23/12/24

Printing Pages :2

Paper Code: AG-307 C (SVSU:2024-25/R)

Enrollment No.												

Program Name:B.Sc Agriculture
3rd Semester / 2nd Year Examination
Subject Code: AG-307
Subject Name: Principles of Integrated Disease Management

[Time :03:00 Hours] **[Max. Marks :75]**

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

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

(I) Solar heat treatment method of Plant disease management was developed by .....

(a) Luthra 1953 (b) Luis pasture 1953
(c) Lusra 1953 (d) All of these

(II) Temperature and timing of Moist hot air treatment method of plant disease management is ?

(a) 54 degree Celsius for 2 hours (b) 54 degree Celsius for 120 minutes
(c) Both a and b (d) Arbuscular mycorrhizae

(III) Hot water treatment method use for the plant organs such as.....?

(a) Flower (b) bulbs and Sugarcane setts
(c) Both a and b (d) All of these

(IV) Which organisms is bio-agent?

(a) *Colletotrickum* (b) *Phytophthora* (c) Both a and b (d) *Bacillus subtilis*

(V) The use of beneficial microorganisms or natural enemies to control plant diseases is known as:

(a) Pesticide application (b) Genetic modification
(c) Biological control (d) Soil sterilization

(VI) Which of the following is Not a major group of plant pathogen?

(a) Fungi (b) Bacteria (c) Virus (d) Insect

(VII) Which of the following is a common method for managing plant diseases in agriculture?

(a) Removing all plant residues from fields (b) Reducing soil pH
(c) Crop rotation (d) Increasing plant density

(VIII) Plant pathogens can affect plant health by:

(a) Causing diseases that reduce plant growth and productivity
(b) Providing essential nutrients to plants
(c) Enhancing photosynthesis
(d) Promoting plant growth

(IX) Full form ETL ?

(a) Electric Transformation Level (b) Economic Threshold Level
(c) Economic Threserhold Level (d) Economic Thresehold Level

20/12/24

Printing Pages :2

Paper Code: AG-306 B (SVSU:2024-25/R)

Enrollment No.												

B.Sc Agriculture
3 Sem / 2 Year, Regular Examination
Farm Machinery and Power (AG-306)

[Time : 03:00 Hours] **[Max. Marks:75]**

Note: 1. Attempt all the questions as per given instructions.
2. Fill the correct answer of MCQs

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

1. During compression stroke, the engine attains high pressure ranging from _____ to_____

1. 30 to 45 kg/cm^2 2. 50 to 65 kg/cm^2
3. 80 to 95 kg/cm^2 4. 0 to 05 kg/cm^2

2. Thermal Efficiency of diesel engine

1. 32 to 38 % 2. 50 to 65 %
3. 80 to 95 % 4. None of these

3. Thermal Efficiency of petrol engine

1. 32 to 38 % 2. 25 to 32 %
3. 80 to 95 % 4. None of these

4. Compression ratio of diesel engine

1. 14:1 to 22:1 2. 10:1 to 18:1
3. 33:1 to 44:1 4. 65:1 to 75:1

5. Temperature of Petrol engine

1. 300 2. 260 3. 500 4. 999

6. Temperature of diesel engine

1. 300 2. 260 3. 500 4. 999

7. Global warming is caused by

1. Greenhouse gases 2. Hydrogen
3. Nitrogen dioxide 4. All of the above

8. Exhaust gases go out through

1. Suction valve 2. Power valve
3. Exhaust valve 4. Intake valve

9. Air and fuel mix in

1. Carburetor 2. Injector
3. Turbo 4. Oil Filter

10. The fuel injection pump is the most important unit of

1. Petrol engine 2. CNG engine
3. Diesel engine 4. Spark plug

Full form EIL?

Electric Injuri Level (b) Economic Injury Level

Economic Injuryi Level (d) Economic Thresehold Level

I) Which of the following is NOT a component of Disease triangle?

Rhizoid (b) Host

Environment (d) Pathogen

I) Which one of the following cultural method of plant disease nagement?

Hot water treatment

Crop roation

Both A and B

None of these

II) *Trichoderma* is a.....bioagent

Viral (b) Fungal

Fungal and Bacterial (d) All of these

V) Bavistin is a.....?

Bioagent (b) Fungicide

Both A and B (d) All of these

) Application dose of *Trichoderma* species for Seed Treatment

5-10gram/kg of seed (b) 0.6-1.0gram/kg of seed

5-10kg /kg of seed (d) All of these

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

I Describe the plant disease forecasting method and their important in Crop production

I Discuss briefly physical method of plant disease management?.

