

IBPS SO AGRICULTURAL FIELD OFFICER (SCALE I) MAINS
YEAR: 2013

Q1. The total number of Krishi Vigyan Kendras (KVKs) in India is?

- (a) 721
- (b) 665
- (c) 765
- (d) 650
- (e) 705

Q2. For larger size seed which implement is used?

- (a) Dibler
- (b) Transplanter
- (c) Planter
- (d) Seed Drill
- (e) All of these

Q3. Indian Institute of soil and water conservation is situated?

- (a) Jodhpur
- (b) Dehradun
- (c) Delhi
- (d) Kanpur
- (e) Bhopal

Q4. Groundwater level is measured by?

- (a) Galvanometer
- (b) Piezometer
- (c) Thermister
- (d) Anemometer
- (e) All of these

Q5. Which pig breed is famous for meat and giving birth to babies?

- (a) White Yorkshire
- (b) Duroc
- (c) Berkshire
- (d) Chester Whites
- (e) Landrace

Q6. Egg colour depends on which of the following?

- (a) Chlorophyll
- (b) Albumin
- (c) Yolk
- (d) Xanthophyll
- (e) None of these

Q7. Highest soil salinity tolerant crop is?

- (a) Wheat
- (b) Oat
- (c) Barley
- (d) All of the above
- (e) None of the above

Q8. Cholai is the weed of?

- (a) Oat
- (b) Wheat
- (c) Lentil
- (d) Maize
- (e) Soyabean

Q9. Seed rate of tomato?

- (a) 600-700 gram/ha
- (b) 120-200 gram/ha
- (c) 300-350 gram/ha
- (d) 400-500 gram/ha
- (e) 800-900 gram/ha

Q10. Sod culture is related to?

- (a) Grass
- (b) Graminea Crops
- (c) Legumes
- (d) Fruit Plants
- (e) Vegetable crops

Q11. Calcium content is high in?

- (a) Mango
- (b) Mandarin
- (c) Sapota
- (d) Ber
- (e) Litchi

Q12. Contribution of agriculture in GDP?

- (a) 16%
- (b) 20%
- (c) 10%
- (d) 25%
- (e) 5%

Q13. Who is the new chairman of NABARD?

- (a) Harsh Kumar bhanwala
- (b) M.S. Swaminathan
- (c) Dr. G.R. Chintala
- (d) Habibullah
- (e) None of these

Q14. Buttoning in cauliflower is due to?

- (a) Potassium
- (b) Zinc
- (c) Copper
- (d) Nitrogen
- (e) Phosphorus

Q15. Downy mildew of maize is due to?

- (a) Viral
- (b) Fungus
- (c) Bacterial
- (d) Physiological Disorder
- (e) None of these

Q16. Highest coffee producing state is?

- (a) Sikkim
- (b) Orissa
- (c) Tamil Nadu
- (d) West Bengal
- (e) Karnataka

Q17. Total essential nutrient of plant is?

- (a) 10
- (b) 17
- (c) 14
- (d) 12
- (e) 15

Q18. Yellow spot in citrus is due to?

- (a) Cobalt
- (b) Molybdenum
- (c) Magnesium
- (d) Copper
- (e) Zinc

Q19. Nitrogen requirement for tobacco crop?

- (a) 10-100 kg/ha
- (b) 5-50 kg/ha
- (c) 20-200 kg/ha
- (d) 60-70 kg/ha
- (e) 40-50 kg/ha

Q20. Seed rate of pure mustard crop is?

- (a) 6-7 kg/ha
- (b) 5-6 kg/ha
- (c) 10-12kg/ha
- (d) 15-20 kg/ha
- (e) 2-3 kg/ha

Q21. Spacing of chickpea is _____?

- (a) 30×25 cm
- (b) 30×10 cm
- (c) 20×5 cm
- (d) 30×60 cm
- (e) 30×30 cm

Q22. C:N ratio of normal soil is _____?

