If in the same class Anita ranks 14th from the top, how many children are below her in the class?</td><td>c</td></tr>
<tr><td></td><td>a) 14</td><td>b) 15</td><td>c) 23</td><td>d) 25</td><td></td></tr>
<tr><td>10</td><td colspan="4">Fill in the blank and choose the correct answer
16 36 64 _____</td><td>d</td></tr>
<tr><td></td><td>a) 81</td><td>b) 90</td><td>c) 96</td><td>d) 100</td><td></td></tr>
<tr><td>11</td><td colspan="4">Which of the following statements is/are TRUE?
State True or False:

A. India is the second largest producer of fruits in the world
B. Arunachal is the largest producer of Kiwi in India
C. India is the largest exporter of meat in the world
D. India is the largest producer of vegetables in the world</td><td>b</td></tr>
<tr><td></td><td>a) only A, B and C</td><td>b) only A and B</td><td>c) only B and C</td><td>d) Only A, B and D</td><td></td></tr>
<tr><td>12</td><td colspan="4">Match the Indian states with their corresponding classical or folk dances:

<table><tr><td>A. Punjab</td><td>i. Kathak</td></tr><tr><td>B. Odisha</td><td>ii. Bhangra</td></tr><tr><td>C. Uttar Pradesh</td><td>iii. Mohiniyattam</td></tr><tr><td>D. Kerala</td><td>iv. Odissi</td></tr></table></td><td>d</td></tr>
<tr><td></td><td>a) A-ii, B-iii, C-i, D-iv</td><td>b) A-ii, B-iv, C-iii, D-i</td><td>c) A-iv, B-iii, C-i, D-ii</td><td>d) A-ii, B-iv, C-i, D-iii</td><td></td></tr>
<tr><td>13</td><td colspan="4">Which organism causes cervical cancer?</td><td>c</td></tr>
<tr><td></td><td>a) Human Immunodeficiency virus</td><td>b) Varicella</td><td>c) Human Papillomavirus</td><td>d)Noro virus</td><td></td></tr>
<tr><td>14</td><td colspan="4">The Women's Kabaddi World Cup 2025 will be held at</td><td>a</td></tr>
<tr><td></td><td>a) Rajgir, Bihar</td><td>b) Jaipur, Rajasthan</td><td>c) Pune, Maharashtra</td><td>d) Chennai, Tamil Nadu</td><td></td></tr>
<tr><td>15</td><td colspan="4">The Summer Olympic Games, 2028 will be held at</td><td></td></tr>
<tr><td></td><td>a) Milan</td><td>b) Paris</td><td>c) Los Angeles</td><td>d) Brisbane</td><td>c</td></tr>
<tr><td>16</td><td colspan="4">The world first Genome-edited rice variety DRR Rice 100 (Kamala) was developed by</td><td>b</td></tr>
</table>

	a) ICAR-IARI, New Delhi	b) ICAR-IIRR, Hyderabad	c) ICRISAT, Hyderabad	d) CRIDA, Hyderabad	
17	A man spends 75% of his income. His income increases by 20%, and his expenditure increases by 10%. What is the percentage increase in his savings?				a
	a) 50%	b) 80%	c) 70%	d) 100%	
18	Rearrange the parts to form a coherent sentence A.allowing them to function efficiently B.the mitochondria are the powerhouse of cells C.by converting nutrients into energy D. essential for various biological processes				d
	a) C B D A	b) B A C D	c) D B A C	d) B C A D	
19	Which social reformer is known for his fight against the caste system and started the Self-Respect Movement?				c
	a) B.R. Ambedkar	b) Jyotirao Phule	c) Periyar E.V. Ramasamy	d) Mahatma Gandhi	
20	Choose the correct match for India classical music A. Raga Yaman – i. Known for Tabla playing B. Raga Marwa – ii. Performed in the evening C. Ustad Zakir Hussain. – iii. A light raga, typically performed at dusk D. Raga Hamsadhwani – iv. A raga for the early morning				b
	a) A-i, B-ii, C-iii, D-iv	b) A-ii, B-iv, C-i, D-iii	c) A-ii, B-iii, C-iv, D-i	d) A-i, B-ii, C-iv, D-iii	