I Explain the Biological method of plant disease management?

V Write about on the *Trichoderma* species for plant disease management?

Answer in short (any six) **[5×6=30]**

Differentiate between the following Viroids and Mycoplasma?

I Briefly explain the phosphorus cycle?

I Define the following terms

(a) Disease triangle (b) Plasmid

V Write the name of (5) Fungicide for plant disease management?

Write short note on Mechanism of Biological Control?

I Write down the IDM and their important in plant disease management?

I Write about on Safety issues in fungicides uses?

11. The full form of I.C. engine

1. Internal Combustion Engine 2. Internal Common Engine
3. Internet Combustion Engine 4. None of these

12. Compression ratio of petrol engine

1. 5:1 to 8:1 2. 6:1 to 9:2
3. 8:8 to 9:9 4. 4:1 to 6:1

13. Ignition in diesel engine by

1. heat of compression 2. Electric sparks
3. air of compression 4. None of these

14. Ignition in petrol engine by

1. heat of compression 2. Electric sparks
3. air of compression 4. None of these

15. Hot coolant pass with the help of the

1. Thermostat Valve 2. Injector
3. Spark Plug 4. None of these

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

I Explain the gear system in engine and define their types with suitable?

II A four-stroke engine has a mean effective pressure of 7 kg/cm^2 (686 kPa) area of piston is 730 cm^2, stroke length 45 cm, torque due to brake load is 110 kg-m (1078 Nm). Consumption / h. is 4.5 kg and working speed is 120 per minute. Calculate the indicated power, brake power, mechanical efficiency, specific fuel consumption.

III Explain the working of seed drill machine?

IV A diesel engine transmits 25 kW at the end of the crank shaft moving at 1650 rev/min. find the torque exerted by the piston?

3. **Answer in short (any six)** **[5x6=30]**

I Define the working of tractor steering?

II Define the working of fuel supply system in engine?

III Describe thesowing and plantation equipment?

IV Define the working cycle of 4 stroke petrol engine?

V Define the working cycle of 2 stroke petrol engine?

VI Describe the primary tillage and secondary tillage?

VII Define the farm power sources?

VIII Draw a diagram of radiator?

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ting Pages :2

r Code: AG-305 C (SVSU:2024-25/R)

Enrollment No.

B.Sc. Agriculture

III Semester / II Year Examination

Subject Code: AG-305

Subject Name: Agriculture Finance & Cooperation

: 03:00 Hours] [Max. Marks : 75]

. Attempt all the questions as per given instructions.

2. Fill the correct answer of MCQs

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

What indicates the availability of money with the farmer – borrower?

(a) Capital (b) Capacity

(c) Character (d) Condition

Traders are the example of which type of resources?

(a) Institutional (b) Non-Institutional

(c) Both (a) & (b) (d) None of these

Balance sheet is also known as:

(a) Net worth statement (b) Flow of fund statement

(c) cash flow statement (d) Income statement

RBI Headquarters:

(a) Patna (b) Bhopal (c) Delhi (d) Mumbai

RRBs is relate to:

(a) Regional rural banks (b) Reserve rural banks

(c) Real rural banks (d) None of these

Mortgage loan is which type of:

(a) Simple (b) Equitable

(c) Both a & b (d) Complicated

Income statement is also called as:

(a) Net worth statement (b) Profit & loss statement

(c) cash flow statement (d) None of the above

NPW is refers to the:

(a) Net Present Worth (b) No Present Worth

(c) Net Past Worth (d) None of these

Full form of SHGs:

(a) Self-Help Groups (b) Special-Help groups

(c) Social-Help Groups (d) None of these

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Printing Pages :2

Paper Code: AG-310 B (SVSU:2024-25/R)

Enrollment No.

Program Name:B.Sc Agriculture

3rdSemester / 2nd Year Examination

Subject Code:AG-310

Subject Name: fundamental of soil and water conservatiion

[Time :03:00 Hours] [Max. Marks :75]

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 Which one is man made soil erosion

A) Normal Geological erosion B)Accelerated soil erosion

C)Soil genesis erosion D)Hazards of erosion

II Which is primary stage of water erosion

A) Sheet erosion B) Wind erosion

C) Rill erosion D) All of these

III What are the factors influencing water erosion

A)Rainfall B)Slope C)Vegetation D) All of these

IV Which soil is more eroded

A) Sandy B) Silty loam C) Silty D) B& C both

V What is A in A=RKLSCP

A)Slope length factor B) Slope percentage factor

C) Erosion control factor D)Computed soil loss per unit area

VI Which city/country recommended universal soil loss equation?

