

Printing Pages :2

Paper Code: BSA-A-706

A

(SVSU:2023-24/R)

Enrollment No.

Program Name- B.Sc. Agriculture
4 Year VII Semester / Examination
Subject Name: Dairy Cattle Production

[Time : 03:00 Hours]

[Max. Marks : 70]

Note : 1. Attempt all the questions as per given instructions.

2. Fill the correct answer of MCQs

1. Multiple Choice Questions (MCQs)

[01×15=15]

I The Chromosome number of Domestic Cattle is

- a. 60 b. 70 c. 65 d. 50

II Zoological Name of sheep is

- a. Capra aegarus Hircus . b. Ovis aries
c. Sus scrofa domesticus d. None of these

III Full Form of CARI

- a. Central Avian Research Institute b. Central Arival Rsearch Institute
c. Central Aves Research Institute d. None of these

IV The CARI situated in

- a. Lucknow b. Bareilly c. Kanpur d. New Delhi

V Selection on the basis of performance of the ancestors is called as

- a. pedigree selection b. Family Selection
c. Individual selection d. None of these

VI Selection on the basis of individual phenotypic performance is called

- a. Family Selection b. Individual selection
c. pedigree selection d. None of these

VII The Rear Udder is composed of the _____ of the udder

- a. Hind Parts b. Front Parts c. Lateral Parts d. None of these

VIII In Unified Score Card System maximum marks given to

- a. General appearance b. Mammary Development
c. Head and neck d. Body

IX Selection of the individuals on the basis of average performance of their progeny is called

- a. progeny testing b. Family Selection
c. Individual selection d. None of these

X Fire insurance is a type of

- a. Life Insurance b. General Insurance
c. Both a and b d. None of these

XI The method of mating between individuals which are more closely related

- a. Inbreeding b. out breeding c. cross breeding d. None of these

- XII The method of mating between individuals which are not closely related within the same breed**
 a Inbreeding b. out breeding c. cross breeding d. None of these
- XIII The mating of the animals belonging to two different breeds**
 a Cross breeding b. Out breeding c. Inbreeding d. None of these
- XIV Mating of the unrelated pure breed animals, within the same breed is called**
 a Inbreeding b. out crossing c. cross breeding d. None of these
- XV When the males from one of the pure breeds are used in alternate generations to breed the cross bred females**
 a Rotational crossing b. out crossing
 c. cross breeding d. None of these

2. Answer in long (any three) [10×3=30]

- I** What is Breeding? Describe the Indigenous breed of cattle.
- II** What is Selection? Explain the different type of selection.
- III** Write an Essay on Unified Score Card System?
- IV** Write an essay on management of dairy cow.
- V** Write an essay on General care and management of calf.

3. Answer in short (Any five) [5x5=25]

- I** Write the role of livestock in Indian economy.
- II** What is Insurance? Describe the nature of insurance.
- III** Write about the purpose of insurance.
- IV** What are the characteristics of insurance?
- V** Describe the livestock resources in India.
- VI** Describe the Importance of Colostrums Feeding.
- VII** Write about the mammary system of the cattle.

Printing Pages :2

Paper Code: BSA-A-702

C (SVSU:2023-24/R)

Enrollment No.														
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Program Name- B.Sc. Agriculture

7th Semester / 4th Year Examination

Subject Name: Plant Growth Regulators in Agriculture

[Time : 03:00 Hours]

[Max. Marks : 70]

Note : 1. Attempt all the questions as per given instructions.