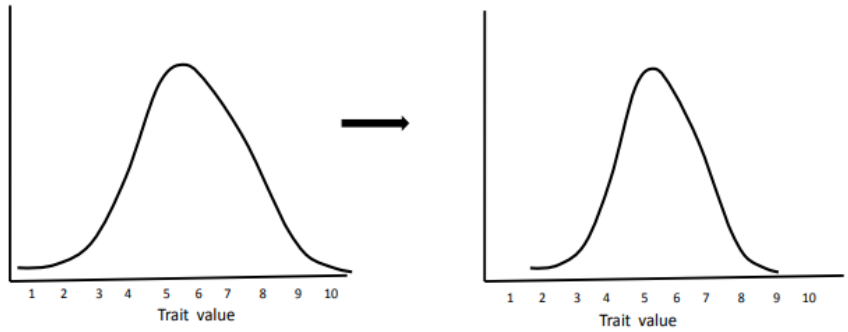
21	What was the Minimum Support Price (MSP) for paddy in the year 2023–24?				b
	a) Rs. 2,060 per quintal	b) Rs. 2,183 per quintal	c) Rs.2,203 per quintal	d) Rs. 2,500 per quintal	
22	The destruction of utility is called				b
	a)Production	b) Consumption	c)Exchange	d)Distribution	
23	Two statements labelled as Assertion (A) and Justification (B) are given. Read both the statements carefully and select the correct answer with the help of the codes. **Assertion (A):** Firms in a perfectly competitive market are price takers and must accept the market price as given. **Justification (B):** The reason for this is that many buyers and sellers exist in the market, all offering identical products, so no single firm can influence the price.				a
	a) Both A and B are true and B is the correct justification for A	b) Both A and B are true, but B is not the correct justification for A	c) A is false, but B is true	d) Both A and B are false	

24	Match the following terms related to the production function (List I) with their descriptions (List II) **List I** / **List II** E. Creeping Inflation — v. Rapid increase in prices. F. Walking Inflation — vi. Extremely high and uncontrollable inflation. G. Running Inflation — vii. Slow and steady rise in prices. H. Hyperinflation — viii. Moderate increase in prices.				b
	a) A-iii, B-ii, C-iv, D-i	b) A-iii, B-iv, C-i, D-ii	c) A-iv, B-iii, C-ii, D-i	d) A-ii, B-i, C-iv, D-iii	
25	What type of decisions involve day-to-day operations with short-lived impacts?				b
	a) Strategic	b) Operational	c) Administrative	d) Marketing	
26	The Cobb-Douglas production function is widely used in agricultural economics. A. Because it is simple to estimate and helps analyse marginal productivity and returns to scale. B. Because it allows for perfect substitution between inputs in agricultural production. C. Because it assumes decreasing marginal returns and cannot handle multiple inputs. D. Because it is rarely used in empirical agricultural analysis due to complexity.				
	a) A and C are correct	b) Only B is correct	c)Only A is correct	d)Either B or D is correct	**c**
27	Which of the following is NOT a type of uncertainty in agriculture?				d
	a)Government policy changes	b)Technological obsolescence	c)Price fluctuations	d)Fixed input availability	
28	Match the following terms related to the production function (List I) with their descriptions (List II) **List I** / **List II** A. Factor-Factor Relationship — i. Isoquant Tangent to Isocost line B. Product-Product Relationship — ii. What to Produce? C. Factor-Product Relationship — iii. How to Produce? D. Least Cost Combination — iv. How Much to Produce?				d
	a) A-ii, B-i, C-iv, D-iii	b) A-i, B-ii, C-iii, D-iv	c) A-iv, B-iii, C-ii, D-i	d) A-iii, B-ii, C-iv, D-i	

29	In the context of plant disease epidemiology, which of the following best describes the **concept of inoculum potential**?				b
	a)The environmental factors that favor pathogen growth.	b)The amount of pathogen present in the environment capable of causing disease.	c)The genetic potential of the host to resist infection.	d) The ability of pathogens to reproduce and multiply in the host.	