A)Dehradun B)New Delhi C)Jodhpur D)USDA

VII What are agronomic practice water erosion control

A) Bench terraces B) Gradient bonding

C)Runoffs plots D) Strip cropping

VIII Which surface soil structure

A)Collimeter B)Platy C) Angular D)Crumb

IX Which one is primary mineral

A)Pyrites B)Gypsum C)Mica D)Iron

Things which are owned by farmer called as.

(a) Assets (b) Liabilities

(c) Equity (d) All of above

The Land development banks are the part of :

a) Commercial Bank (b) Cooperative bank

c) RRB (d) SBI

RRB established in:

a) 1972 (b) 1975

c) 1982 (d) 1918

Short-Term Credit duration for farmers:

a) 3 to 10 months (b) 5 to 8 months

c) 6 to 18 months (d) 6 to 36 months

Relatives are the type of resources?

a) Non-Institutional (b) Institutional

c) Cooperative (d) All of these

The basis for any credit transaction is trust related with which of the following Cs of credit:

a) Capital (b) Capacity

c) Character (d) condition

Answer in long (any three) [10×3=30]

Explain 'Kisan Credit Card' with their criteria and benefits.

Describe the role and importance of world bank.

Write a detail note on SWOT analysis.

Discuss in detail about Agriculture Finance and their importance.

Answer in short (any Six) [5x6=30]

Discuss briefly about the role of NCUI.

Give a short note on agriculture cooperation.

What are the Institutional sources of agriculture finance?

Write down about the 3C's of credits.

Write the role of NAFED in detail

Briefly discuss about unfair practices of money lenders.

Define the brief history of cooperative development in India.

X Which is flora

A)Bacteria B)Fungi C) Algae D)All of these

XI What is percentage of organic carbon in organic matter

A)60% B)58 % C) 62% D) All of these

XII How many essential elements are there-

A)17 B)16 C)18 D)19

XIII What is clay size

A)<0.002mm B)0.2mm C)0.01mm D)All of these

XIV Which form of Boron does plants take

A)BO3 B)BO2C C)BO3 D)All of these

XV Which elements are dominant in strongly acidic soil

A)Sodium B)Potassium

C)Aluminum D)Carbonate

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

I What is mechanics of water erosion ?

II What are factors influencing water erosion?

III How to control erosion by Agronomical measures

IV What is watershed?

3. Answer in short (any six) [5x6=30]

I What is shifting cultivation?

II What is water erosion and explain its kinds?

III What is accelerated erosion?

IV What is wind erosion?

V Explain mechanics of wind erosion.

VI How can wind erosion be control?

VII What is desertification?

Printing Pages :2 26/12/24

Paper Code: AG-308 A (SVSU:2024-25/R)

Enrollment No.												

Program Name: B.Sc. Agriculture
III Semester / 2024 Year Examination
Subject Code: AG-308
Subject Name: Environmental Studies & Disaster Management

[Time: 03:00 Hours] **[Max. Marks: 75]**

Note: 1. Attempt all the questions as per the given instructions.
2. Fill the correct answer of MCQs

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

I The source of energy in an ecosystem is
a) ATP b) Sunlight c) D.N.A d) R.N.A

II An association between two individuals or populations where both benefit and where neither can survive without the other is
a) competition b) commensalism
c) mutualism d) protocooperation

III A group of individuals of a plant or animal species, inhabiting a given area is called
a) Biome b) Population c) Ecosystem d) Community

IV All are in-situ conservation efforts except
a) National parks b) Sanctuaries
c) biosphere reserves d) Zoo

V What is the animal symbol of W. W. F (World Wildlife Fund)?
a) Red Panda b) Giant Panda c) Tiger d) Kangaroo

VI The natural place of an organism or community is known as
a) Niche b) Biome c) Habitat d) Habit

VII Plants are also regarded as
a) flora b) fauna c) flower d) botany

VIII The variety among species and within species is classified as
a) diversity b) deduction c) reduction d) informatics

IX Soil conservation is the process where
(a) soil is aerated (b) soil is protected against loss
(c) sterile soil is converted to fertile soil
(d) soil erosion is allowed

X Soil erosion can be prevented by
(a) Afforestation (b) overgrazing
(c) increasing birds population (d) removal of vegetation

Printing Pages :2 16/12/24

Paper Code: AG-304 C (SVSU:2024-25/R)

Enrollment No.												