2. Fill the correct answer of MCQs

1. Multiple Choice Questions (MCQs)

[01×15=15]

- I _____ in 1948 was coined the term „ Phytohormone“
 a. Thimann b. Bunn c. Baraski d. Davidson
- II Hormone” is _____ word
 a) latin b) Greek c) french d) all
- III Growth inhibitors inhibit the transport of
 a) auxins b) Gibberellins c) Cytokinin d) None of the above
- IV When Chemicals produced naturally by the plants is called
 a) Plant growth regulator b) Plant Hormone
 c) both a and b d) None
- V Which are Synthesized as result of plant metabolic processes
 a) Plant Hormone b) Plant growth regulator
 c) both a and b d) None
- VI Origin of Plant Hormone is
 a) Exogenous b) Endogenous
 c) Both a & b d) None of tha above
- VII The word Auxin is from _____ word
 a) Greek b) latin c) french d) all
- VIII The relatively high level of auxin to cytokinin favoured
 during organogenesis
 a) Shoot formation b) Root formation
 c) Both root and shoot formation d) None of the above
- IX The term, cytokinin was proposed by Letham
 a) Letham b) Kurosawa c) Reinert d) None of the above
- X Cytokinins can be extracted from
 a) Cow Milk b) coconut milk
 c) goat milk d) None of the above
- XI Ethylene is the only natural plant growth hormone exists in
 _____ form
 a) gaseous form b) Liquid form
 c) solid form d) None of the above
- XII _____ is a naturally occurring growth inhibitor
 a) auxins b) Absciscic acid c) Cytokinin d) None of the above
- XIII ABA is synthesized and stored in
 a) mesophyll chloroplast b) mitochondria
 c) Lysosome d) None of the above

P.T.O.

- XIV Growth inhibitors inhibit the transport of _____
a) Ethylene b) auxins c) Cytokinin d) None of the above
- XV "Hormone" is Greek word derived from "*hormao*", which means to
a) stimulate b) Inhibit c) both a and b d) None of the above

2. Answer in long (any three) [10×3=30]

- I What is Hormone? Describe the Classification of plant hormones
- II What is micro propagation? Describe the steps of micro propagation.
- III What is Phytohormone? Describe the types of Gibberellins and Cytokinin.
- IV What Are Surfactants? Explain the type of surfactants.
- V Role of plant hormone in flowering and sex expression

3. Answer in short (any five) [5×5=25]

- I What is growth regulator? Explain it.
- II What is Clonal propagation? Explain all steps.
- III Difference between plant hormone and plant growth regulator.
- IV Write short note on Gibberellins.
- V Describe the Physiological effects of cytokinins.
- VI What is Uses of Surfactants?
- VII What is the Role of plant hormone in seed, fruit and grain formation
- VIII What is Sterilization? Explain it.

Printing Pages :2

Paper Code: BSA-705 A (SVSU:2023-24/R)

Enrollment No.												
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B.Sc.Agriculture

VII Semester /4th Year Examination

Subject Code -BSA -A -705

Subject Name -Soil Management

[Time : 03:00 Hours]

[Max. Marks : 70]

Note: 1. Attempt all the questions as per given instructions.

1. Multiple Choice Questions (MCQs) [01×15=15]

- I Which is the primary stage of soil erosion?
(a) Splash (b) Sheet (c) Rill (d) All of these
- II Which soil has maximum in India
(a) Alluvial soil (b) Red Soil (c) Laterite soil (d) All of these
- III Which is not suitable in red soil
(a) High Texture (b) Calcium carbonate
(c) High organic matter (d) none of these
- IV Which soil is find in high rainfall area
(a) Laterite soil (b) Saline soil (c) Marshy soil (d) All of these
- V Tarai soil is find in
(a) UP (b) Bihar (c) West Bengal (d) All of these
- VI How many types of soils are found in India
(a) 12 (b) 8 (c) 6 (d) All of these
- VII How many types soil ind in India
(a) 10.0 (b) 4.0 (c) 8.0 (d) All of these
- VIII What is the pH of sodic soil
(a) 10.5 (b) 4.0 (c) 7.5 (d) All of these
- IX Soils of cold zone are known as
(a) Tundra soil (b) Desert soil (c) Brown soil (d) All of these
- X Pedon is developed by
(a) USDA (b) U.K (c) Brown soil (d) All of these
- XI Area of pedon is
(a) 1 to 10 m² (b) 1 to 15 m² (c) A & B both (d) All of these
- XII O- Horizon find in
(a) Red soil (b) Forest soil (c) A & B both (d) None of these

XIII Which is the factors of soil formation

- (a) Topography (b) Oxisol (c) Inceptisol (d) All of these

XIV Soil salinity Institute situated in

- (a) Haryana (b) Karnal (c) A & B both (d) None of these

XV Physical weathering is due to

- (a) disintegration (b) decomposition (c) A & B both (d) none of these

2. Answer in long (any three)

[10×3=30]

I Soils in India and their equivalents in U.S. Soil Taxonomy

II What are salient features of LCC?

