

UPPCS PRE 24 MA ANSWER-43

1. Consider the following pairs:

Disease - Related Crop

1. Khaira disease – Sugarcane
2. Karnal bunt disease – Wheat
3. Panama wilt disease – Chickpea
4. Tikka disease – Groundnut

How many of the above pairs are correctly matched?

- (a) Two pairs
- (b) One pair
- (c) Four pairs
- (d) Three pairs

1. Answer -(a)

Names of major crops and their diseases

- Khaira disease – Paddy
- Red rot disease – Sugarcane
- Karnal bunt disease – Wheat
- White blister disease – Mustard
- Panama wilt disease – Banana
- Ergot disease – Millet
- Uktha disease – Chickpea
- Tikka disease – Groundnut

Additional knowledge:

Panama wilt disease

- It is a devastating disease that affects **banana plants** and can cause crop losses up to 100%.
- This disease is particularly devastating in **tropical and subtropical regions** where bananas are grown commercially.
- The presence of this disease can reduce the yield of banana plants and the quality of fruits produced.
- This disease also **causes wilting and chlorosis** on the leaves of the affected plants.
- The spread of this disease can be prevented by following good agricultural practices, such as **crop rotation** and **disease resistant varieties**. Additionally, the use of fungicides can help reduce the spread of the disease.

2. Match List I (Diseases) with List II (Affected Crop):

List I	List II
A. Canker Disease	1. Wheat

2. Answer - (b)

Names of major crops and their diseases

- Canker disease – Lemon
- Ear cockle disease – Wheat
- Black tip disease – Mango
- Hen and chicken disease – Grape

B. Ear Cockle Disease	2. Mango
C. Koilia Disease	3. Grapes
D. Hen and Chicken Disease	4. Lemon

Select the correct answer from the code given below:

- (a) A-3, B-1, C-2, D-4
 (b) A-4, B-1, C-2, D-3
 (c) A-3, B-2, C-1, D-4
 (d) A-4, B-2, C-1, D-3

Additional knowledge:

Names of major crops and their diseases

- Black arm disease – Cotton
- Phyllody disease – Sesame
- Tungro disease – Paddy
- Yellow vein disease – Okra, Papaya, Tobacco

3. Consider the following pairs:

Crop - Recommended Herbicide

1. Wheat - Isoproturon
2. Paddy - Butachlor
3. Cotton - Alachlor
4. Soybean - Pendimethalin

How many of the above pairs are correctly matched?

- (a) One pair
 (b) Three pairs
 (c) Four pairs
 (d) Two pairs

3. Answer - (c)

Crop - Recommended herbicide

- **Wheat** - Isoproturon
- **Paddy** - Butachlor, Thiobencarb, Anilophos
- **Cotton** - Alachlor, Fluchloralin (Vaseline) Diuron
- **Soybean** - Pendimethalin (Stomp), Alachlor, Fluchloralin, Liloform
- **Potato** - Metribuzin (Sencor), Ocifluorfen (Gol), Pendimethalin

Additional knowledge:

Names of major crops and their diseases

- Buck eye rot disease – Tomato
- Grassy shoot disease – Sugarcane
- Powdery mildew disease – Pea, millet
- Molya disease – Wheat and barley

4. Match List I (Diseases) with List II (Bacteria):

List I	List II
A. Blight disease of potato	1. Xanthomonas malvacearum
B. Blight	2. Xanthomonas

4. Answer – (d)

Disease – Bacteria

- Potato blight disease – Pseudomonas solanacea
- Rice blight disease – Xanthomonas oryzae
- Lemon canker disease – Xanthomonas citri
- Black arm disease of cotton – Xanthomonas malvacearum

Additional knowledge:

Various diseases, pests and treatment of paddy

disease of rice	citri
C. Lemon canker disease	3. Pseudomonas solanaceae
D. Black arm disease of cotton	4. Xanthomonas oryzae

Select the correct answer from the code given below:

- (a) A-1, B-2, C-3, D-4
 (b) A-2, B-3, C-4, D-1
 (c) A-4, B-3, C-1, D-2
 (d) A-3, B-4, C-2, D-1

- **Khaira** is a major disease of **paddy** which is caused due to **zinc deficiency**.
- **Brown leaf spot – bacterial blight and paddy blast disease** are various diseases of paddy caused by fungus in unirrigated paddy, **Tungro disease** – caused by rice **tungro virus**, **virtual smut** are caused by **fungus**.
- **Stink bug, armyworm, stem borer, brown and white hopper of paddy, leaf roller insect** etc. are various pests of paddy.
- Stink bug is controlled by Malathion and the armyworm by Chlorpyrifos.

5. Consider the following statements with reference to 'Visual smut disease of rice':

1. It is spread by a fungus called *Pyricularia oryzae*.
2. This disease caused a famine in Bengal in 1943.

Which of the above statements is/are correct?

- (a) Only 2
 (b) Both 1 and 2
 (c) Neither 1, nor 2
 (d) Only 1

5. Answer - (c)

- **Blast disease of rice** - This is the main disease of rice crops which is spread by a fungus called *Pyricularia oryzae*.
- **Brown spot disease of rice** - This is a **seed borne disease** which is spread by a fungus called *Helimenthosprium oryzae*. This disease caused **famine in Bengal in 1943**.
- **Visual smut disease or flag smut disease or turmeric disease of rice** - This disease is spread by a fungus called *Claviceps oryzae*.

Additional Knowledge:

Diseases caused in plants by fungi

Name of the disease – Fungi

- Plant rot of rice – *Fusarium moniliforme*
- Late blight of potato – *Phytophthera infestans*
- Powdery blight disease of wheat – *Erysiphe graminis*
- Tikka disease of peanut – *Cercospora personata*
- Red blight of sugarcane – *Colletotrichum falcatum*

6. Which one of the following is a wood-decay fungus?

- (a) *Wolfiporia extensa*

6. Answer – (a)

- '*Wolfiporia extensa*' is a fungus of the Polyporaceae family. It is a **wood-decaying fungus** but has an underground growth habit.