Program Name:B.Sc Agriculture
3rd Semester / 2nd Year Examination
Subject Code:AG-304
Subject Name: Agricultural microbiology

[Time :03:00 Hours] **[Max. Marks :75]**

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) Who is the father of Agricultural microbiology?
(a) R.S. Singh (b) Dr. P.D. Chaudhary
(c) Martinus Beijerinck (d) Both A and B

(II) What is the flagellin?
(a) Enzyme (b) Fat (c) Protein (d) Both A and B

(III) Which of the following is NOT a component of bacterial cell?
(a) Rhizoid (b) flagella (c) pilli (d) Both A and B

(IV) What is a Mycorrhiza?
(a) Symbiotic relationship between fungus with root of plant
(b) Non-symbiotic relationship between fungus with root of plant
(c) Both A and B (d) None of these

(V) *Trichoderma* is a.....bioagent
(a) Viral (b) Fungal
(c) Fungal and Bacterial (d) All of these

(VI) Example of non symbiotic bacteria ?
(a) *Rhizobium* (b) Azactobacter
(c) Both A and B (d) All of these

(VII) Which of the following transduction method in bacteria
(a) Transfer of genetic material by conjugative tube
(b) Transfer of genetic material by bacteriophase
(c) Both a and b (d) All of these

(VIII) Nitrification is the process of oxidation of.....
(a) Carbon (b) Ammonia into nitrites
(c) Both A and B (d) All of these

(IX) Which type of Mycorrhizae form a network on the surface of plant roots, rather than entering the root cells?
(a) Ectomycorrhizae (b) Endomycorrhizae
(c) Vesicular mycorrhizae (d) Arbuscular mycorrhizae

I The removal of the top layer of soil is called
a) landslide b) soil erosion c) drought d) earthquake

II What is the purpose of rainwater harvesting?
(a) To hold rainwater on the surface of the earth.
(b) To recharge groundwater.
(c) To use water for the irrigation of crops.
(d) To rear fish

III The _____ is an important requirement of the aquatic life.
a) Dissolved nitrogen b) Dissolved chlorine
c) Dissolved oxygen d) Dissolved methane

IV The most abundant water pollutant is
a) industrial wastes b) pesticide
c) detergent d) ammonia

V Acid rain contains
a) sulphuric acid b) nitric acid c) both a and b
d) sulphuric acid, nitric acid, and hydrochloric acid

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

I What do you mean by the Multidisciplinary nature of environmental studies? Explain in detail.

II Describe the food chain and food web.

III What do you mean by pollution? Explain the causes and effects of water pollution.

IV What do you understand by disaster? Explain any one natural disaster

3. Answer in short (any Six) [5x6=30]

I What is the difference between in-situ and ex-situ conservation?

II Mention the uses of forests.

III Write a short note on non-renewable resources.

IV Explain endangered species. Mention the names of any two endangered species

V Give a brief account of ozone layer depletion.

VI Write a short note on acid rain.

VII What do you mean by conservation? Write a short note on water conservation.

VIII Write a short note on the Environment Protection Act.

(X) Mycorrhizae are especially important in helping plants absorb which nutrient?
(a) Nitrogen (b) Phosphorus (c) Potassium (d) Calcium

(XI) Which organisms are most commonly found on the rhizoplane?
(a) Marine algae (b) Soil fungi and bacteria
(c) Aquatic animals (d) Leaf-dwelling insects

(XII) What is the rhizoplane?
(a) The layer of soil farthest from plant roots
(b) The surface of plant roots where microorganisms attach
(c) The nutrient-depleted area around the root
(d) A type of bacteria found only on leaves

(XIII) Which of the following is a bacterial bioagents?
(a) *Bacillus subtilis* (b) *Trichoderma species*
(c) Both a and b (d) None of these

(XIV) Bacterial cell made of.....
(a) *Chitin* (b) *Cellulose* (c) Peptidoglycan (d) None of these

(XV) What is Plasmid?
(a) *Extrachromosomal of DNA* (b) *Extrachromosomal Cellulose*
(c) Peptidoglycan (d) None of these

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

I Describe the genetic recombination in bacteria. ?

II Discuss briefly nitrogen cycle?.

III Explain the Ammonification and Nitrification?

IV Write about on the carbon cycle?

3. Answer in short (any six) [5×6=30]

I Differentiate between the following
Bacteria and Mycoplasma?

II Briefly explain the phosphorus cycle?

III Define the following terms
(a) Pathogen (b) Viroid

IV Write about on role of microbe in the soil fertility ?