III Explain the quality of irrigation water in details.

IV What are major process of soil profile development?

3. Answer in short (any five)

[5×5=25]

I What are objectives of soil profile and draw a hypothetical diagram?

II Define bulk density, Particle density & Porosity with formula and role of bulk density in Agriculture.

III What is black soil genesis and management practices?

IV Write short notes on following

(a) Soil pH in Agriculture (b) Role of soil texture in agriculture

V EC, pH, SAR of Saline soil, Saline and Alkaline soil, non -saline and Alkaline soil

VI What is universal soil loss equation .

VII How to manage watershed.

Printing Pages 2

Paper Code: BSA-A-701

C

(SVSU:2023-24/R)

Enrollment No.

Program Name B.Sc. Agriculture

4thYear 7thSemester / Examination

Subject Name: Advanced Seed Technology

Subject Code- BSA-A-701

[Time : 03:00 Hours]

[Max. Marks : 70]

Note : 1. Attempt all the questions as per given instructions.

1. Fill in the blanks [01×15=15]
- I Which of the following may or may not be capable of germination?
A. Grain B. Seed C. Legume D. All of above
 - II Which of the following is a recalcitrant seed?
A. Mango B. Rice C. Fruit D. Castor
 - III Which of the following is a pseudo cereal
A. Quinoa B. Buck wheat C. Both A & B D. None of these
 - IV Which of the following is an epigeal germination
A. Beans B. Papaya C. Both A & B D. None of above
 - V Which of the following have thick seed coat
A. Coconut B. Citrus C. Peanut D. All of the above
 - VI National seed corporation was founded in
A. 1963 B. 1953 C. 1955 D. 1919
 - VII Seed act in India was enacted in
A. 1966 B. 1994 C. 1999 D. 1919
 - VIII The rudimentary shoot or stem of an embryonic plant is called
A. Plumule B. Pedicle C. Coleoptile D. Funicle
 - IX There is a pre-requisite for seed certification of hybrid of
A. Cotton B. Musk melon C. Brinjal D. All of the above
 - X The first step in seed viability test is
A. Imbibition B. Staining C. Evaluation D. None of the above
 - XI What is the color tag of certified seed
A. Azure blue B. White C. Green D. Black
 - XII Physical characteristics of seed includes?
A. Seed color B. Seed size C. Seed uniformity D. all of the above
 - XIII The isolation distance for certified maize seed is
A. 200 m B. 300 m C. 400 m D. 500 m
 - XIV The random cup method is suitable for sampling
A. 10 g seeds B. 20 g seed C. 30 g seed D. 40 g seed
 - XV Aleurone layer is rich in
A. Protein B. Pectin C. Starch D. Hemicellulose

2. Answer in long (any three) [10×3=30]

- I** Explain the public and private seed production system?
- II** Explain the different test of seeds quality for seed legislation?
- III** Explain the storage and packaging of seeds?
- IV** Explain the Awareness of seed processing equipment?

3. Answer in short (any five) [5×5=25]

- I** How to obtaining licenses for seed production?
 - II** Define process cultivation of tomato?
 - III** Define the rabi and kharif crops with examples?
 - IV** Define the zayad crop with examples?
 - V** Define the supply chain management?
 - VI** Define themodel crops?
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Printing Pages :2

Paper Code: BSA-A-708

C (SVSU:2023-24/R)

Enrollment No.													
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Program Name: B.Sc. (Ag).

7th Semester / 4th Year

Subject Code: BSA-A-708.

Subject Name: Plasticulture in Agriculture.

[Time : 03:00 Hours]

[Max. Marks : 70]

Note: 1. Attempt all the questions as per given instructions.