30	Match the pairs: Disease and their causal agents. A Bacterial Blight of Rice — i *Xanthomonas oryzae* BBacterial Spot of Tomato — ii*Xanthomonas vesicatoria* CLeaf Spot of Cucumber — iii*Pseudomonas syringae* DBacterial Canker of Tomato — iv*Clavibacter michiganensis*				a
	a) A-i, B-ii, C-iii, D-iv	b) A-ii, B-i, C-iii, D-iv	c) A-iii, B-i, C-ii, D-iv	d) A-i, B-iii, C-ii, D-iv	
31	Powdery mildew fungi generally prefer high humidity and free water for spore germination.:				b
	a) True	b) False	c) Partially True	d) Not Applicable	
32	Which of the following is a biotrophic pathogen?				c
	a) *Phytopthora infestans*	b)*Fusarium oxysporum*	c)*Puccinia graminis*	d)*Rhizoctonia solani*	
33	Match the Pairs: Plant Viruses and Genome Type. A. *Tobacco Mosaic Virus* (TMV) — i. Single-stranded DNA (ssDNA) B. *Banana Bunchy Top Virus* (BBTV) — ii. Circular single-stranded DNA (multi-component) C. *Tomato Yellow Leaf Curl Virus* (TYLCV) — iii. Single-stranded RNA, positive sense (+ssRNA) D. *Cucumber Mosaic Virus* (CMV) — iv. Multipartite +ssRNA genome				c
	a) A-i, B-iii, C-iv, D-ii	b) A-ii, B-iv, C-iii, D-i	c) A-iii, B-ii, C-i, D-iv	d) A-iv, B-i, C-ii, D-iii	
34	Crown gall disease is caused by the bacterium *Agrobacterium tumefaciens* and is transmitted through seed.				b
	a) True	b) False	c) Partially True	d) Not Applicable	
35	There are two statements marked as Assertion (A) and Justification (B). Mark your answer as per the codes provided below: A: Transgenic papaya resistant to PRSV was developed using coat protein-mediated resistance. B: Expression of PRSV coat protein gene in papaya plants prevents infection by blocking viral entry.				c
	a) Both A and B are true, and B is the correct explanation of A	b) Both A and B are true, but B is not the correct explanation of A	c) A is true, but B is false	d) A is false, but B is true	
36	The **loop-mediated isothermal amplification (LAMP)** technique in plant disease diagnostics is mainly used for:				a

	a)Amplifying DNA or RNA of plant pathogens at constant temperature.	b)Sequencing pathogen genomes for taxonomic identification.	c)Measuring pathogen growth in culture media.	d)Detecting specific proteins from pathogens using fluorescent antibodies.	

37	RILs are developed through_____ breeding method				b
	a) Transgressive	b) SSD	c) Bulk	d) Backcross	
38	The change in a trait with time as a result of natural selection is shown above. This type of natural selection is 				c
	a) Directional	b) Disruptive	c) Stabilizing	d) Random	
39	**Which among the following is NOT correct about center of origins?** A. They are geographical regions where crop plants originated and were first domesticated. B. Crops cannot be grown outside their centers of origin. C. These regions show the greatest genetic diversity for the crop species. D. Centers of origin were first proposed by Darwin				c
	a) A, B, C	b) B, C, D	c) B and D only	d) C and D only	
40	**A: Assertion:** Higher concentration of Auxin:Cytokinin in culture media induces shoot proliferation **B: Justification:** Auxin is a growth inducer hormone In the light of the above statements, choose the ***correct answer*** from the options given below:				d
	a) Both A and B are true and B is the correct explanation of A	b) Both A and B are true but B is NOT the correct explanation of A	c) A is true but B is false	d) A is false but B is true	

<table>
<tr><td>41</td><td colspan="4">Match the Following Chromosomal Aberrations with Their Respective Chromosome Numbers

<table><tr><td>A. Nullisomic</td><td>i. 2n + 2</td></tr><tr><td>B. Monosomic</td><td>ii. 2n -2</td></tr><tr><td>C.Trisomic</td><td>iii. 2n - 1</td></tr><tr><td>D.Tetrasomic</td><td>iv. 2n + 1</td></tr></table></td><td>b</td></tr>
<tr><td></td><td>a) A-iii, B-ii, C-i, D-iv</td><td>b) A-ii, B-iii, C-iv, D-i</td><td>c) A-iv, B-i, C-iii, D-ii</td><td>d) A-i, B-iv, C-ii, D-iii</td><td></td></tr>
<tr><td>42</td><td colspan="4">Multiple traits affected by a single gene is known as</td><td rowspan="2">d</td></tr>
<tr><td></td><td>a) Linkage</td><td>b) Penetrance</td><td>c) Expressivity</td><td>d) Pleiotropy</td></tr>
<tr><td>43</td><td colspan="4">Which among the following is NOT correct about multiple factor hypothesis?
A.Environmental factors influence the expression of traits
B.It states that traits are solely determined by a single gene
C.Each gene involved in the trait has a small and additive effect.
D.Each gene follows Mendelian principles of inheritance</td><td rowspan="2">b</td></tr>
<tr><td></td><td>a) A and C only</td><td>b) B only</td><td>c) C only</td><td>d) D and C only</td></tr>
<tr><td>44</td><td colspan="4">A: Assertion:Lac operon is a negative inducible operon system
B: Justification: The genes of lac operon are expressed only in the presence of lactose.
In the light of the above statements, choose the correct answer from the options given below:</td><td>a</td></tr>
<tr><td></td><td>a) Both A and B are true and B is the correct explanation of A</td><td>b) Both A and B are true but B is NOT the correct explanation of A</td><td>c) A is true but B is false</td><td>d) A is false but B is true</td><td></td></tr>
<tr><td>45</td><td colspan="4">Match the following gene interaction to their phenotypic ratio