V Write short note on bacterial growth curve?

VI Write down the phosphorus cycle?

VIII Write about on chemoautotroph and photoautotroph bacteria?

14/01/2025

Printing Pages : 2

Paper Code :BSA-307 A (SVSU:2022-23/R)

Enrollment No.

B.Sc.(Ag.)

IInd YEAR EXAMINATION

Sub. Name - StatisticsSub. Code - BSA 307

[Time : 3:00 Hours] [Max. Marks : 70]

Attempt All Questions. Tick correct Answer for Objectives Question in Answer Sheet.

I. Objectives Question: Answer All Question [15×1= 15]

1. Mode is the measure of
(a) Location (b)dispersion (c) Skewness (d) None of these

2. If mean, median and mode are same then distribution is called
(a)asymmetrical distribution (b) symmetrical distribution
(c) Binomial distribution (d) None of these

3. Mean deviation is always measured from
(a)Mean (b) Median (c) Mode (d) None of these

4. Diagrams and graphs are tool of
a) Collection of data (b)Analysis of data
(c) Presentation of data (d) association of data

5. Range is a measure of
(a) Location (b)dispersion (c) Skewness (d) None of these

6. Data originally collected for an investigation is known as
(a) primary data (b) secondary data (c) single Data (d) None of these

7. Chi square test is used for testing
(a) means (b) variances (c) modes (d) none

8. Inference is a technique of
(a)summation (b) reading (c) testing (d) none

9. To perform a Chi-square test
(a) Data conform to a normal distribution
(b) Data be measured on a nominal scale
(c) Each cell has equal number of frequencie(d) All of these

10. A small sample size is
(a)n= 40 (b) n = 60 (c) n ≤ 30 (d) none of these

11. In testing the variables follows
(a) poisson distribution (b) normal distribution
(c) beta distribution (d) None of these

12. t test is a test of analysis of
(a)proportions (b) variances (c) means (d)All of these

03/01/25

Printing Pages :2

Paper Code: AG-312 B (SVSU:2024-25/R)

Enrollment No.

Program Name: B.Sc. Agriculture

III Semester / II Year Examination

Subject Code: AG-312

SUBJECT NAME: FUNDAMENTALS OF ENTOMOLOGY-II

[Time : 03:00 Hours] [Max. Marks : 75]

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 Family of diamond back moth is..
(a). Plutellidae. (b). Lepidoptera.
(c). Diptera. (d). Hemiptera.

II The study of insects is called…
(a). Entomology. (b). Botany.
(c). Protozoology (d). Ethology.

III DBM is a specific insect of….?
(a). Brinjal. (b). Tomato. (c). Cabbage. (d). Bottle gourd.

IV IPM is also known as?
(a). IPC. (b). IDM. (c). IPA. (d). IIM.

V Scientific name of boll weevil is..?
(a). *Phenacoccus hirsutus*. (b). *Anthonomusgrandis*.
(c). *Tectanagrandis*. (d). *Sylepta derogata*.

VI Bt cotton is resistant against which crop?
(a). Spodoptera. (b). Spodoptera.
(c). Lepidoptera. (d). Hemiptera.

VII First pesticide used in India was?
(a). DDT. (b). Endosulfan. (c). Heptachlor. (d). Aldrin.

VIII Insecticide which is also known as Gamma-hexachloricyclohexane?
(a). Hexachlorobenzene. (b). Heptachlor.
(c). TDE. (d). Lindane.

IX Which is a banned insecticide in India?
(a). Aldrin. (b). Nitrofen. (c). Aldicarb. (d). All of the above.

X Which is an organophosphate?
(a). Mirex. (b). DDT. (c). Diazinon. (d). All of the above

ost frequently occurring value is called
an (b) mode (c) M.D. (d) None of these

es of freedom is related to
). of independent observations (b) variances
eans (d) none

of variation is a measure of
cation (b)dispersion (c) Skewness (d) None of these

Question : Answer Any Three **[10×3=30]**

in poissondistributionand explain its properties.

do you understand by Graphical Presentations?

a Bar chart of the following data –

8	12	26	10	28
6	2	4	12	10

ss Large Sample Testing procedure and their methods of testing.

do you understand by Analysis of Variance? Explain its
iples.

ss correlation and its coefficientand its uses.

t Question: Answer any five **[5×5=25]**

the Characteristics of an Ideal mean.

ss a chi square test.

do you understand by Measures of dispersion?

il tins are taken at random. The mean height of tins is 15.8 kg.

is 0.50 kg. Does the sample mean differ significantly from the
ded weight of 16 kg.
ulated at 0.025 level of significance = 2.26)

uss ANOVA and its Applications.

t is scatter diagram and show it graphically.

uss two lines of Regression.

uss Simple random Sampling procedure.