<p>(b) Morel (c) Rhizopus microsporus (d) Agaricus</p>	<p>Additional Knowledge:</p> <ul style="list-style-type: none"> • Morel mushroom or simply morel, is a type of wild mushroom with an earthy, nutty flavour. • 'Rhizopus microsporus' is a fungal pathogen infecting maize, sunflower and rice. • 'Agaricus' is an edible fungus. 'Agaricus' is commonly known as mushroom.
<p>7. Consider the following statements with reference to 'Charcoal abscission disease':</p> <ol style="list-style-type: none"> 1. This is a major disease of vegetables of the Cucurbitaceae family. 2. This is a 'virus'-borne disease. <p>Which of the above statements is/are correct?</p> <p>(a) Only 1 (b) Neither 1 nor 2 (c) Only 2 (d) Both 1 and 2</p>	<p>7. Answer - (a)</p> <p>Charcoal rot</p> <ul style="list-style-type: none"> • This is a major disease of vegetables of the Cucurbitaceae family. It is caused by the fungus Macrophomina phaseolina. • Cucurbitaceae is a family of plants which includes cucumber, melon, pumpkin, watermelon etc. <p>Additional knowledge:</p> <p>Mosaic disease of leaves</p> <ul style="list-style-type: none"> • This disease affects cucumber, bitter gourd, bottle gourd, custard apple etc. It is a disease caused by a virus. <p>Alternaria leaf spot</p> <ul style="list-style-type: none"> • This occurs on bottle gourd, cucumber, ridge gourd and other cucurbit crops. This disease is caused by a fungus. It is caused by the fungi Alternaria cucumerina and Alternaria alternata.
<p>8. Which of the following diseases affect the wheat crop?</p> <ol style="list-style-type: none"> 1. Karnal Bunt 2. Bare Smut 3. Sehoon <p>Code:</p> <p>(a) Only 1 and 2 (b) 1, 2 and 3 (c) Only 2 and 3 (d) Only 1 and 3</p>	<p>8. Answer - (b)</p> <p>Wheat diseases</p> <ul style="list-style-type: none"> • Rust - This is a major disease of wheat crop. It is of the types Stem Rust (Black Rust), Leaf Rust (Brown Rust) and Stripe Rust (Yellow Rust). It is caused by a fungus called Puccinia. • Karnal Bunt - It is caused by a fungus called Tilletia Indica. • Loose Smut - It is caused by Ustilago Segetum. • Ear cockle of wheat - It is caused by a nematode called Aegina. <p>Additional knowledge:</p> <p>Different varieties of wheat</p> <ul style="list-style-type: none"> • Main varieties - Kalyan Sona, Kanchan, Girja, Gomti,

Anuradha, Macaroni, Sonalika, Arjun, Kundan, Pusa Vishesh, Malav Kirti, Bhavani, Amar, Sujata, Chandrika, Raj 3077, Mangala, Narendra etc.

- **Latest developed varieties** - (1) **By I.C.A.R:** D.W.B-14, H.S-420, VL-829, H.I-1500, Pusa Baker, Pusa Kiran, Nilgiri Khapli, Pusa Malvi, (2) **By IARI:** HS-562, HD-311F
- **Triticale** - Developed from **cross between wheat and rye**.

9. Consider the following statements with reference to 'Yellow Rust' disease:

1. It is a 'fungal' disease which turns the leaves yellow thereby disrupting the process of photosynthesis.
2. It affects the leaves of wheat.

Which of the above statements is/are correct?

- (a) Both 1 and 2
- (b) Only 2
- (c) Neither 1 nor 2
- (d) Only 1

9. Answer - (a)

Yellow Rust

- Yellow rust is a **fungal disease** that turns the leaves **yellow**, thereby **disrupting the process of photosynthesis**.
- This disease is caused by **Magnaporthe Oryzae Fungus** and was discovered in **Brazil in 1985**.
- This fungus **affects the leaves of wheat and consumes their chlorophyll**, thereby affecting the growth of the plant.

Additional Knowledge:

- **Tikka disease of peanuts** is also known as **leaf spot disease**.
- Tikka disease is caused by organisms of the Cercospora genus named Cercospora personata and Cercospora arachidicola.

10. Which of the following is also called 'Uncle of Wheat' in the local language?

- (a) Euphorbia hirta
- (b) Solanum nigrum
- (c) Vicia sativa
- (d) Phalaris minor

10. Answer - (d)

- The **most dangerous weed of the wheat rabi crop** in India is **Mandusi (Phalaris minor)** which is also known as **Gulli Danda or Wheat's Uncle**. It is the main weed of the **rice-wheat crop cycle**. Its birthplace is believed to be in the **Mediterranean region**.

Additional Knowledge:

Major weeds growing in different crops

Crop - Major weeds

- **Wheat** - Bathua (Chenopodium album), Hirankhuri (Convolvulus arvensis), Krishnaneel (Anagallis arvensis), Akri (Vicia sativa), Wheat's uncle (Phalaris minor).

	<ul style="list-style-type: none">• Rabi pulse and oilseed crops - Pyaaji (<i>Asphodelus tenuifolius</i>), Pohli (<i>Carthamus obliqua</i>), Wild pea (<i>Lathyrus sativus</i>), Bansoya (<i>Fumaria pauciflora</i>), Akri, Bathua, Hirankhuri etc.• Paddy - Sawan (<i>Echinochloa colona</i>), Kodon (<i>Eleusine indica</i>), Kanakaua (<i>Commelina benghalensis</i>), Wild jute (<i>Corchorus acutangulus</i>), Motha (<i>Cyperus</i>).• Maize, Sorghum, Millet - Doob Ghas (<i>Cynodon dactylon</i>), Gumma (<i>Leucas aspera</i>), Makoy (<i>Solanum nigrum</i>), Kanakaua, Wild Jute, White Murg, Sawan, Motha etc.• Pulses and Oilseeds of Kharif - Mahkua (<i>Ageratum conyzoides</i>), Hazardana (<i>Phyllanthus niruri</i>), Duddhi (<i>Euphorbia hirta</i>) Kanakaua, White Murg, Sawan, Motha etc.										
<p>11. Which of the following is/are essential micronutrients for plants?</p> <p>1. Iron</p> <p>2. Zinc</p> <p>3. Copper</p> <p>4. Phosphorus</p> <p>Code:</p> <p>(a) 2 and 3 only</p> <p>(b) 1, 2 and 3 only</p> <p>(c) 1, 3 and 4 only</p> <p>(d) 3 and 4 only</p>	<p>11. Answer - (b)</p> <p>Essential Nutrients in Plants</p> <ul style="list-style-type: none">• Main Nutrients - Nitrogen, Phosphorus and Potash.• Secondary Nutrients - Calcium, Magnesium and Sulphur.• Micro Nutrients - Iron, Zinc, Copper, Manganese, Molybdenum, Boron and Chlorine. <div><p><u>Additional Knowledge:</u></p><p>Calcium</p><ul style="list-style-type: none">• Due to calcium deficiency in plants, there is a lack of chlorophyll in new shoots. The shape and size of the terminal part of the plant becomes bad and unhealthy.• Due to its deficiency, the buds bend and the tip starts drying and the toxic substances present in the cells of the plant have an adverse effect.• The amount of calcium in the soil is usually removed by using dolomite (about 20 percent calcium), gypsum (21 percent calcium), lime etc. in the soil.</div>										
<p>12. Consider the following pairs:</p> <table><tr><td>Disease/symptom</td><td>caused</td><td>-</td><td></td></tr><tr><td>Deficiency of element</td><td></td><td></td><td></td></tr></table> <p>1. Dieback in lemon - Copper (Cu)</p>	Disease/symptom	caused	-		Deficiency of element				<p>12. Answer-(a)</p> <p>Diseases caused by deficiency of nutrients in plants</p> <table><tr><td></td><td>Original disease/symptom - deficiency of element</td></tr></table> <ul style="list-style-type: none">• Dieback in lemon - Copper (Cu)• Internal necrosis in gooseberry - Boron (Bo)		Original disease/symptom - deficiency of element
Disease/symptom	caused	-									
Deficiency of element											
	Original disease/symptom - deficiency of element										