<table><tr><td>A. Polymeric gene action</td><td>i. 12:3:1</td></tr><tr><td>B. Supplementary gene action</td><td>ii. 9:7</td></tr><tr><td>C. Complementary gene action</td><td>iii. 9:6:1</td></tr><tr><td>D. Masking gene action</td><td>iv. 9:3:4</td></tr></table></td><td rowspan="2">c</td></tr>
<tr><td></td><td>a) A-iii, B-ii, C-i, D-iv</td><td>b) A-i, B-iii, C-iv, D-ii</td><td>c) A-iii, B-iv, C-ii, D-i</td><td>d) A-i, B-iv, C-ii, D-iii</td></tr>
<tr><td>46</td><td colspan="4">A: Assertion:MAS requires markers that are tightly linked with the genes/QTLs controlling desired traits
B: Justification: Linked genes follow Mendel’s law of independent assortment
In the light of the above statements, choose the correct answer from the options given below:</td><td rowspan="2">c</td></tr>
<tr><td></td><td>a) Both A and B are true and B is the correct explanation of A</td><td>b) Both A and B are true but B is NOT the correct explanation of A</td><td>c) A is true but B is false</td><td>d) A is false but B is true</td></tr>
</table>

<table>
<tr><td>47</td><td colspan="4">Chronologically order the steps involved in the process of Mitosis
A. Chromosomes align at the cell's equator
B. Chromosomes de-condense; nuclear envelopes re-form around the two sets of chromosomes
C. Chromatin condenses into visible chromosomes; spindle fibers begin to form; the nuclear envelope starts breaking down.
D. Sister chromatids are pulled apart toward opposite poles of the cell.</td><td></td></tr>
<tr><td></td><td>a) C, A, D, B</td><td>b) B, C, D, A</td><td>c) D, A, B, C</td><td>d) A, B, C, D</td><td>a</td></tr>
<tr><td>48</td><td colspan="4">Polymerase Chain Reaction was developed by _____</td><td></td></tr>
<tr><td></td><td>a) Kary Mullis</td><td>b) Karl Ereky</td><td>c) Herbert Boyer</td><td>d) Jennifer Doudna</td><td>a</td></tr>
<tr><td>49</td><td colspan="4">Which of the following is NOT true about pureline?</td><td></td></tr>
<tr><td></td><td>a) They are found in self-pollinated crops</td><td>b) They are homozygous and heterogenous</td><td>c) With time, purelines become genetically variable</td><td>d) Purelines are derived from a single individual through repeated selfing</td><td>b</td></tr>
<tr><td>50</td><td colspan="4">A: Assertion: Genetic recombination results from crossing over, which leads to new combinations of alleles.
B: Justification: Crossing over occurs during Pachytene stage of meiosis I
In the light of the above statements, choose the most appropriate answer from the options given below:</td><td></td></tr>
<tr><td></td><td>a) Both A and B are true and B is the correct explanation of A</td><td>b) Both A and B are true but B is NOT the correct explanation of A</td><td>c) A is true but B is false</td><td>d) A is false but B is true</td><td>a</td></tr>
<tr><td>51</td><td colspan="4">Match the following crops with their hybrid varieties
<table><tr><td>A. Cotton</td><td>i. ICPH 8</td></tr><tr><td>B. Pearl Millet</td><td>ii. HB1</td></tr><tr><td>C. Pigeon pea</td><td>iii. CSH-1</td></tr><tr><td>D. Sorghum</td><td>iv. H4</td></tr></table></td><td rowspan="2">a</td></tr>
<tr><td></td><td>a) A-iv, B-ii, C-i, D-iii</td><td>b) A-iii, B-ii, C-i, D-iv</td><td>c) A-i, B-iv, C-iii, D-ii</td><td>d) A-ii, B-iii, C-iv, D-i</td></tr>
<tr><td>52</td><td colspan="4">The Pustovit method for population improvement is practiced in which crop?</td><td rowspan="2">d</td></tr>
<tr><td></td><td>a) Safflower</td><td>b) Tobacco</td><td>c) Sugarcane</td><td>d) Sunflower</td></tr>
<tr><td>53</td><td colspan="4">In the context of prokaryotic cells, which among the following is TRUE?
A. RNA polymerase III is responsible for the transcription of DNA
B. Sigma factor is necessary for transcription to occur.
C. Transcription occurs in the cytoplasm</td><td>c</td></tr>
</table>