- (a) 10: 01
- (b) 05: 01
- (c) 10: 02
- (d) 15: 05
- (e) 15: 01

Q23. Largest fish producing state in India is _____?

- (a) Orissa
- (b) Kearala
- (c) Tamil Nadu
- (d) Maharastra
- (e) Andhra Pradesh

Q24. Tilt angle of disc plough?

- (a) 15-25°
- (b) 30-35°
- (c) 10-15°
- (d) 30-45°
- (e) None of these

Q25. Test weight of groundnut?

- (a) 700-900 gram
- (b) 200-250 gram
- (c) 300-700 gram
- (d) 2000-2500 gram
- (e) 1200-1500 gram

Q26. National Commission on farmer is started in?

- (a) 2010
- (b) 2012
- (c) 2005
- (d) 2004
- (e) 2020

Q27. Pusa Sanyog is variety of?

- (a) Citrus
- (b) Cucumber
- (c) Mango
- (d) Papaya
- (e) Lady Finger

Q28. Shattering process is related to?

- (a) Lentil
- (b) Soybean
- (c) Wheat
- (d) Gram
- (e) None of these

Q29. Which fruit has maximum area under cultivation?

- (a) Mango
- (b) Papaya
- (c) Lemon
- (d) Orange
- (e) Banana

Q30. Which of the following breed is best for egg production?

- (a) Busra
- (b) Tellicherry
- (c) White leghorn
- (d) Orpington
- (e) Rhode Island Red

Q31. Central sheep and wool Institute situated in?

- (a) Jaipur
- (b) Jodhpur
- (c) Junagadh
- (d) Ambika Nagar (Rajasthan)
- (e) Sri Ganga Nagar

Q32. Which of the following compounds can make the colour of the soil white?

- (a) Calcite
- (b) Iron oxide
- (c) Nitrogen
- (d) Glauconite
- (e) None of these

Q33. National Institute of Agricultural Marketing is located at?

- (a) Karnal
- (b) Jaipur
- (c) Lucknow
- (d) Hyderabad
- (e) Moradabad

Q34. Which of the following region receive the monsoon first?

- (a) Bay of Bengal region
- (b) Coastal region of Gujarat
- (c) Coastal region of Kerala
- (d) Himalayan region
- (e) Coastal region of Maharashtra

Q35. RATNA is a variety of which of the following fruit?

- (a) Guava
- (b) Banana
- (c) Papaya
- (d) Mango
- (e) Apple

Q36. Which of the following is the result of the matting of two breeds of same species?

- (a) Cat
- (b) Tiger
- (c) Horse
- (d) Mule
- (e) Dog

Q37. Which of the following crops is mainly grown in the Barak valley?

- (a) Sugarcane
- (b) Maize
- (c) Jute
- (d) Tea
- (e) Cotton

Q38. Which of the following has the largest share in the import bill of India?

- (a) Petroleum and crude oil
- (b) Natural gas
- (c) Machine tools
- (d) Gold
- (e) Food

Q39. Highest water erosion is in which state?

- (a) Maharashtra
- (b) UP
- (c) West Bengal
- (d) Bihar
- (e) MP

Q40. Country with highest tractor density in the world is _____?

- (a) Slovenia
- (b) Germany
- (c) India
- (d) USA
- (e) None

Solutions

S1. Ans.(a)

Sol. In the year 2013, there were 721 KVKs in India.

Note: As per PIB report of (June) 2022, there are **731** Krishi Vigyan Kendras (KVKs) in the country.

There are 38 KVKs under the control of State Governments, 66 under ICAR Institutes, 103 under NGOs, 506 under Agricultural Universities, 3 under Central Universities, 3 under Public Sector Undertakings, 7 under Deemed to be Universities and 5 under Other Educational Institutions.