1. Multiple Choice Questions (MCQs)

[01×15=15]

- I What is the disadvantage of plasticulture?
 - (a) Increased management (b) Increased plant growth
 - (c) Earlier production (d) Improved Quality.
- II What is the advantage of plasticulture?
 - (a) Increased management (b) Better fumigation.
 - (c) Greater initial costs (d) Removal and disposal
- III Hotbeds are a small scale form of for raising seedlings.
 - (a) Lath house (b) Green house
 - (c) Shade house (d) Low tunnels.
- IV Full form of PP
 - (a) Polypropene (b) Polypropylene
 - (c) Plant propagation (d) Polypentane.
- V How much water is lost in surface irrigation system?
 - (a) 40% (b) 30% (c) 70% (d) 50%
- VI How is the agriculture of India?
 - (a) Fully irrigated (b) Rainfed agriculture
 - (c) Both a & b (d) None of above.
- VII At present time plastic consumption around MnTPA.
 - (a) 14 (b) 13 (c) 15 (d) 16
- VIII Polycarbonate is characterized by high transparency in solar range
 - (a) 70% (b) 90% (c) 50% (d) 65%.
- IX Which is not a component of drip system?
 - (a) Fogger (b) Emitters (c) Drippers (d) Filters.
- X In case of pond not be more than meter deep.
 - (a) 1.5 (b) 1.8 (c) 1.75 (d) 2.0
- XI Full form of MFIs
 - (a) Melt flow index (b) Malt flow index (c) Microfinance institution
 - (d) Money flow index.
- XII Full form of LDPE is .
 - (a) large density polyethylene. (b) low density polyethylene
 - (c) length density polyethylene (d) None of these

P.T.O.

XIII Shade net house ranges available in the different range of shade %
(a) 90 (b) 66 (c) 77 (d) 55

XIV Which one is not an advantage of mulching?

- (a) Improve soil structure (b) Improve soil texture
(c) Increased soil organic matter (d) Increased nutrient availability.

XV What does higher MFIs indicate in polymer system and which type of polyethylene belongs to higher MFI value category?

- (a) Lower molecular weight, LDPE
(b) Higher molecular weight, LDPE
(c) Lower molecular weight, HDPE
(d) Higher molecular weight, HDPE.

2. Answer in long (any three) [10×3=30]

I Define plasticulture and describe types of plastics?

II Describe plastics nets in agriculture?

III Explain briefly the present status and future prospective of plasticulture in India?

IV Details about the fencing?

3. Answer in short (any five) [5×5=25]

I What do the following terms signify?

- (a) Sprayers (b) Seed drill tubes.

II Define the vacuum packing.

III What is use of plastics in water managements?

IV Write short notes on the plastic film lining in canal.

V What are the uses of plastic in nursery raising?

VI Define the important maintain variables of quality control?

VII What is the use of plastics in pond?

Program Name:- B.Sc. (Ag)

7thSemester / 4thYear Examination

Subject Code :- BSA-A 703

Subject Name : Vermi-composting and Organic farming

[Time : 03:00 Hours]

[Max. Marks : 70]

Note : 1. Attempt all the questions as per given instructions.

1. Multiple Choice Questions (MCQs)

[01×15=15]