	D. Transcription and translation are coupled in prokaryotes				
	a) A, B, C, D	b) A and C only	c) B, C, D	d) B and D only	
54	**A: Assertion:** Bread wheat is an allohexaploid **B: Justification:** The source of D genome is *Triticum monococcum* In the light of the above statements, choose the correct answer from the options given below:				
	a) Both A and B are true and B is the correct explanation of	b) Both A and B are true but B is NOT the correct explanation of A	c) A is true but B is false	d) A is false but B is true	c
55	Match the following genetic disorders with their respective chromosomal aberrations A. Patau's syndrome – i. XO B. Edward's syndrome – ii. XXY C. Turner's syndrome – iii. 18,18,18 D. Klinefelter's syndrome – iv. 13,13,13				b
	a) A-iv, B-ii, C-i, D-iii	b) A-iv, B-iii, C-i, D-ii	c) A-i, B-iv, C-iii, D-ii	d) A-ii, B-iii,C-iv, D-i	
56	Arrange the following events in the sequential manner of their occurrence A. Fertilization B. Megasporogenesis C. Embryogenesis D. Megagametogenesis				b
	a) D, B, A, C	b) B, D, A, C	c) B, D, C, A	d) D, A, C, B	
57	Tetrazolium test is commonly used for				c
	a) Purity test	b) Vigor test	c) Viability test	d) Gemination test	
58	According to Flor's gene for gene hypothesis, which among the following is **NOT** true? A. For each gene controlling resistance in the host, there is a corresponding gene controlling avirulence in the pathogen. B. A resistant reaction occurs only when the host has the tolerant gene and the pathogen has the matching avirulence gene. C. If either the R gene in the host or the Avr gene in the pathogen is absent, the pathogen causes disease. D. The interaction between a resistance gene and an avirulence gene always results in disease.				d
	a) A & D	b) B & C	c) A & C	d) B & D	

<table>
<tr><td>59</td><td colspan="4">Two countries, Country A and Country B, produce two goods: Wheat and Cloth. The following table shows the number of hours it takes each country to produce one unit of each good:
<table><tr><th>Good</th><th>Country A (hours/unit)</th><th>Country B (hours/unit)</th></tr><tr><td>Wheat</td><td>10</td><td>20</td></tr><tr><td>Cloth</td><td>15</td><td>30</td></tr></table>Based on the theory of comparative advantage, which of the following is correct?</td><td></td></tr>
<tr><td></td><td>a) Country A has a comparative advantage in both goods.</td><td>b) Country B has a comparative advantage in Wheat.</td><td>c) Country A should specialize in Wheat and Country B should specialize in Cloth.</td><td>Country A should specialize in Wheat and Country B should specialize in Cloth.</td><td>d</td></tr>
<tr><td>60</td><td colspan="4">Which of the following conditions is not necessary for the market to exist.</td><td></td></tr>
<tr><td></td><td>a) The existence of a good or commodity</td><td>b) Existence of buyers and sellers</td><td>c) Demarcation of area</td><td>d) Time span</td><td>d</td></tr>
<tr><td>61</td><td colspan="4">Which statement is/are true:

A. The KCC was designed by RBI.
B. The KCC can be used as an identity card.
C. KCC can only be issued by Nationalized banks
D. Adhaar linkage is mandatory for availing benefits under KCC</td><td></td></tr>
<tr><td></td><td>a) only A and B are tue</td><td>b) only C is true</td><td>c) only B and C are true</td><td>d) only C and D are true</td><td>(c)</td></tr>
<tr><td>62</td><td colspan="4">Choose the correct answer based on the following statements.