XI Pollyphagous insect-pest is..?
(a). Locust. (b). DBM.
(c). Mango hopper. (d). Green hopper.

XII Monophagous insect-pest is?
(a). Rice yellow stem borer. (b). Cotton jassid.
(c). Rice weevil. (d). All of the above.

XIII For their size, insects are much stronger than man because
a. Their muscles are naturally stronger
b. They can control muscle response more precisely
c. They have giant nerve fibers
d. Of physical properties related to their small size

XIV Vector of rice tungro virus is..?
The most important vectors (transmission agents) of human disease would probably be
a. Moths b. Beetles c. Ants d. Fleas

XV Vector of Grassy Stunt Disease is?
(a). GLH. (b). BLH. (c). WLH. (d). All of the above.

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

I Explain Recent methods of pest control.
II What do you mean by IPM? Explain the concept of IPM.
III Describe the effects of biotic factors on insects.
IV Explain different components of insects' environment.

3. Answer in short (any six) **[5x6=30]**

I Discuss the effects of light on insects
II Write a short note on the classification of insecticides.
III Write the formulation of any one insecticide.
IV What do you understand by inter-specific competition?
V Write a brief account ofthe effects of temperature on insects.
VI Mention any five characteristic features of insects.
VII Write application techniques of spray fluids.
VIII Give a short note on the safety issues of pesticide use.

28/12/24

rinting Pages :2

aper Code: AG-309 B (SVSU:2024-25/R)

Enrollment No.												

B.Sc.(Ag.)

IInd YEAR EXAMINATION

Name –Statistical Methods Sub. Code - AG309

Time : 3:00 Hours] [Max. Marks : 75]

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

2. Fill the correct answer of MCQs

Objectives Question: Answer All Question [15×1= 15]

Mean is the measure of

a) Location (b)dispersion (c) Skewness (d) None of these

f mean, median and mode are same then distribution is called

a)asymmetrical distribution (b) symmetrical distribution

(c) Binomial distribution (d) None of these

Standard deviation is always measured from

a)Mean (b) Median (c) Mode (d) None of these

f the observations are 1,5,1,5,1 the mode is

a) 0 (b) 1 (c) 5 (d) None of these

Range is a measure of

a) Location (b)dispersion (c) Skewness (d)None of these

Discrete variables are represented by

a) graphs (b) Line diagram

c) Bar diagram (d) All of these

Root mean square deviation is

a) Q.D. (b) S.D. (c) M.D. (d) None of these

Variance of the identical units 2,2,2,2,2 is

a) 1 (b) 0 (c) 2 (d) None of these

The measurements of spread or scatter of the individual values round the central point is called:

a) Measures of dispersion (b) Measures of central tendency

c) Measures of skewness (d) Measures of kurtosis

A large sample size is

a)n= 20 (b) n = 60 (c) n ≤ 30 (d) none of these

Which one is a symmetrical distribution?

a)Poisson distribution (b)normal distribution

c) beta distribution (d) None of these

02/01/25

Printing Pages :2

Paper Code: AG-311 B (SVSU:2024-25/R)

Enrollment No.												

Course: B.Sc. (Agriculture)

Year/Sem: 2nd Year / 3rd Sem

Subject Name: Dairy Science

Subject Code: AG--311

[Time: - 3:00 Hours] [Max. Marks: 75

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

2. Fill the correct answer of MCQs

I. Objectives Question: Answer All Question [15×1=15]

1. **Full form of AMUL**
   A. Anand Milk Union Limited B. Anand Mil Unions Limited
   C. Anands Milk Union Limited D. None of Above
2. NPDD Scheme was implemented in.....Year
   A. 2014 B. 2015 C 2010 D. 2009
3. Full form of BMC
   A. Bulk Milk Cooler B. Bulk Meal Cooler
   C. Bulk Meat Cooler D. None of Above
4. Full form of KVS
   A. Krishi Vigyan Scheme B. Key Vocational Scheme
   C Key Village Scheme D. None of Above
5. Full form of ICDP
   A. Integrated Cattle Development Project
   B. Integrated Cattle Development Program
   C. International Cattle Development Program
   D. None of Above
6. Name of the Dairy Institute which located in Karnal
   A. NDRI B. IARI C. CRIC D. NDDB
7. Amul was established in .....Year
   A. 1946 B. 1956 C 1945 D. 1944
8. AMUL was win the BML Manjul Award.....Year
   A. 1917 B. 1918 C. 1919 D. 1920
9. AMUL was win the IMC Ramkrishna Bajaj National Quality award in .....Year
   A. 2020 B 2021 C. 2011 D 2012

a test of analysis of
ortions (b) variances (c) means (d)All of these
st frequently occurring value is called
n (b) mode (c) M.D. (d) None of these
s of freedom is related to
of Independent observations (b) variances
ans (d) none
n is a measure of
ation (b)dispersion
wness (d) None of these