S2. Ans.(c)

Sol. When it comes to planting larger-sized seeds, such as those for crops like corn or beans, a planter is typically used. A planter is a farming implement designed to sow seeds in rows at a consistent depth and spacing. It can handle various seed sizes, including larger ones, and is specifically designed for efficient and precise seed placement in the soil.

S3. Ans.(b)

Sol. The Indian Institute of Soil and Water Conservation (IISWC) is situated in Dehradun, Uttarakhand, India. It is an organization that conducts research and provides training in the field of soil and water conservation. IISWC plays a crucial role in developing and promoting sustainable agricultural practices to conserve soil and water resources in India.

S4. Ans.(b)

Sol. A piezometer is a device used to measure groundwater levels. It consists of a small-diameter, open-ended tube that is inserted into the ground to a certain depth where the groundwater level is to be measured. The tube is typically made of materials such as PVC or stainless steel. When the piezometer is installed, groundwater from the surrounding soil enters the tube, and the water level inside the tube rises to the same level as the groundwater in the surrounding soil.

S5. Ans.(a)

Sol. White Yorkshire pigs are a breed that is well-known for their qualities related to meat production and their ability to give birth to litters of piglets.

S6. Ans.(d)

Sol. Eggshell color is determined by various pigments that are deposited on the surface of the eggshell during the egg-laying process. Xanthophylls are a class of natural pigments that are responsible for giving eggs their yellow to orange colors. These pigments are found in the diet of the laying hens and are then absorbed into the bloodstream, eventually making their way into the eggshell.

S7. Ans.(c)

Sol. Most of the major cereal crops exhibit high tolerance to soil salinity. In this group are sorghum, wheat, triticale, rice, oats and barley. Only exceptions are corn and rice.

S8. Ans.(d)

Sol. Chola, also known as Amaranthus, is a common weed that often grows in maize fields. It competes with maize for nutrients, water, and sunlight, and can significantly reduce the yield of maize crops if not properly managed. Therefore, chola is considered a weed of maize because it can negatively impact the growth and productivity of maize plants.

S9. Ans.(c)

Sol. The seed rate for tomato cultivation can vary depending on various factors like the variety of tomato, the planting method, and the local growing conditions. In general, tomato seeds are sown at a rate of 300-350 grams per hectare (ha). This means that for every hectare of land, you would typically need to use 300-350 grams of tomato seeds.

S10. Ans.(a)

Sol. Sod culture involves the cultivation and management of grass, particularly for lawns, pastures, and other similar purposes. In this method, a piece of land is covered with a thick layer of grass and its underlying soil. The grass forms a dense, continuous mat or "sod" on the soil, which helps prevent soil erosion, suppress weed growth, and provide a lush and even surface for various applications.

S11. Ans.(b)

Sol. Mandarin oranges are known for their relatively high calcium content compared to the other fruits listed. Calcium is an essential mineral for maintaining strong bones and teeth, and it also plays a crucial role in various physiological processes in the body.

S12. Ans.(a)

Sol. Contribution of agriculture in GDP in the year 2013 was 16%.
However, in the year 2023, it has increased to 18.3% (Source: PIB, March 2023).

S13. Ans.(c)

Sol. Dr. G.R. Chintala was the former chairman of NABARD.
Shri Shaji K.V. is appointed as the new chairman of NABARD.

S14. Ans.(d)

Sol. Buttoning is a common problem in cauliflower cultivation where the plant prematurely forms small, button-like heads instead of the desired large, compact curd. This issue can occur when there is a lack of essential nutrients, and nitrogen is a crucial nutrient for the healthy growth and development of cauliflower plants.

Nitrogen is a key component of amino acids and proteins, which are essential for plant growth and the formation of leaves and flower heads. When cauliflower plants do not receive an adequate supply of nitrogen, their growth is stunted, and they may prematurely form these small, button-like heads.

S15. Ans.(b)

Sol. Downy mildew of maize is a plant disease caused by a fungus called *Peronosclerospora maydis*. This fungus infects maize (corn) plants, leading to characteristic symptoms such as white to grayish, fluffy growth on the lower surfaces of the leaves. It can also affect other parts of the maize plant, including the stem and ear.