A: Tariffs are often imposed to protect domestic industries from foreign competition.

B:Tariffs raise the price of imported goods, making domestic products more competitive.</td><td></td></tr>
<tr><td></td><td>a) Both A and B are true, and B is the correct explanation of A</td><td>b) Both A and B are true, and B is not the correct explanation of A</td><td>c)A is true but B is false</td><td>d)A is false but B is true</td><td>(a)</td></tr>
<tr><td>63</td><td colspan="4">Match the following:
<table><tr><td>A. RBI</td><td>i. Refinancing Agriculture and RDBs</td></tr><tr><td>B. NABARD</td><td>ii. Regulates capital market</td></tr><tr><td>C. SEBI</td><td>iii. Regulates and supervises insurance industry</td></tr><tr><td>D. IRDAI</td><td>iv. Controls monetary policy.</td></tr></table></td><td></td></tr>
<tr><td></td><td>a) A-iv, B-i, C-ii, D-iii</td><td>b) A-iv, B-i, C-iii,D- ii</td><td>c) A-i, B-ii,C-iv, D-iii</td><td>d) A-ii, B-iv, C-iii, D-i</td><td>(a)</td></tr>
</table>

64	When price elasticity of demand Ep = ∞ then the Demand graph is_____ to x axis				
	a)Vertical	b)Horizontal	c)Concave	d)Convex	(**b**)
65	Which organization regulates the MSP for agricultural produce in India?				
	a) Commission for Agricultural Costs and Prices	b) Food Corporation of India	c) Reserve Bank of India	d) Indian Council of Agriculturral Research	(**a**)
66	Storage of goods creates what type of utility?				
	a)Time	b)Place	c)Form	d)Possession	(**a**)
67	MatchList I withList II **List I** / **List II** a.Raptorial — i.Foreleg of mantids b.Natatorial — ii. Forelegs of gryllids c.Fossorial — iii.Human louse d.Clasporial — iv.Aquatic bugs Choose the correct answer from the options given below:				
	a) a-iii, b-iv, c-i, d-ii	b) a-iv, b-iii, c-i, d-ii	c) a-i, b-iv, c-ii, d-iii	d) a-iii, b-ii, c-iv, d-i	c
68	MatchList I withList II **List I** / **List II** a.Apionida — i.Khapra beetle b.Bostrychidae — ii. Flat grain beetle c.Cucujidae — iii.Larger grain borer d.Dermestidae — iv.Sweet potato weevil Choose the correct answer from the options given below:				
	a) a-iii, b-iv, c-i, d-ii	b) a-iv, b-iii, c-ii, d-i	c) . a-iv, b-iii, c-i, d-ii	d) a-iii, b-ii, c-iv, d-i	b
69	Given below are two statements: Statement I:If global average warming is limited to one or two additional degrees, some regions will experience enhanced agricultural productivity Statement II: Beyond 2^0C to 3^0 C of global average warming, essentially all impacts become deleterious. In light of the above statements, choose the most appropriate answer from the options given below				a
	a).Both Statement I and Statement II are correct	b). Both Statement I and Statement II are incorrect	c).Statement I is correct but Statement II is incorrect	d).Statement I is incorrect but Statement II is correct	
70	Webbing of rice grains is a characteristics symptom of				
	a) rice moth	b) rice weevil	c) Angoumois grain moth	d) Khapra beetle	a
71	The modified hind wings in flies (used for balance) are called				
	a) Elytra	b Halteres	c) Hamuli	d) Tegmina	b
72	A single specimen selected by the author of a species as its type, or the only specimen known at the time description is known as				