1. Journal "Indian Horticulture" is published by

(A) IIHR

(B) IARI

(C) ICAR

(D) IGKV

2. India is known as home of _____

(A) Vegetables

(B) Spices and Medicinal

(C) Fruits

(D) Flowers

3. PMKSY -Har Khet ko Pani was implemented by

A. Ministry of Jal Shakti

B. Ministry of Agriculture

C. Ministry of Environment

D. None of Above

4. Full form of PDMC

A. Per Drop More Crop

B. Per drop More crop

C. Per drop Minor Crop

D. None of Above

5. In micro Irrigation cost reduce at

A. 10%

B. 15%

C. 5%

D. 50%

6 Trickle Irrigation also known as :

A. Drip Irrigation

B. Sprinkle irrigation

C. Both A and B

D. None of Above

7. The most appropriate use of rain water harvesting is

A. Agriculture

B. Irrigation

C. Drinking water

D. None of Above

8. Full form of IWMP

A. Integrated Watershed Management Programme

B. Initial Watershed Management Programme

C. Integrated Weed shed Management Programme

D. None of Above

9. PDMC scheme related to

A. PMKSY

B. IAY

C. MANREGA

D. PMAY

10. Sprinkle irrigation mostly use in

A. Garden

B. Green house

C. Both A and B

D. None of Above

11 Drip Irrigation saved.....% of water

A. 50

B. 10

C 20

D. 15

12. Water harvesting is the process in which
 A. Collect the water B. Waste the water
 C. Drainage the water D. None of Above
13. Evapotranspiration measure by
 (A) Thermometer (B) Lysimeter
 (C) Pyrometer (D) Thermocouple
14. "Queen of Nuts" is called _____
 (A) Walnut (B) Almond (C) Peanut (D) Date palm
15. "King of Temperate Fruits" is called _____
 (A) Pear (B) Apple (C) Peach (D) Kiwi Fruit

2. Answer in long (any three) [10×3=30]

- I Explain green manuring with examples.
- II Define the objectives of vermin technology.
- III Write down the benefit of Organic fertilizers.
- IV Role of bio & organic fertilizers with example.

3. Answer in short (any five) [5x5=25]

- I Define importance of vermin-composting in utilization of agriculture waste.
- II Describe the 'Role of vermin-composting in organic in agriculture.
- III Describe the 'classification of earthworm.
- IV Describe the 'method of Preparation vermin-composting.
- V Write down the objective of organic farming.
- VI Explain types of fertilizers and its role in agriculture.
- VII Classify the bio fertilizers and organic fertilizers.

Printing Pages :2

Paper Code: BSA-A-702 C (SVSU:2023-24/R)

Enrollment No.													
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Program Name: B.Sc Agriculture
4th Year 7th Semester Examination
Subject Name: Applied Weed Management
Subject Code BSA-A-702

[Time : 03:00 Hours]

[Max. Marks : 70]

Note : Attempt all the questions as per given instructions.

1. Multiple Choice Questions (MCQs) [01×15=15]

- I For control of weeds in peas, herbicide used in;
a) 2,4-D b) Dosanex c) M C P B d) Atrazine
- II Mimicry weed in wheat field is
a) Canary Grass b) Wild oat c) Both a and b d) Swine grass
- III Which herbicide group inhibitor the photosynthesis reaction ?
a). Thiocarbamates b). Triazines
c). Cyclohexanedione d). Benzoic acid
- IV Which of the following is useful for controlling aquatic weeds?
a) Dredging b) Chaining c) Herbicidal application d) All of these
- V Roundup herbicide is a trade name of
a) Pretilachlor b) pendimathalin c) Alachlor d) Glyphosate
- VI Generally weeds seeds are abundant at a depth of
a). 1.0-1.5cm b). 5 cm c).10cm d).15cm
- VII Name a partial stem parasite weed.
a) Loranthus b) Cuscuta c) Orobanche d) Striga
- VIII Which herbicide group inhibit the lipid synthesis?
a).Cyclohexanedione b). Acetanilides c). Uracils d). Nitriles
- IX What is the chemical name of MCPA ?
a).2-(4-chloro-2 methylphenoxy acid
b). 4-(4 chloro-2 methylphenoxy acid
c). 4- chloro-2 –methylphenoxy acid
d). 2,4-dichlorophenoxy acid
- X What is the chemical name of Dicamba ?
a).3-amino-2,5-dichlorobenzoic acid
b). 3,6-dichloro2-metoxymethoxybenzoic acid
c). 2,3,6- trichlorobenzoic acid
d). None of the above