2. Internal necrosis in gooseberry - Boron (Bo)
3. Little leaf in lemon - Copper (Cu)
4. Little leaf in mango and brinjal - Zinc (Zn)

How many of the above pairs are correctly matched?

- (a) Four pairs
- (b) Three pairs
- (c) Two pairs
- (d) One pair

- Little leaf in lemon - Copper (Cu)
- Little leaf in mango and brinjal - Zinc (Zn)

Additional knowledge:

Original disease/symptom - cause

- Disorder millerandage in grapes - **deficiency of Boron (Bo)**
- Yellow spot disorder in lemon - **deficiency of molybdenum (Mo)**
- Water core in banana - **due to deposition of ice particles and sorbitol**
- Bronzing in guava - **deficiency of Zinc (Zn)**

13. Match List I (Diseases/Symptoms) with List II (Causes):

List I	List II
A. Leaf Scorch in Mango	1. SO ₂ gas emitted from kiln smoke
B. Hen and Chicken' disease in grapes	2. Boron deficiency
C. Black Tip disease in Mango	3. Excess of potassium (K) and chloride in water
D. Bunchy disease in pecan nut	4. Zinc deficiency

Select the correct answer from the code given below:

- (a) A-3, B-1, C-2, D-4
- (b) A-4, B-1, C-2, D-3

13. Answer-(c)

Original disease/symptom - cause

- Leaf scorch in mango - deficiency of potassium (K) and excess of chloride in water
- Hen and Chicken disease in grapes - Boron (Bo) deficiency
- Black Tip of Mango - SO₂ gas emitted from **kiln smoke**
- Bunchy disease in pecan nut - Zinc (Zn) deficiency

Additional Knowledge:

Diseases/Symptoms - Causes

- **Internal tissue decay of jackfruit** - Boron (Bo) deficiency
- **Leaf scorching in litchi** - Potassium (K) deficiency
- **Internal nicotinic in mango** - Boron (Bo) deficiency

<p>(c) A-3, B-2, C-1, D-4 (d) A-4, B-2, C-1, D-3</p>	
<p>14. Who among the following is considered the father of 'plant pathology'?</p> <p>(a) Carl E. von Weyer (b) Theophrastus (c) Heinrich Anton de Bary (d) Stephen Hales</p>	<p>14. उत्तर -(c)</p> <p>Fathers of major branches of science</p> <ul style="list-style-type: none"> • Modern embryology – Carl E. Von Weyer • Botany – Theophrastus • Plant pathology – Heinrich Anton de Bary • Plant physiology – Stephen Hales <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><u>Additional Knowledge:</u></p> <p>Plant pathology</p> <ul style="list-style-type: none"> • In plant pathology, the reduction in plant growth or damage or injury to the plant is considered as a disease, which is caused by environmental (abiotic) factors and microorganisms. Some are caused by interference with the normal functions of plants by other organisms. • Plant pathology does not deal with injury or damage to plants caused by insects and mites and other herbivorous animals, or by humans cutting or otherwise using plants. </div>
<p>15. How many of the following are 'viral' borne animal diseases?</p> <ol style="list-style-type: none"> 1. Foot and Mouth Disease 2. Ponkin or rinderpest 3. Hemorrhagic Septicemia 4. Mastitis <p>Code:</p> <p>(a) All four (b) Only three (c) Only one (d) Only two</p>	<p>15. Answer-(d)</p> <p>Disease - Agent - Animals affected</p> <ul style="list-style-type: none"> • Foot and Mouth Disease - Virus - All domestic animals • Poncini - Virus - Cow, Buffalo, Sheep, Pig • Anthrax - Bacteria - Cow, Buffalo • Mastitis - Bacteria - Udder of all domestic animals affected <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><u>Additional Knowledge:</u></p> <p>Disease - Agent - Animals affected</p> <ul style="list-style-type: none"> • Anthrax - Bacteria - Cow, Buffalo, Sheep, Goat and Horse • Black Quarter - Bacteria - Cow, Buffalo • Pneumonia - Bacteria - Cow, Buffalo, Sheep and Goat </div>
<p>16. Which of the following is/are 'bacterial' borne animal diseases?</p> <ol style="list-style-type: none"> 1. Smallpox 2. Tuberculosis 3. Milk fever 	<p>16. Answer-(d)</p> <p>Disease - Agent - Animals affected</p> <ul style="list-style-type: none"> • Smallpox - Virus - Cow, Buffalo, Sheep and Goat • Tuberculosis - Bacteria - Cow, Buffalo, Sheep and Goat • Milk Fever - Calcium Deficiency - In Cow