	a) holotype	b) allotype	c) syntype	d) Paratype	a
73	. Tomato leaf curl virus is transmitted by				b
	a) aphids	b) whitefly	c) grasshopper	d) Mealy bugs	
74	Round dance indicate that the source of food is				a
	a) less than 50m	b) more than 50m	c) less than 100m	d) More than 100m	
75	Statement I: Collembola, crickets and cutworms are not considers ass oil builders. Statement II: By addition of insect saliva by the soil dwelling insects, the soil is enriched. In the light of the above statements, choose the *most appropriate* answer from the options given below:				
	a).Both Statement I and Statement II are correct	b). Both Statement I and Statement II are incorrect	c).Statement I is correct but Statement II is incorrect	d).Statement I is incorrect but Statement II is correct	d
76	Given below are two statements: Statement I: *Laccifer lacca* sucks the phloem sap from succulent twigs. Statement II: *Cajanus cajan* is another host of *Laccifer lacca.* In the light of the above statements, choose the *most appropriate* answer from the options given below:				
	a).Both Statement I and Statement II are correct	b). Both Statement I and Statement II are incorrect	c).Statement I is correct but Statement II is incorrect	d).Statement I is incorrect but Statement II is correct	a
77	Given below are two statements: Statement I: Whip scorpions and harvest men belong to the class Arachnida. Statement II: Pillbugs and Sowbugs belong to the class Crustacea. Inlight of the above statements, choose the *most appropriate* answer from the options given below:				a
	a).Both Statement I and Statement II are correct	b). Both Statement I and Statement II are incorrect	c).Statement I is correct but Statement II is incorrect	d).Statement I is incorrect but Statement II is correct	
78	Given below are two statements: Statement I: All locusts are grasshoppers. Statement II: But all grasshoppers are not locusts. In the light of the above statements, choose the *most appropriate* answer from the options given below:				
	a).Both Statement I and Statement II are correct	b). Both Statement I and	c).Statement I is correct but	d).Statement I is incorrect but	c

		Statement II are incorrect	Statement II is incorrect	Statement II is correct	
79	The acidity equivalent of urea is 80. What does this mean?				Answer option (a,b,c or d)
	a) Urea contains 80% acidic compounds.	b) Urea releases 80 kg of acid when applied to soil	c) 80 kg of lime ($CaCO_3$) is needed to neutralize the acidity produced by 100 kg of urea	d) Urea increases soil pH by 8 units	c) 80 kg of lime (CaCO3) is needed to neutralize the acidity produced by 100 kg of urea
80	Which of the following has the highest Cation Exchange Capacity (CEC) in soil?				
	a) Humus	b) Smectite (Montmorillonite) clay	c) Kaolinite clay	d) Sand	a) Humus
81	Which statement(s) about acidic soil reclamation is/are TRUE? 1. Liming raises pH by neutralizing Al^{3+} and H^+ ions 2. The lime requirement increases with higher CEC 3. Wood ash can substitute for limestone in acidic soils 4. Acidic soils with pH <5.5 always need sulfur addition				
	a) Only 1 and 3	b) Only 1, 2, and 3	c) Only 2 and 4	d) All are true	b) Only 1, 2, and 3
82	**Statement:** Consider the following about capillary action in soils: **Assertion (A)**: Capillary rise is higher in sandy soils than clay soils **Justification (B)**: Smaller soil pores generate stronger matric forces				
	a) Both A and B are true, and B correctly explains A	b) Both A and B are true, but B doesn't explain A	c) A is true but B is false	d) A is false but B is true	d) A is false but B is true
83	Match the nitrogen fixation processes with their descriptions: A) Biological N_2 fixation — i) Haber-Bosch process producing ammonia B) Industrial N_2 fixation — ii) Conversion of N_2 to NH_3 by living organisms C) Atmospheric N_2 oxidation — iii) Lightning converting N_2 to NO_x D) Denitrification — iv) Conversion of NO_3^- back to N_2 gas				
	(a) A-ii, B-i, C-iii, D-iv	(b) A-i, B-iii, C-iv, D-ii	(c) A-iii, B-ii, C-i, D-iv	(d) A-iv, B-i, C-ii, D-iii	(a) A-ii, B-i, C-iii, D-iv