S16. Ans.(e)

Sol. Karnataka is the highest coffee-producing state in India. It is known for its coffee plantations, particularly in the regions of Coorg (Kodagu), Chikmagalur, and Hassan. These areas have favorable climatic conditions for coffee cultivation, including the right amount of rainfall, altitude, and temperature. The coffee produced in Karnataka is predominantly of the Arabica and Robusta varieties.

S17. Ans.(b)

Sol. Plants require essential nutrients for proper growth and development. There are in total 17 nutrients that are required by plants. Out of which, 6 are macronutrients and other micronutrients.

S18. Ans.(b)

Sol. Molybdenum is an essential micronutrient for plants, and its deficiency can lead to various symptoms in plants, including yellowing of the leaves. In the case of citrus trees, a lack of molybdenum can result in the development of yellow spots or blotches on the leaves, which is a characteristic symptom of citrus chlorosis.

S19. Ans.(c)

Sol. Nitrogen plays a key role in the production of tobacco. Nitrogen requirement for different types of tobacco varies widely. It is 20 kg N/ha for FCV tobacco on black clayey soils, 180 Kg N/ha for bidi-tobacco and 200 Kg N/ha for chewing tobacco in sandy clay loam soils.

S20. Ans.(a)

Sol. The typical recommended seed rate for pure mustard crop is in the range of 6-7 kg/ha.

S21. Ans.(b)

Sol. The correct spacing for chickpea cultivation is (b) 30×10 cm.

In this spacing method, chickpea plants are arranged in rows with a distance of 30 cm between rows, and there is a space of 10 cm between individual plants within the same row. This spacing allows enough room for the chickpea plants to grow without competing for resources such as sunlight, water, and nutrients.

S22. Ans.(a)

Sol. The C: N ratio of normal soil is defined as the ratio of the mass of carbon to the mass of nitrogen in a substance. **C: N ratio of normal soil is 10:1.** 10:1 ratio indicates that there are ten units of carbon (C) for each unit of nitrogen (N) in the soil. This ratio significantly impacts the crop residue decomposition, particularly residue- cover on the soil and the crop nutrient cycling.

S23. Ans.(e)

Sol. **Andhra Pradesh** is the largest producer of fish in India followed by West Bengal.

S24. Ans.(a)

Sol. **Discs are tilted backward at an angle of 15 to 25 degree** from vertical and disc angle of 42 to 45 degree from direction of travel. Disc diameter ranges from 61 to 71 cm.

S25. Ans.(b)

Sol. The correct option for the test weight of groundnut is (b) 200-250 grams.

Test weight, also known as kernel weight or shelling percentage, refers to the weight of a specific volume of a crop's seeds. In this case, it represents the weight of a certain volume of groundnut kernels. The specified range of 200-250 grams indicates that the weight of groundnut kernels falling within this range is considered standard.

The weight of those kernels should be between 200 grams and 250 grams to meet the standard criteria. Groundnut kernels falling within this weight range are considered of good quality, and this standard is used for grading and quality control purposes in the agriculture industry.

S26. Ans.(d)

Sol. The National Commission on Farmers (NCF) was constituted on November 18, 2004 under the chairmanship of Professor M.S. Swaminathan. The Terms of Reference reflected the priorities listed in the Common Minimum Programme.

S27. Ans.(b)

Sol. The Pusa Sanyog is an F1 hybrid variety of cucumbers (Japanese Gynoecious line X Green Long of Naples). This variety is an early and high yielding one with cylindrical and dark green fruits with yellow stripes. The flesh is crisp and the variety matures in about 50 days.

S28. Ans.(b)

Sol. The correct option, according to the provided information, is (b) Soybean.