<p>4. Johne's disease</p> <p>Code:</p> <p>(a) 2 and 3 only (b) 1, 2 and 3 only (c) 1, 3 and 4 only (d) 2 and 4 only</p>	<ul style="list-style-type: none"> • Johne's Disease - Bacteria - Ruminant Animals <p>Additional Knowledge:</p> <p>Disease - Agent - Organism affected</p> <ul style="list-style-type: none"> • Saprolegnia Disease - Fungi - in fish • Gill-rot - fungus - in fish • Fin and tail rot disease - Bacteria - in fish • Infection abortion - Bacteria - Cow, buffalo, pig and goat • Tympany - Contaminated food - Ruminant animals
<p>17. Consider the following statements with reference to 'Rabies':</p> <ol style="list-style-type: none"> 1. It is a bacterial disease that affects the 'central nervous system'. 2. It is found in mammals. 3. Only carnivorous animals are affected by it. <p>How many of the above statements are correct?</p> <p>(a) Only one (b) Only two (c) All three (d) None</p>	<p>17. Answer - (a)</p> <p>Rabies or madness in animals</p> <ul style="list-style-type: none"> • Rabies is a viral disease that affects the central nervous system of humans and animals. • It is found in mammals. • Rabies is seen in three forms- Wildlife rabies (sylvatic rabies) which is found in wildlife such as fox, wolf, jackal etc. Urban rabies which is found in domestic animals such as dogs, cats, cow, buffalo, horse, goat, sheep etc. Bat rabies which is mainly found in America. <p>Additional knowledge:</p> <p>Rabies virus</p> <ul style="list-style-type: none"> • Rabies in animals is caused by the bite of a rabies infected animal. • Rabies virus is found in the saliva and brain of the infected animal. • This virus also spreads by entering the mucous membrane of the eyes, nose and mouth through wounds, but cannot cross normal skin.
<p>18. Which of the following is/are deficiency crop diseases?</p> <ol style="list-style-type: none"> 1. Ergot disease of millet 2. Dieback disease of lemon 3. Marsh disease of pea 4. Smut disease of millet <p>Code:</p> <p>(a) 1, 2 and 3 only</p>	<p>18. Answer - (b)</p> <p>Ergot (Aphid) disease of millet</p> <ul style="list-style-type: none"> • The cause of this disease is a fungus called Claviceps microcephala. <p>Dieback Disease of Citrus</p> <ul style="list-style-type: none"> • This abiotic disease in citrus plants is caused due to deficiency of copper. <p>Marsh Disease of Pea</p>

<p>(b) 2 and 3 only (c) 1, 3 and 4 only (d) 3 and 4 only</p>	<ul style="list-style-type: none"> This disease in peas is caused due to deficiency of a nutrient called manganese. <p>Smut of Bajra</p> <ul style="list-style-type: none"> The cause of this disease is a fungus called <i>Tolyposporium penicillariae</i>. <div style="border: 1px solid black; padding: 5px;"> <p>Additional Knowledge:</p> <p>Khaira Disease of Rice</p> <ul style="list-style-type: none"> This disease in rice crops is caused due to deficiency of zinc. <p>Wilt of Arhar</p> <ul style="list-style-type: none"> This disease is caused by a fungus called <i>Fusarium oxysporum</i>. <p>Little Leaf Disease of Mango</p> <ul style="list-style-type: none"> This abiotic disease is caused due to zinc deficiency. </div>
<p>19. Consider the following pairs:</p> <p>Institute - Location</p> <ol style="list-style-type: none"> Central Cotton Research Institute - Surat Tocklai Tea Research Station - Jorhat Central Jute Research Institute - Barrackpore Indian Institute of Pulses Research - Kanpur <p>How many of the above pairs are correctly matched?</p> <p>(a) Three pairs (b) Four pairs (c) One pair (d) Two pairs</p>	<p>19. Answer -(a)</p> <ul style="list-style-type: none"> Central Cotton Research Institute - Nagpur Tocklai Tea Research Centre - Jorhat Central Jute Research Institute - Barrackpore Indian Pulses Research Institute - Kanpur <div style="border: 1px solid black; padding: 5px;"> <p>Additional Knowledge:</p> <ul style="list-style-type: none"> Central Rice Research Centre - Cuttack National Sugarcane Breeding Institute - Coimbatore Indian Sugarcane Research Centre - Lucknow Central Potato Research Institute - Shimla National Coffee Research Centre - Chikmagalur National Rubber Research Centre - Kottayam Central Silk Research Centre - Mysore Central Tobacco Research Centre - Rajahmundry Central Coconut Research Institute - Kasaragod Indian Oilseeds Research Institute - Hyderabad Central Institute for Subtropical Horticulture - Bengaluru Central Agricultural Meteorology Centre - Pune </div>
<p>20. Consider the following statements with reference to the 'Indian Veterinary Research Institute':</p>	<p>20. Answer -(d)</p> <p>Indian Veterinary Research Institute</p> <ul style="list-style-type: none"> It is located in 'Izzatnagar' in 'Bareilly' district of Uttar Pradesh state of India.

1. It is located at 'Izatnagar' in 'Bareilly' district of Uttar Pradesh state of India.
2. It was established after the independence of India.

Which of the above statements is/are correct?

- (a) Both 1 and 2
- (b) Only 2
- (c) Neither 1, nor 2
- (d) Only 1

- It is India's leading institute in the field of veterinary research.
- It was established in 1889.

Additional Knowledge:

Indian Veterinary Research Institute (IVRI)

- Indian Veterinary Research Institute (IVRI) was established on 9th December, 1889 as Imperial Bacteriological Laboratory at Pune (Maharashtra) and was later shifted to Mukteshwar in 1893.
- Mukteshwar was chosen due to its eco-physical suitability for research on infectious diseases. Subsequently, for large scale production of serums and vaccines, the Izatnagar, Bareilly (UP) campus was established in 1913.
- The Institute was gradually expanded and has its headquarters at Izatnagar (UP) and campuses at Mukteshwar, Bengaluru and regional stations at Palampur, Kolkata and Pune.
- Research carried out at the Institute in the areas of animal health and production with a multi-disciplinary approach has yielded rich dividends.

21. Consider the following statements with reference to the 'Indian Council of Agricultural Research (ICAR)':

1. It is an autonomous organization under the Ministry of Agriculture and Farmers Welfare, Government of India.
2. It was formerly known as the 'Imperial Council of Agricultural Research'.
3. It was established in 1904 in pursuance of the report of the Royal Commission on Agriculture.
4. It is headquartered in

21. Answer -(b)

Indian Council of Agricultural Research (ICAR)

- It is an autonomous organisation under the Department of Agricultural Research and Education (DARE), Ministry of Agriculture and Farmers Welfare, Government of India.
- Formerly known as the Imperial Council of Agricultural Research, it was established on 16 July 1929 as a registered society under the Societies Registration Act, 1860, in pursuance of the report of the Royal Commission on Agriculture.
- It is headquartered in New Delhi. The Council is the apex body for coordinating, guiding and managing research and education in agriculture including horticulture, fisheries and animal sciences throughout the country.
- It is one of the largest national agricultural systems in the world with 111 ICAR institutes and 73 agricultural universities spread across the country.

Chennai.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

- It has played a **leading role in ushering in the Green Revolution in India** and subsequent development in the agricultural sector through its research and technology development.

Additional Knowledge:

- **Indian Agricultural Research Institute (IARI)** was established in **Pusa (Bihar)** in the **year 1905** during the period of 'Lord Curzon'. It was **shifted to New Delhi in 1936**. It is popularly known as '**Pusa Sansthan**'.