Question : Answer Any Three **[10×3=30]**

o you understand by Graphical Presentation?
histogram of the following data –

10	10-12	12-14	14-16	16-18	18-20
	2	4	8	12	8

correlation for bivariate data?
eff. of correlatonof the following data –

	12	6	10	8
	2	4	12	10

small Sample Testing procedure and their methods of

o you understand by Analysis of Variance? Explain its
es.
Regression and its coefficient and its uses.

Question: Answer any six **[6×5= 30]**

note on measures of Central Tendency?
e Methods of finding mode of a distribution.
bout Null and Alternate hypothesis.
e Large testing procedure.
various methods of collection of a secondary data.
Mean Deviation and Range of Data?
note on Frequency polygon.
Stratified Sampling procedure.

10. Full form of OF.....
A. Operation Flood B. Operate Flood
C. Operation Floods D. Operation Fluid

11. If pH is increase then Acidity.....
A. Decrease B. Increase
C. Constant D. None of Above

12. NABARD was established in .....Year
A 1984 B 1982 C. 1981 D. 1980

13. Full form of FMD
A. Foot and Mouth Disease B. Foot and Mouth Disorder
C. Foot and Mouths Diseases D. None of Above

14. The word "Amul" is derived from Sanskrit word 'Amulyawhich means.....
A. Priceless B. Precious
C. Both A and B D None of Above

15. In current year milk If production is.....Million Tones
A 300 B. 200 C 500 D. 400

II Long-Question: Answer Any Three **[10×3=30]**

1. Define the different types of preservatives in brief.
2. How to calculate the density of milk if lactometer reading 27, Milk temperature 29°C .
3. Explain the different method of preservation in brief.
4. Explain the adulteration in brief
5. Describe the any one five year plan in brief.

III. Short Question: Answer any Six **[6×5=30]**

1. Explain the procedure for density determination in short.
2. Describe the Sterilizationin short.
3. Describe Operation flood in short.
4. Define the various operations of milk processing.
5. Define the current status of milk production in India.
6. Define the UHT method in short
7. Describe the DEDSscheme.
8. Explain the NPDD scheme in short.
9. Explain the Rastriya Gokul Mission in short.
10. Define AMUL in short.

06/01/25

nting Pages :2

per Code: AG--301 B (SVSU:2024-25/R)

Enrollment No.												

B.Sc. Agriculture

III Semester / 2nd Year Examination

Subject Code AG-301

ubject Name: Crop Production Technology-I (Kharif Crop)

me : 03:00 Hours] [Max. Marks : 75]

e: 1. Attempt all the questions as per given instructions.
2. Write the correct answer of MCQs in OMR sheet

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

Which one is the kharif crop?
(a) Mustard (b) Paddy (c) Potato (d) Wheat

I Which of the following leading state in area and production of maize?
(a) Karnataka (b) U.P. (c) Kerala (d) Rajasthan

II What is the Protein content in Groundnut:
(a) 10-18% (b) 30-40% (c) 20-30% (d) 40-48%

V Family of Maize is:
(a) Malvaceae (b) Leguminoseae
(c) Poaceae (d) Tilliaceae

V Gossypium hirsutum is the variety of:
(a) Maize (b) Sorghum (c) Jute (d) Cotton

VI 'Glyphosate' is commonly used for:
(a) Herbicide (b) Pesticide (c)Fertilizer (d) All

VII Which is the hybrid variety of cotton:
(a) DCH-32 (b) ICPH-9 (c) DCM-7 (d) QC-10

VIII The number of Chromosome in maize:
(a) 2n=20 (b) 2n=24 (c) 2n=16 (d) 2n=10

IX 'Vigna radiata' is the scientific name of:
(a) Rice (b) Sorghum (c) Mungbean (d) Cowpea

X IIFSR is located at:
(a) Meerut (b) Kanpur (c) Rampur (d) Lucknow

8/01/25

Printing Pages :2

Paper Code: AG-303 C (SVSU:2024-25/R)

Enrollment No.												