Shattering is a process related to agricultural crops, especially grains like soybeans. Shattering refers to the natural process by which mature seed pods or heads burst open, releasing seeds so they can scatter and grow elsewhere. This is a significant concern for farmers, as shattering can lead to yield losses during harvest. Soybeans are one of the crops where shattering can occur.

S29. Ans.(a)

Sol. Mango has the largest area under its cultivation.

S30. Ans.(c)

Sol. The correct answer is (c) White Leghorn.

White Leghorn chickens are one of the best breeds for egg production. They are known for their high egg-laying ability, producing large white eggs consistently. They are small-sized, active, and hardy birds, making them well-suited for commercial egg production. White Leghorns are efficient in converting feed into eggs, making them a popular choice among poultry farmers. Their adaptability to various climates and their ability to lay eggs throughout the year contribute to their reputation as one of the best chicken breeds for egg production.

S31. Ans.(d)

Sol. The ICAR-Central Sheep and Wool Research Institute (ICAR-CSWRI) is an Indian Council of Agricultural Research subsidiary commissioned for research, training and extension activities related to sheep and rabbits. It is situated in Avikanagar, Malpura, in Rajasthan, India.

S32. Ans.(a)

Sol. The correct option is (a) Calcite.

Calcite is a white or colourless mineral composed of calcium carbonate (CaCO_3). When calcite is present in soil, it can make the soil appear white due to its inherent colour. Calcite is a common mineral found in limestone and marble, and its white coloration is often visible in the soil where these rocks have weathered and broken down.

S33. Ans.(c)

Sol. National Institute of Agricultural Marketing (NIAM) is a national level institute set up by the Ministry of Agriculture, on 8 August 1988 at Jaipur, Rajasthan, to cater to the needs of agricultural marketing personnel and to offer specialized Training, Research, Consultancy, and Education in Agricultural Marketing in India and Southeast Asian countries.

The institute is dedicated to Chaudhary Charan Singh, the fifth prime minister of India from where it derives its full name, "Chaudhary Charan Singh National Institute of Agricultural Marketing".

The Union Minister for Agriculture is the President of the General body of NIAM and the Secretary, Department of Agriculture and Cooperation is the Chairman of the Executive Committee.

S34. Ans.(c)

Sol. The Arabian Sea Branch of the Southwest Monsoon first hits the **Western Ghats of the coastal state of Kerala**, India, thus making this area the first state in India to receive rain from the Southwest Monsoon.

S35. Ans.(d)

Sol. Ratna is variety of mango. This hybrid is from a cross of Neelum and Alphonso. Tree moderately vigorous, precocious, fruits are medium sized, attractive in colour and free from spongy tissue.

S36. Ans.(d)

Sol. The crossing between two different species of the same genus is called interspecific crossbreeding. Horse and donkey belong to the same genus Equus. **A mule is obtained by a cross between a male donkey and female horse.**

S37. Ans.(c)

Sol. The correct answer is (c) Jute.

Jute is the main crop grown in the Barak Valley. The Barak Valley is located in the northeastern state of Assam in India. Jute is a natural fiber that is mainly grown for its use in making products like sacks, ropes, and textiles. The region's suitable climate and soil conditions make it conducive for the cultivation of jute, making it a significant crop in the Barak Valley.

S38. Ans.(a)

Sol. The correct option is (a) Petroleum and crude oil.

India is heavily reliant on imports to meet its domestic oil demand. Crude oil and petroleum products consistently account for the largest share in India's import bill. India imports a significant amount of crude oil and refined petroleum products to fulfill its energy requirements, and these imports often constitute a substantial portion of the country's overall import bill. This dependency on oil imports can impact India's trade balance and economy, making it a crucial factor in the country's economic policies and energy strategies.

S39. Ans.(c)

Sol. West Bengal suffered erosion along about 60.5% of the coast (323.07 km) over the period from 1990 to 2018. This is followed by Kerala (46.4%) and Tamil Nadu (42.7%) respectively.

S40. Ans.(a)

Sol. Slovenia is the top country by number of tractors in the world.