

# **Study Notes**

# StingBee

# NABARD Grade A Mains 2020 Agriculture Quiz

- 1. Which of the following states of India has maximum problematic soils ?
- a. Assam
- b. Madhya Pradesh
- c. Gujarat
- d. Kerala
- e. None of the above

#### Note :

State with highest saline soils	Gujarat
State with highest Alkali soils	Uttar Pradesh
State with highest Acid soils	Kerala
State with highest total problematic soils	Kerala

ixamBe

2. A 5 x 20 cm double action disc harrow is operated by a <u>tractor</u> having a speed of 5 km/h. Calculate the actual field capacity, assuming the field efficiency of 80 percent.

a. 0.2 ha/hr

b. 0.4 ha/hr

- c. 0.5 ha/hr
- d. 0.8 ha/hr
- e. 1.5 ha/hr

#### Note :

A 5 x 20 cm double action disc harrow is operated by a tractor having a speed of 5 km/h. Calculate the actual field capacity, assuming the field efficiency of 80 percent.

o percent.

Solution:

Size of the harrow (width) = 5 x 20 = 100 cm = 1 meter

S x W x E

Actual field capacity, C = -----

1000

= (1 x 5 x 80) / 1000

Actual field capacity = 0.4 ha/hr.

ixamBe

Where,

- $\rm C$  Effective field capacity, hectare per hr (ha/hr).
- S Speed of travel in km per hour.
- W Theoretical width of cut of the machine in metre, and
- E Field efficiency in per cent.

#### 3. ICAR - Directorate of Cold Water Fisheries is located in

#### a. Himanchal Pradesh

- b. Uttarakhand
- c. Ladakh
- d. Jammu and Kashmir
- e. Assam

Note :

Logo

#### Fisheries Science Institutes

Name of the Institute and Photo Gallery



ICAR - Central Marine Fisheries Research Institute, Kochi, Kerala Photo gallery



ICAR - Central Inland Fisheries Research Institute, Barrackpore, West Bengal Photo gallery



ICAR - Central Institute of Fisheries Technology, Kochi, Kerala Photo gallery



ICAR – Central Institute of Fisheries Education, Mumbai, Maharashtra Photo gallery



ICAR – National Bureau of Fish Genetic Resources, Lucknow, Uttar Pradesh Photo gallery Ganga Aquarium



ICAR - Central Institute of Freshwater Aquaculture, Bhubaneshwar, Odisha Photo gallery



ICAR - Central Institute of Brackishwater Aquaculture, Chennai, Tamil Nadu Photo gallery



 $\ensuremath{\mathsf{ICAR}}$  – Directorate of Coldwater Fisheries Research, Bhimtal, Uttarakhand Photo gallery





- a. 1<sup>st</sup>
- b. 2<sup>nd</sup>
- c. 5<sup>th</sup>
- d. 9<sup>th</sup>
- e. 10<sup>th</sup>

#### Note : According to APEDA

#### AREA

As on 31st March 2018, total area under organic certification process (registered under National Programme for Organic Production) is 3.56 million Hectare (2017-18). This includes 1.78 million ha (50%) cultivable area and another 1.78 million Hectare (50%) for wild harvest collection.

ixam

Among all the states, Madhya Pradesh has covered largest area under organic certification followed by Rajasthan, Maharashtra and Uttar Pradesh.

During 2016, Sikkim has achieved a remarkable distinction of converting its entire cultivable land (more than 76000 ha) under organic certification.

#### PRODUCTION

Among different states Madhya Pradesh is the largest producer followed by Maharashtra, Karnataka, Uttar Pradesh and Rajasthan. In terms of commodities Oil seeds are the single largest category followed by Sugar crops, Cereals and Millets, Fiber crops, Pulses, Medicinal, Herbal and Aromatic plants and Spices and Condiments.

#### 5. International Livestock Research Institute (ILRI) is located in

- a. Nigeria
- b. Nairobi
- c. Colombo
- d. New Delhi
- e. Beijing

#### Note :

The International Livestock Research Institute (ILRI) is an international agricultural research institute based in <u>Nairobi, Kenya</u>, and founded in 1994<sup>[1]</sup> by the merging of the International Livestock Centre for Africa and the International Laboratory for Research on Animal Diseases.

#### 6. World Fish Centre is located in

- a. Kenya
- b. India
- c. Singapore
- d. Malaysia
- e. Sri Lanka



Note :

**WorldFish** is an international, nonprofit research organization with <u>headquarters</u> in <u>Penang</u>, <u>Malaysia</u>, and offices in <u>Asia</u>, <u>Africa</u>, and the Pacific. WorldFish's mission is to harness the potential of fisheries and aquaculture to reduce <u>poverty</u> and <u>hunger</u> in developing countries.

- 7. A farmer want to apply Butachlor (50 EC) to rice at 1.5 kg a.i/ha. Calculate the quantity of the herbicide required for 1 hectare field.
  - a. 0.75 ltr
  - b. 1.0 ltr
  - c. 1.5 ltr
  - d. 3.0 ltr
  - e. 4.5 ltr

Note :

Formula

Quantity of commercial formulation/ha = Dosage (kg a.i/ha)/Percent a.i X100

Recommended dosage of herbicide for rice = 1.5 kg a.i/ha

active ingredient in commercial formulation = 50%

Quantity of commercial formulation per hectare = 1.5 x 100/50 = 3.0 litres

8. Workout quantity of complex (17:17:17) and urea required to meet the nutrient requirement of 100 : 50 kg N, P2 O5 & K2 O per hectare respectively.