22. Match List I with List II:

List I	List II
A. Indian Rice Research Institute	1. Mau
B. Central Institute for Women in Agriculture	2. Nagpur
C. Central Research Institute on Citrus	3. Hyderabad
D. Indian Seed Research Institute	4. Bhubaneswar

Select the correct answer from the code given below:

- (a) A-1, B-2, C-3, D-4
- (b) A-2, B-3, C-4, D-1
- (c) A-4, B-3, C-1, D-2
- (d) A-3, B-4, C-2, D-1

22. Answer - (d)

Major Institutes of Indian Council of Agricultural Research (ICAR)

- Indian Rice Research Institute - **Hyderabad**
- Central Institute for Women in Agriculture - **Bhubaneswar**
- Central Research Institute on Citrus - **Nagpur**
- Indian Seed Research Institute - **Mau**

Additional Knowledge:

Major Institutes of Indian Council of Agricultural Research (ICAR)

- Central Island Agricultural Research Institute - Port Blair
- Central Arid Zone Research Institute - Jodhpur
- Central Avian Research Institute - Izzatnagar
- Central Inland Fisheries Research Institute - Barrackpore
- Central Institute for Brackishwater Aquaculture - Chennai
- Central Institute for Research on Buffaloes - Hisar
- Central Institute for Research on Goat - Makhdoom
- Central Institute for Agricultural Engineering - Bhopal
- Central Institute for Arid Horticulture - Bikaner
- Central Cotton Research Institute - Nagpur
- Central Institute for Fisheries Technology - Cochin
- Central Institute for Freshwater Aquaculture - Bhubaneswar
- Central Institute for Research on Cotton Technology - Mumbai
- Central Institute for Subtropical Horticulture - Lucknow
- Central Institute for Temperate Horticulture - Srinagar
- Central Institute for Post-harvest Engineering & Technology - Ludhiana
- Central Marine Fisheries Research Institute - Kochi
- Central Plantation Crops Research Institute - Kasargod

- Central Potato Research Institute - Shimla

23. Consider the following statements with reference to 'Pradhan Mantri Kisan Samman Nidhi Yojana':

1. It was launched in the year 2020 to meet the financial needs of landholder farmers.
2. It is a centrally sponsored scheme with 100% funding by the Government of India.
3. It is being implemented by the Ministry of Agriculture and Farmers Welfare.

Which of the above statements is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1, 2 and 3
- (d) 1 and 3 only

23. Answer - (b)

Pradhan Mantri Kisan Samman Nidhi Yojana

- It was launched in **February, 2019** to meet the **financial needs of landholder farmers**.
- A financial benefit of **Rs 6000 per annum** is transferred in **three equal instalments every four months** to the bank accounts of farmer families across the country through **Direct Benefit Transfer (DBT)**.
- The scheme was initially for small and marginal farmers (SMFs) who had land up to 2 hectares, but later **the scope of the scheme was extended to all landholder farmers**.
- It is a **centrally sponsored scheme** with **100% funding** by the Government of India.
- It is being implemented by the '**Ministry of Agriculture and Farmers Welfare**'

Additional Knowledge:

Pradhan Mantri Kisan Maandhan Yojana (PMKMY)

- Launch date - **1 June 2019**
- Objective - **Rs 3,000 pension per month to farmers**
- PMKMY was announced in the **Union Budget 2019-20**, under which eligible farmers will be given a pension of **Rs 3,000 per month after the age of 60 years**.
- Only those farmers will be eligible in this scheme who have **2 hectares or less land and are between 18 and 40 years of age**.

24. In which year in India the 'Intensive Agriculture District Programme' was implemented in selected districts of some states?

- (a) 1952
- (b) 1960
- (c) 1976
- (d) 1984

24. Answer - (b)

- In India, in the year **1960**, the '**Intensive Agriculture District Program**' was implemented in selected districts of some states.
- Its objective was to provide **fertilisers, pesticides, good seeds and technical assistance to the farmers**.
- Along with these facilities, emphasis was also laid on proper irrigation systems.

Additional Knowledge:

- In the context of India, after independence, the biggest challenge before the political leadership was the **social and economic reconstruction and development of the country**. As more than **80 percent** of India's population depends on agriculture for their livelihood, **agriculture is found to be closely related to economic development**.

After independence, India inherited a backward agricultural system, the main characteristics of which were as follows -

- Different types of land ownership
- Concentration of land in a few hands
- Effectiveness of middlemen
- Existence of majority of poor farmers
- Rural unemployment
- Low agricultural production
- Lack of technical facilities
- Social backwardness and discrimination
- Low rural living standards and illiteracy in rural areas
- Dominance of **conservatism, fanaticism and casteism etc.**

25. Under the Kisan Credit Card, loan is given for which of the following-

1. Short term loan requirement for crops
2. Consumption needs of farmer family
3. Establishment of cold storage facility in the village
4. Purchase of tractor for farmers

Which of the above statements is/are correct?

- (a) 1 and 2 only
- (b) 1, 2 and 3 only
- (c) 1, 3 and 4 only
- (d) 3 and 4 only

25. Answer - (a)

'Kisan Credit Card' is provided with the following objectives -

- **Short-term loan requirement** for cultivation of crops
- Post-harvest expenses;
- Production of marketing credit
- **Consumption needs of farmer family;**
- Working capital for maintenance of agricultural assets and agriculture related activities like dairy cattle, inland fisheries etc.
- **Investment credit requirement** for agriculture and allied activities like pumpsets, sprayers, dairy cattle etc. However, this segment is of **long term credit**.
- **Short term credit assistance** is not given to farmers for purchase of combine harvester, tractor and mini truck and construction of family house and setting up of cold storage facility in the village.

Additional Knowledge:

Kisan Credit Card (KCC) Scheme

	<ul style="list-style-type: none"> • 'Kisan Credit Card (KCC) Scheme' was introduced in the year 1998 to provide adequate and timely credit support to farmers from the banking system under a single window with flexible and simplified procedure for their cultivation and other requirements like purchase of agricultural inputs like seeds, fertilisers, pesticides etc. and withdrawal of cash for their production requirements. • This scheme was further extended in the year 2004 for investment credit requirements of farmers for allied and non-agricultural activities. • Kisan Credit Card Scheme is implemented by commercial banks, RRBs, small finance banks and cooperative societies.
<p>26. Which of the following information is/are mentioned on the 'Soil Health Card'?</p> <ol style="list-style-type: none"> 1. Production capacity of the field 2. Moisture content in the soil 3. Presence of nutrients and nutrient deficiency in the soil 4. Appropriate guidelines to improve the quality of fields <p>Code:</p> <p>(a) 1, 2 and 3 only</p> <p>(b) 2, 3 and 4 only</p> <p>(c) 1, 2, 3 and 4</p> <p>(d) 1, 3 and 4 only</p>	<p>26. Answer - (c)</p> <p>Information recorded in the 'Soil Health Card'</p> <ul style="list-style-type: none"> • Health of the soil • Production capacity of the field • Presence of nutrients and nutrient deficiency • Moisture content in the soil • Other nutrients present • Appropriate guidelines to improve the quality of the fields <p><u>Additional Knowledge:</u></p> <p>Soil Health Card</p> <ul style="list-style-type: none"> • On February 19, 2015, the nationwide 'National Soil Health Card' scheme was launched at Suratgarh in Sri Ganganagar district of Rajasthan. • The main objective of this scheme is to assist the states in providing soil health cards to farmers across the country. • The theme of this scheme is - Healthy Earth, Green Fields. • Under this scheme, rural youth and farmers up to 40 years of age can establish soil testing laboratories and do sample testing.
<p>27. Consider the following statements with reference to 'Pradhan Mantri Krishi Sinchai Yojana':</p>	<p>27. Answer - (b)</p> <p>Pradhan Mantri Krishi Sinchai Yojana</p> <ul style="list-style-type: none"> • This is a centrally sponsored scheme launched in the year 2015.