84	If the pH of a soil is 5, what is the approximate concentration of H^+ ions in the soil solution?				
	a) 1×10^{-6} mol/L	b) 1×10^{-5} mol/L	c) 1×10^{5} mol/L	d) 1×10^{6} mol/L	b) 1×10^{-5} mol/L
85	Mass (grams) of a substance (eg. Cation, anion, or compound) that will react with 1 gram of H^+, or 1 mole (6×10^{23}) of charges is called				
	a) Gram equivalent weight	b) Gram molecular weight	c) Molecular weight	d) Valency	a) gram equivalent weight
86	**Statement:** Consider the following about soil formation: **Assertion (A)**: Climate is considered the most active soil-forming factor **Justification (B)**: Climate controls weathering rates and organic matter decomposition				
	a) Both A and B are true, and B correctly explains A	b) Both A and B are true, but B doesn't explain A	c) A is true but B is false	d) A is false but B is true	a) Both A and B are true, and B correctly explains A
87	Match the fertilizer types (Column A) with their primary nutrient content (Column B): A) Urea — i) 46% N B) Single Superphosphate (SSP) — ii) 16% P_2O_5 + 12% S C) Muriate of Potash (MOP) — iii) 60% K_2O D) Diammonium Phosphate (DAP) — iv) 18% N + 46% P_2O_5				
	(a) A-i, B-ii, C-iii, D-iv	(b) A-iii, B-iv, C-ii, D-i	(c) A-iv, B-i, C-iii, D-ii	(d) A-ii, B-iii, C-iv, D-i	(a) A-i, B-ii, C-iii, D-iv
88	Which of the following statements about soil water is/are TRUE? 1. Available water capacity is the water held between field capacity and permanent wilting point 2. Permanent wilting point occurs when soil water potential reaches -1500 kPa 3. Hygroscopic water is unavailable to plants but can be used by some microorganisms 4. Gravitational water drains within 24-48 hours after irrigation				
	a) Only 1 and 2	b) Only 1, 2 and 3	c) Only 2 and 4	d) All are true	d) All are true
89	What is the correct formula for calculating soil bulk density?				
	a) (Mass of moist soil) / (Volume of soil core)	b) (Mass of oven-dry soil) / (Total volume of soil including pores)	c) (Volume of soil pores) / (Mass of dry soil)	d) (Mass of soil minerals only) / (Volume of soil minerals only)	b) (Mass of oven-dry soil) / (Total volume of soil

					including pores)
90	A soil containing 200 kg of nitrogen per hectare will be classified as:				
	a) Low in nitrogen	b) Medium in nitrogen	c) High in nitrogen	d) Very high in nitrogen	b) Medium in nitrogen
91	The term p^H was introduced by				
	a) Daniel Hillel	b) N. C. Brady	c) SØrenson	d) M. L. Jackson	c) SØrenson
92	Buffering capacity of soil is mainly contributed by				
	a) Minerals	b) Clay	c) Humus and clay	d) Cations and anions	c) Humus and clay

93	Bengal Famine is caused by				Answer
	a) *Halminthosporium oryzae*	b) *Hilminthosporium oryzae*	c) *Helmiinthosporium oryzae*	d) *Helminthosporium oryzae*	(d)
94	Please select sclerotia producing fungi				
	a) *Rhizoctonia solani*	b) *Sclerotium oryzae*	c) *Sclerotium hydrophylum*	d) All of the above	(d)
95	Which of the following statements about biopesticides and chemical pesticides are true A. Biopesticides require more frequent applications than chemical pesticides to achieve effective pest control. B. Biopesticides have a longer shelf life compared to chemical pesticides C. Biopesticides are less specific in targeting pests compared to chemical pesticides. D. Biopesticides are more environmentally friendly than chemical pesticides due to their biodegradable nature				
	a) A, B	b) C, D	c) D, A	d) B, C	(c)
96	**Assertion (A):** *Azospirillum* is a bacterial biofertilizer. **Reason (R):** *Azospirillum* is a nitrogen-fixing bacterium that associates with plant roots, enhancing soil fertility and plant growth.				
	a) Both A and R are true, and R is the correct explanation of A.	b) Both A and R are true, but R is not the correct explanation of A.	c) A is true, but R is false.	d) A is false, but R is true.	(a)
97	Please match the correct answer A Bordeaux mixture — i 1885 B Irish Potato Famine — ii 1844 C Bengal Famine — iii 1943 D Golden Nematode — iv 1941				
	a) A - i, B - ii, C -iv, D-iii	b) A - ii, B - i, C -iii, D-iv	c) A - iii, B - ii, C -i, D-iv	d) A - i, B - ii, C -iii, D-iv	(d)

98	Which of the following is a structure used by fungi to absorb nutrients from the host?				
	a) Rhizoids	b) Haustoria	c) Mycelium	d) Appressoria	(d)
99	Integrated pest management (IPM) includes 1. using of biological control methods. 2. using of chemical control methods. 3. using of cultural control methods. 4. using of physical, control methods.				
	a) Only 1 and 2 are true.	b) Only 1 and 3 are true.	c) Only 1, 2 and 3 are true	d) Only 1, 2, 3 and 4 are true	(d)
100	Which fungi are considered obligate parasites?				
	a) *Mucor*	b) *Agaricus*	c) *Puccinia*	d) Yeast	(c)