- A. 294 kg, 108.7 kg
- B. 108.7 kg, 294 kg
- C. 240.6 kg, 104.5 kg
- D. 257.8 kg, 114 kg
- E. 275.7 kg, 95.8 kg

Note :

quantity of complex fertilizer required = 100 x 50/17 = 294 kg

This will supply 50 kg each of N, P2O5 and K20

Remaining 50 kg N is to be supplied with Urea

Quantity of Urea = 100 x 50/46 = 108.7 kg



- 9. Stomata closing can be induced by
  - A. Kaoline
  - B. Linseed oil
  - C. 2,4 D
  - D. PMA
  - E. CCC

Note:

#### Types of anti – transpirants

Stomata closing type	PMA (Phenyl Mercuric Acid), Abscisic acid (ABA), Atrazine
Film forming type	Silicone, Waxes, Hexadeconol
Reflectant type	Kaoline,
Growth retardant	Cycocel

#### 10.Stevenson screen is related to

- a. Bacteriology
- b. Biotechnology
- c. Agrometorology
- d. Remote sensing
- e. None of the above

Note :

A **Stevenson screen** or **instrument shelter** is a shelter or an enclosure to <u>meteorological</u> instruments against <u>precipitation</u> and direct heat radiation from outside sources, while still allowing air to circulate freely around them. It forms part of a standard <u>weather station</u> and holds instruments that may include <u>thermometers</u> (ordinary, <u>maximum/minimum</u>), a <u>hygrometer</u>, a <u>psychrometer</u>, a <u>dewcell</u>, a <u>barometer</u>, and a <u>thermograph</u>.

11. For calculating value of P, P2 O5 is multiplied by

- A. 0.22
- B. 0.44
- C. 2.23
- D. 0.73
- E. 1.71



#### Note :

Nitrogen (N)	NO <sub>3</sub> x 0.22
Phosphorus (P)	P <sub>2</sub> O <sub>5</sub> x 0.44
Potassium (K)	K <sub>2</sub> O x 0.83
Calcium (Ca)	CaO x 0.71
Magnesium (Mg)	MgO x 0.61
Organic matter (OM)	OC x 1.724

12. Flame photometer is used in the determination of

- A. Nitrogen
- B. Phosphorus
- C. Potassium
- D. Boron
- E. All of the above

#### Note :

A photoelectric flame photometer is a device used in inorganic chemical analysis to determine the concentration of certain metal ions, among them sodium, potassium, lithium, and calcium. Group 1 and Group 2 metals are quite sensitive to Flame Photometry due to their low excitation energies.

#### 13. Edible banana is

- A. Diploid
- B. Monoploid
- C. Triploid
- D. Tetraploid
- E. Amphidiploid

Note :

#### **Ploidy of Banana**

Diploid	AB – Kunnan, Ney Poovan, Lady finger
Triploid	AAA – Dwarf Cavendish, Robusta, Red Banana, Grand Nene
	AAB – Poovan, Rasthali, Nendhran, Hill Banana



	ABB – Monthan
Tetraploid	FHIA-1(Gold finger)

14. Exhausting temperature of canned fruits and vegetables is

- A. 70 72 C
- B. 82 87 C
- C. 90 92 C
- D. 100 102 C
- E. 108 110 C

Note : Canning Process

Washing > Sorting and Grading > Peeling/Coring/Pitting > Cutting/Slicing > Blanching > Filling in Cans > syruping/Brining > Exhausting > Seaming/Closing

15. International Institute of Tropical Agriculture is situated at

- A. Italy
- B. Brazil
- C. India
- D. China
- E. Nigeria
  - Note :

The **International Institute of Tropical Agriculture (IITA)** works with partners to enhance crop quality and productivity, reduce producer and consumer risks, and generate wealth from agriculture, with the ultimate goals of reducing hunger, malnutrition, and poverty. IITA's research-for-development (R4D) focuses on addressing the development needs of tropical countries. The institute was established in 1967 and is headquartered in <u>Ibadan</u>, <u>Nigeria</u>, with several research stations across <u>Africa</u>. The International Institute of Tropical Agriculture (IITA) is one of the 16 International Agricultural Research Centres funded by the Consultative Group on International Agricultural Research(CGIAR).

17. Inflorescence of banana is known as

- A. Umbel
- B. Spadix
- C. Catkin
- D. Spikelet
- E. None of the above

Note :





18. Which one of the following pairs is not correctly matched ?

- A. Bract Mosaic Virus : Banana
- B. Yellow Vein Mosaic : Cassava
- C. Ring Spot Virus : Papaya
- D. Leaf Curl Virus : Tomato
- E. None of the above

Note : Yellow vein mosaic virus is a virus of Okra which cause yellowing of veins. This virus is transmitted by White Fly (Bemisia tabaci). Resistant okra varieties are Prabhani Kranti, Arka Abhay, Arka Anamika, Varsha Uphar.

19. Foot and Mouth disease of animals is caused by

- A. Fungus
- B. Virus
- C. Bacteria
- D. Parasite
- E. None of the above

Note : **Foot-and-mouth disease (FMD)** or **hoof-and-mouth disease (HMD)** is an <u>infectious</u> and sometimes fatal <u>viral disease</u> that affects <u>cloven-hoofed</u> <u>animals</u>, including domestic and wild <u>bovids</u>.<sup>[1][2]</sup> The virus causes a high fever lasting two to six days, followed by <u>blisters</u> inside the mouth and on the feet that may rupture and cause <u>lameness</u>.

21. Which country accommodates the highest number of buffaloes in the world ?

- A. China
- B. India
- C. Indonesia
- D. Thailand
- E. USA



#### Note :

Cattle	Brazil
Buffalo	India
Sheep	China
Goat	China

- 22. Which form of Nitrogen is present in Urea?
  - A. Ammonical
  - B. Amide
  - C. Nitrite
  - D. Nitrate
  - E. a and d both

Note : Formula of NH2CONH2, Urea contains 46% Nitrogen.