1. It is a centrally sponsored scheme launched in the year 2015.
2. Under this, micro irrigation is also promoted through subsidy to ensure 'more crop per drop'.

Which of the statements given above is/are correct?

- (a) Only 2
(b) Both 1 and 2
(c) Neither 1 nor 2
(d) Only 1

- The centre-state share in this is **75:25 percent**. In the case of the north-eastern region and hilly states, this ratio is **90:10**.
- It has **three main components** - **Accelerated Irrigation Benefit Programme (AIBP)**, **Har Khet Ko Pani (HKKP)** and **Watershed Development**.
- This scheme has been implemented to expand cultivated areas with assured irrigation, reduce water wastage and improve water use efficiency.
- Under this, micro irrigation is also promoted through subsidy to ensure 'more crop per drop'.

Additional Knowledge:

PM Kusum Yojana

- Kusum Yojana was launched by the **Ministry of New and Renewable Energy** in the year **2019**, when the **Cabinet Committee on Economic Affairs** approved the scheme with the primary objective of ensuring financial and water security.
- Under this scheme, farmers have been provided with **solar panels for irrigation**. Under this scheme, **90 percent** of the total cost of installing solar pumps will be **borne by the government** and the remaining **10 percent** of the cost will be **paid by the farmers themselves**.

28. Consider the following statements with reference to the 'Pradhan Mantri Fasal Bima Yojana':

1. It was launched in the year 2020.
2. It is being administered by the 'Ministry of Agriculture and Farmers Welfare'.
3. It covers only pre-harvest losses due to natural calamities, pests and diseases.
4. A uniform premium of 2% is paid for all crops.

28. Answer - (c)

Pradhan Mantri Fasal Bima Yojana (PMFBY)

- PMFBY was launched in the year **2016** and is being administered by the **Ministry of Agriculture and Farmers Welfare**.
- Under this, **all farmers including tenant farmers growing notified crops in notified areas are eligible** for coverage.
- It aims to provide a **comprehensive insurance cover** in case of **crop failure due to natural calamities, pests and diseases or any other reason** so as to help stabilise the income of farmers.
- It covers **pre and post harvest losses due to natural calamities (cyclone and unseasonal rains), pests and diseases**.
- In this, a **uniform premium of only 2% will be paid by the farmers for all Kharif crops and 1.5% for all Rabi crops**.

Additional Knowledge:

<p>How many of the statements given above are correct?</p> <p>(a) Only three (b) All four (c) Only two (d) Only one</p>	<ul style="list-style-type: none"> The 'Rashtriya Krishi Vikas Yojana' was launched from 2007-08 under the Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India with the objective of achieving 4% annual growth in the agricultural sector during the Eleventh Five Year Plan period.
<p>29. Which is the first and only transgenic crop approved by the 'Genetic Engineering Appraisal Committee' in India which is being cultivated commercially in India?</p> <p>(a) BT cotton (b) GM mustard (c) BT brinjal (d) All of the above</p>	<p>29. Answer -(a) BT Cotton</p> <ul style="list-style-type: none"> BT cotton was introduced to combat the bollworm attack which had devastated cotton crops in the past. It was jointly developed by Maharashtra Hybrid Seeds Company (Mahyco) and the American seed company Monsanto. In 2002, GEAC approved BT cotton for commercial cultivation in 6 states namely Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra and Tamil Nadu. BT cotton is the first and only transgenic crop approved by GEAC. The Genetic Engineering Appraisal Committee (GEAC) in India is responsible for evaluating activities involving large-scale use of hazardous microorganisms and recombinants in research and industrial production from the environmental point of view. 'Bollgard I' Bt cotton (single-gene technology) is the first biotech crop technology approved for commercialization in India in 2002, followed by Bollgard II- double-gene technology in mid-2006, approved by the Genetic Engineering Approval Committee, the Indian regulatory body for biotech crops. <div data-bbox="584 1503 1506 1888" style="border: 1px solid black; padding: 5px;"> <p>Additional Knowledge: Genetic Engineering Appraisal Committee</p> <ul style="list-style-type: none"> It is set up under the Ministry of Environment, Forest and Climate Change. Its function is to grant approval for the use of genetically modified microorganisms and products in agriculture. It is India's apex regulator for genetically modified seeds. </div>
<p>30. Which feature of some species of blue-green algae helps promote them as bio-fertilizers?</p>	<p>30. Answer - (c)</p> <ul style="list-style-type: none"> 'Cyanobacteria' or 'blue-green algae' is an example of biofertilizer, a type of organic fertiliser that contains living

- (a) They convert atmospheric methane into ammonia which can be easily absorbed by plants.
- (b) They induce plants to produce enzymes that help convert atmospheric nitrogen into nitrate.
- (c) They have a mechanism to convert atmospheric nitrogen into a form which can be easily absorbed by plants.
- (d) They induce plant roots to absorb nitrate from the soil in large quantities.

organisms and harnesses naturally occurring inputs such as **solar energy, nitrogen and water to ensure soil fertility and plant growth.**

- Blue-green algae are **photoautotrophic microorganisms**. They have **special cells that use solar energy to convert atmospheric nitrogen into ammonia**. The ammonia is used by plants to increase growth and production.

Additional Knowledge:

- **Mixed farming** is an agricultural system in which a farmer practises **different agricultural practices simultaneously**, such as **growing cash crops and animal husbandry**.
- It aims to increase income through such different sources and meet the demand for land and labour throughout the year.

31. Consider the following pairs:

1. National Research Centre on Orchid - Ladakh
2. National Research Centre on Grapes - Pune
3. National Research Centre on Litchi - Muzaffarnagar
4. National Research Centre on Yak - Agartala

How many of the above pairs are correctly matched?