- XI** Which herbicide is used in aquatic weed control?
a). Acrolein b). Delapon c). Diuron d). Picloram
- XII** Which herbicide is amino acid synthesis inhibitor
a). Glyphosate b). 2,4-D c). MCPA d). Atrazine
- XIII** What is the mode of action of sulfonamide herbicide
a). Amino acid synthesis inhibitor b). Photosynthesis inhibitor c). Lipid inhibitor d). Pigment inhibitor
- XIV** A pre plant incorporated herbicide
a). Paraquat b). Delapon c). Uracils d). Fluchloralin
- XV** Which herbicide is systemic and translocated type ?
a). Atrazine b). Diuron c). Paraquat d). Glyphosate
- 2. Answer in long (any three)** [10×3=30]
- I** What are weeds and define their types?
- II** Briefly explain propagation and dissemination of weeds.
- III** Explain the weed effectively on wheat and maize.
- IV** What do you mean by weed effectively on groundnut and mustard?
- 3. Answer in short (any five)** [5×5=25]
- I** Explain the weed control methods?
- II** What is the unwanted weed and give any three examples?
- III** What is the absolute weed and give any three examples?
- IV** What is the relative weed and give any three examples?
- V** Explain the control of Cuscuta.
- VI** What are the two common weeds?
- VII** What is the biological control of aquatic weeds?

Printing Pages :2

Paper Code: BSA-A-704 A (SVSU:2023-24/R)

Enrollment No.												
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Keral Verma Subharti College of Science

Program Name B.Sc. Agriculture

7th Semester / 4th Year Examination

Subject Code- BSA-A-704

Subject Name: Soil Plant and Water Analysis

[Time : 03:00 Hours]

[Max. Marks : 70]

Note : 1. Attempt all the questions as per given instructions.

1. Multiple Choice Questions (MCQs) [01×15=15]

- I DRIS recommending fertilizer schedule is based on analysis
A. Bacteria B. Fungi C. Algae D. Actinomycetes
- II Long range weather forecast will help in planning of
A. Cropping pattern B. Land preparation
C. Cropping Pattern D. None of these
- III Barley, rape and cotton are _____ salt tolerant.
A. High B. Low C. Medium D. None of these
- IV What is wavelength for analysis Iron
A. 248.3nm B. 300.0 nm C. 403.1 nm D. 324.7 nm
- V Temperature required for making ash in muffle furnace—
A. 400° to 500°C B. 550° to 600°C C. 395° to 500°C D. All above
- VI What is flame type for reading copper by AAS
A. Air-C₂H₂ B. N₂O-C₂H₂ C. Air-N₂O D. None of them
- VII Total area under salt affected soil in India is approximately
A. 7.0 M ha B. 1.0 M ha C. 14.0 M ha D. 65 M ha
- VIII Hybrid rice for commercial production was first evolved in
A. China B. India C. Japan D. USA
- IX Name of salt tolerance crop
A. Barley B. Dhaincha C. Cotton D. All above
- X Unsafe limit of boron for wheat crop –
A. 3.0 ppm B. 4.0 ppm C. 7.0 ppm D. All above
- XI Salinity denote by-
A. SAR B. Electrical Conductivity C. RSC D. ESP
- XII Which is dispersing agent in soil texture analysis---
A. (NaPO₃)₆ B. HClO₄ C. ZNSO₄ D. HF

XIII Available nitrogen determined by method—
A. Alkaline permanganate B. Eriochrome black T
C. Triacid D. All of the above

XIV The nature farming was developed in the country
A. Japan B. India C. China D. Pakistan

XV What is normality of sulphuric acid---
A. 44.0 B. 36.0 C. 15.6 D. 15.6

2. Answer in long (any three) [10×3=30]

- I Give the deficiency and toxicity symptoms of (P, Ca, Mg, S)
- II Define the nutrient index for plant analysis?
- III Explain the critical nutrient concentration with suitable example?
- IV Explain the critical nutrient range (CNR)?

3. Answer in short (any five) [5×5=25]

- I Define the how to soil management for crops?
- II What is the quality criteria for irrigation?
- III Define the classification and minimization of error for crops?
- IV Define the role of N, P, K for crops?
- V What is principle of nitrogen and how to determine in plant sample?
- VI What is the method for determine zinc by AAS.?