Program Name – B.Sc. Agriculture

3rd Semester /2nd Year Examination

Subject Code -AG-303

Subject– Fundamentals of Plant Breeding

[Time :03:00 Hours] [Max. Marks :75]

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 What is self-incompatibility in plants?
(a) Inability to undergo meiosis (b) Inability to self-fertilize
(c) Ability to cross-fertilize (d) Lack of reproductive organs

II Mutation breeding was popularized by which plant breeder?
(a) Hugo de Vries (b) Gregor Mendel (c) N. Borlaug (d) None

III A plant derived from a single pollen grain through tissue culture is called:
(a) Clone (b) Double haploid (c) Mutant (d) None

IV Which selection method is based on choosing plants based on their visible traits?
(a) Mass selection (b) Clone (c) Mutant (d) None

V What type of plant breeding is typically used to create plants resistant to diseases?
(a) Hybridization (b) Backcross (c) Mass selection (d) None

VI Who is known as the 'Father of Plant Breeding'?
(a) Gregor Mendel (b) Norman Borlaug
(c) Thomas Fairchild (d) J.L. Budd

VII What is the primary goal of plant breeding?
(a) To increase genetic diversity (b) To improve plant varieties
(c) To reduce crop yield (d) To create wild plant species

VIII Which of the following is a method of plant breeding?
(a) Cross-pollination (b) Mutation breeding
(c) Genetic engineering (d) All of the above

IX What is hybridization in plant breeding?
(a) Crossing two different species (b) Growing plants from seeds
(c) Mating between plants of the same variety
(d) Asexual reproduction

ip is a type of:
Tillage (b) Irrigation
Weed Management (d) None of these

hat is Pendimethalin?
Buffer (b) Pesticide (c) Nutrient (d) Herbicides

inimum temperature for sorghum seed germination is:
7-10% (b) 5-6% (c) 15-20% (d) 10-12%

hen Kharif crop is harvested?
Jan-Feb (b) Oct-Nov
March-April (d) None of these

RI is located at:
Bhopal (b) Kanpur
New Delhi (d) Hyderabad

nswer in long (any three) **[10×3=30]**

/rite down the cultivation of cotton crop.

lustrate the method of maize cultivation with their origin, conomic importance and harvesting.

/rite a detail note on different weed management practices in rop.

/rite down the cultivation practice of paddy.

nswer in short (any six) **[5x6=30]**

/rite down the cultivation of maize on following heads:
a) Water management (b) Nutrient management

Give a short note on Climate, Soil and verities for groundnut rop.

Define the crop growing practices of pearl millet.

Describe seed and sowing irrigation management in mungbean.

Write down the five verities of cotton and pigeon pea.

Write the practices of seed sowing & disease management in napier.

Write down the field preparation method for the cultivation of crops.

X What is meant by genetic purity in plant breeding?
(a) Absence of any mutation (b) 100% homozygosity
(c) Absence of any disease (d)Cross-pollination between plants

XI Which is the main advantage of cross-pollinated crops in plant breeding
(a) Reduced genetic diversity (b) Enhanced genetic variability
(c) Low resistance to diseases (d) Lack of hybrid vigor

XII Which of the following is an advantage of mass selection?
(a) Maintains genetic diversity (b) Eliminates disease resistance
(c) Limits variation (d) Reduces crop yield

XIII Which type of plant breeding maintains the genetic purity of a crop? (a) Hybrid breeding (b) Self-pollination
(c) Mass selection (d) Polyploidy

XIV Which of the following is a characteristic of a pure line?
(a) Heterozygous (b) Homogeneous
(c) Hybridized (d) Cross-pollinated

XV Which method produces plants with a double set of chromosomes?
(a) Hybridization (b) Mutation breeding
(c) Polyploidy (d) Self-pollination

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

I Define domesticationand also write the importance of it?

II Write the advantage of plant breeding for future prospects?

III Discuss about present achievement of plant breeding in agriculture?

IV Discuss about the history of pre and post mendelian in detail?

3. Answer in short (any six) **[5x6=30]**

I Write the scientific methods of plant breeding stepwise?

II Discuss about the future prospects of plant breeding?

III What do you mean by Mutation?

IV What is parthenocarpy?

V Difference between biotic stress and abiotic stress?

VI Write the importance of data collection in plant breeding?

VII Define heterosis with suitable examples?

VIII Define hybridization with suitable examples?