- (a) One pair
- (b) Two pairs
- (c) Three pairs
- (d) Four pairs

31. Answer - (a)

National Research Centres of 'Indian Council of Agricultural Research'

- National Research Centre on Orchid – **Pakyong, Sikkim**
- National Research Centre on Grapes – **Pune**
- National Research Centre on Litchi – **Muzaffarpur**
- National Research Centre on Yak – **West Kameng**

Additional Knowledge:

National Research Centres of 'Indian Council of Agricultural Research'

- National Research Centre on Camel – **Bikaner**
- National Research Centre on Horse – **Hisar**
- National Research Centre on Meat – **Hyderabad**
- National Research Centre on Mithun – **Medziphema, Nagaland**
- National Research Centre on Pomegranate – **Solapur**
- National Research Centre on Pig – **Guwahati**
- National Research Centre on Seed Spices – **Ajmer**
- National Research Centre on Banana – **Trichy**
- National Research Centre on Integrated Pest Management Centre - **New Delhi**
- Mahatma Gandhi Integrated Agricultural Research Institute - **Motihari**

32. Match List I with List II:

List I	List II
A. Directorate of Peanut Research	1. Pune
B. Directorate of Soybean Research	2. Junagadh
C. Directorate of Rapeseed and Mustard Research	3. Indore
D. Directorate of Onion and Garlic Research	4. Bharatpur

Select the correct answer from the code given below:

- (a) A-1, B-2, C-4, D-3
 (b) A-4, B-3, C-2, D-1
 (c) A-2, B-1, C-4, D-3
 (d) A-2, B-3, C-4, D-1

32. Answer - (d)

Directorates/Project Directorates of 'Indian Council of Agricultural Research'

- Directorate of Peanut Research - **Junagadh**
- Directorate of Soybean Research - **Indore**
- Directorate of Rapeseed and Mustard Research - **Bharatpur**
- Directorate of Onion and Garlic Research - **Pune**

Additional Knowledge:

- Directorate of Cashew Research - **Puttur, Karnataka**
- Directorate of Mushroom Research - **Solan**
- Directorate of Medicinal and Aromatic Plant Research - **Anand**
- Directorate of Floriculture Research - **Pune, Maharashtra**
- Directorate of Weed Research - **Jabalpur**
- Project Directorate of Foot and Mouth Disease - **Mukteshwar**
- Directorate of Poultry Research - **Hyderabad**
- Directorate of Agricultural Knowledge Management - **New Delhi**
- Directorate of Cold Water Fisheries Research - **Bhimtal, Nainital**

33. Consider the following statements with reference to 'National Horticulture Mission':

1. It was launched as a centrally sponsored scheme during the 8th Five Year Plan.
2. The scheme aims to increase the horticulture sector in India as well as to increase horticulture production.

Which of the above statements is/are correct?

- (a) Neither 1 nor 2
 (b) Both 1 and 2

33. Answer - (c)

- The Government of India started the 'National Horticulture Mission' in the year **2005-06 (10th Plan)** as a **centrally sponsored scheme**.
- The objective of this scheme is to increase horticulture production along with increasing the horticulture sector in India.

Additional Knowledge:

- The **Essential Commodities Act** was introduced in the year **1955** to prevent hoarding and black marketing of food items.

<p>(c) Only 2 (d) Only 1</p>	
<p>34. Consider the following statements with reference to 'Sweet Revolution':</p> <ol style="list-style-type: none"> 1. The initiative aims to promote sugarcane production in the northeastern states of India. 2. It is an initiative of the Ministry of Agriculture and Farmers Welfare. <p>Which of the above statements is/are correct?</p> <p>(a) Only 1 (b) Neither 1, nor 2 (c) Only 2 (d) Both 1 and 2</p>	<p>34. Answer - (c) Sweet Revolution</p> <ul style="list-style-type: none"> • This is an ambitious initiative of the Government of India to promote beekeeping, which is known as 'Beekeeping'. • To promote the Sweet Revolution, the National Beekeeping and Honey Mission was launched by the government in the year 2020 (under the Ministry of Agriculture and Farmers Welfare). <div data-bbox="584 685 1506 1272" style="border: 1px solid black; padding: 5px;"> <p><u>Additional Knowledge:</u></p> <p>Organic Farming</p> <ul style="list-style-type: none"> • Organic farming refers to a system of agriculture in which organic manure or natural manure is used instead of chemical fertilisers and pesticides. • This is a traditional method of agriculture, in which along with improving the fertility of the land, environmental pollution is also reduced. • By adopting 'organic agricultural practices', goals like sustainable agriculture, biodiversity conservation etc. can be achieved. </div>
<p>35. Consider the following statements with reference to 'National Agricultural Cooperative Marketing Federation of India' (NAFED):</p> <ol style="list-style-type: none"> 1. It is an apex organization of marketing cooperatives of agricultural produce in India. 2. It functions under the Ministry of Agriculture and Farmers Welfare. 3. It was established on 2 October 1958 to promote trade of agricultural 	<p>35. Answer - (b) National Agricultural Cooperative Marketing Federation of India (NAFED)</p> <ul style="list-style-type: none"> • It is an apex organisation of marketing cooperatives of agricultural produce in India. • It works under the Ministry of Agriculture and Farmers Welfare. • It was established on 2 October 1958 to promote the trade of agricultural produce and forest resources throughout the country. • It is registered under the Multi-State Cooperative Societies Act. • With headquarters in New Delhi, it has four regional offices in Delhi, Mumbai, Chennai and Kolkata, besides 28 zonal offices in state capitals and important cities. <div data-bbox="584 1966 1506 2051" style="border: 1px solid black; padding: 5px;"> <p><u>Additional Knowledge:</u></p> </div>

produce and forest resources across the country.

How many of the above statements are correct?

- (a) None
- (b) All three
- (c) Only two
- (d) Only one

Khadi and Village Industries Commission (KVIC)

- It is a **statutory body** under the 'Khadi and Village Industries Commission Act-1956'.
- Its main objective is to formulate plans, promote them and provide facilities and assistance for the establishment and development of **Khadi and Village Industries in rural areas** in collaboration with other agencies wherever necessary.
- It is a main institution under the **Ministry of Micro, Small and Medium Enterprises**, Government of India.

36. Consider the following statements with reference to 'Kisan Sarathi' platform:

1. It was jointly launched by the Union Minister of Agriculture and Farmers Welfare and Union Minister of Electronics and Information Technology.
2. It is a digital platform to facilitate farmers to get 'right information at right time' in their desired language.

Which of the above statements is/are correct?

- (a) Only 2
- (b) Both 1 and 2
- (c) Neither 1 nor 2
- (d) Only 1

36. Answer - (b)

'Kisan Sarathi' platform

- In July 2021, the 'Indian Council of Agricultural Research' (ICAR) celebrated its 93rd Foundation Day and on this occasion the 'Kisan Sarathi' platform was launched.
- It was jointly launched by the **Union Minister of Agriculture and Farmers Welfare** and the **Union Minister of Electronics and Information Technology**.
- It is a digital platform to facilitate farmers to get '**right information at the right time**' in their desired language.

Additional Knowledge:

National e-Governance Plan in Agriculture (NeGP-A)

- It is a **centrally sponsored scheme**, this scheme was launched on a pilot basis in **7 states in the year 2010-11**.
- It aims to promote rapid development in India through the use of '**Information and Communication Technology**' to deliver timely agricultural information to farmers.

37. Consider the following statements with reference to 'Operation Green Scheme':

1. This scheme was first presented in the Union Budget of India for the year 2018-19.

37. Answer - (d)

- The 'Operation Green Scheme' was first introduced in the Union Budget of India for the year 2018-19 and Rs 500 crore was allocated to encourage **Farmer Producer Organizations (FPOs)**.
- The **National Agricultural Cooperative Marketing Federation of India (NAFED)** is the nodal organisation for implementing price

<p>2. 'NAFED' is the nodal organisation for implementing price stabilisation measures under this scheme.</p> <p>Which of the above statements is/are correct?</p> <p>(a) Only 1 (b) Neither 1 nor 2 (c) Only 2 (d) Both 1 and 2</p>	<p>stabilisation measures under the 'Operation Green Scheme'.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Additional Knowledge:</p> <ul style="list-style-type: none"> The Mega Food Park Scheme was launched in the year 2008 by the Ministry of Food Processing Industries. The objective of 'Food Park' is to bring together farmers, processors / processing industry and retailers so that agricultural products can be linked through a mechanism. Under Mega Food Parks, the main emphasis is on increasing the prices of agricultural products, preventing food wastage, increasing the income of farmers and providing employment opportunities in rural areas. </div>
<p>38. Consider the following statements:</p> <ol style="list-style-type: none"> Jute is known as the 'Golden Fibre'. Jute Smart is an e-Government initiative launched in 2008 to promote transparency in the jute sector. <p>Which of the above statements is/are correct?</p> <p>(a) Both 1 and 2 (b) Only 1 (c) Neither 1 nor 2 (d) Only 2</p>	<p>38. Answer - (b)</p> <p>Jute SMART</p> <ul style="list-style-type: none"> Jute SMART is an e-government initiative launched in December 2016 to promote transparency in the jute sector. It provides an integrated platform for procurement of sacking by government agencies. Jute is known as the 'golden fibre'. It is used to make jute bags, mats, ropes, yarn, carpets and other artefacts. <div style="border: 1px solid black; padding: 5px;"> <p>Additional Knowledge:</p> <p>Jute I-CARE Programme</p> <ul style="list-style-type: none"> The 'Better Farming and Advanced Rating Practices' (Jute I-CARE) programme was launched in the year 2015. The programme was launched by the National Jute Board (NJB) in collaboration with the Central Research Institute for Research in Jute and Allied Fibres (CRIJAF) and the Jute Corporation of India (JCI). Its objective is to promote farmer-friendly jute cultivation through mechanisation and to promote the rapid use of Microbial Consortium to increase the income of jute farmers. </div>
<p>39. Consider the following statements with reference to Geographical Indication (GI) tag:</p> <ol style="list-style-type: none"> It is used for products that have a specific 	<p>39. Answer - (d)</p> <p>GI Tag</p> <ul style="list-style-type: none"> Geographical Indication is used for such products which have a specific geographical origin area. The distinctive feature and reputation of these products is also

geographical origin.

2. It is regulated internationally under the WTO's 'Trade Related Aspects of Intellectual Property Rights' (TRIPS) agreement.

Which of the statements given above is/are correct?

- (a) Only 1
(b) Neither 1 nor 2
(c) Only 2
(d) Both 1 and 2

due to this origin area.

- Such an address assures the quality and uniqueness of the product.
- GI Tag has been included as a component of 'Intellectual Property Rights' under the 'Paris Convention for the Protection of Industrial Property'.
- At the international level, GI is regulated under the WTO's agreement on 'Trade Related Aspects of Intellectual Property Rights' (TRIPS).
- At the national level, this work is done under the 'Geographical Indication of Goods' (Registration and Protection) Act, 1999, which came into force from September 2003.

Additional Knowledge:

- **Darjeeling Tea** is the first Indian product to receive the GI tag in 2004. Registration of Geographical Indication is valid for 10 years.
- Many products including **Mahabaleshwar Strawberry, Blue Pottery of Jaipur, Banarasi Saree and Tirupati Laddu and Kadaknath Chicken of Jhabua, Madhya Pradesh** have received the GI tag.

40. Consider the following statements with reference to 'Commission for Agricultural Costs and Prices'(CACP):

1. It is an attached office of the 'Ministry of Agriculture and Farmers Welfare', Government of India.
2. It recommends 'Minimum Support Price' to the government for only 15 mandated crops.

Which of the statements given above is/are correct?

- (a) Only 2
(b) Both 1 and 2

40. Answer - (d)

Commission for Agricultural Costs and Prices

- It recommends to the government the 'Minimum Support Price' (MSP) for 22 mandated crops and 'Fair and Remunerative Price' (FRP) for sugarcane.
- **Commission for Agricultural Costs and Prices (CACP)** is an attached office of the Ministry of Agriculture and Farmers Welfare.
- The mandated crops include 14 Kharif crops, 6 Rabi crops and two other commercial crops.
- Apart from this, the minimum support prices (MSPs) of mustard and coconut are determined on the basis of minimum support prices (MSPs) of mustard and dry coconut respectively.

Additional Knowledge:

Minimum Support Price (MSP)

- The Minimum Support Price (MSP) was first established by

(c) Neither 1 nor 2

(d) Only 1

the Centre in **1966-67**.

- MSP is a minimum price offered by the government at which farmers can sell their produce to the government if they wish, if the market price is low. Thus, **MSP provides protection to farmers against market risk.**
- The **concept of MSP** in India was implemented on the recommendations of the **Lakshmikant Jha Committee.**
- On the basis of the recommendations of the '**Commission for Agricultural Costs and Prices**', **MSP is announced before the sowing of crops**, so that farmers can decide whether to sow a crop or not.
- The suggestion regarding MSP is given by the Commission for Agricultural Costs and Prices, but the **final decision** regarding it is taken by the **Cabinet Committee on Economic Affairs (CCEA).**