Seat No: _____ **Enrollment No: _____**

PARUL UNIVERSITY

COLLEGE OF AGRICULTURE

B.Sc. (Hons.), Winter 2016 - 17 Examination

Semester: 1 **Date: 02/01/2017**
Subject Code: 20101102 **Time: 2:00pm to 5:00pm**
Subject Name: Introductory Agriculture **Total Marks: 60**

Instructions

1. Attempt all questions from each section.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Write section – A, section – B on separate answer sheets.

SECTION A

Q.1 Fill in the blanks. (Each of 0.50 marks) **(10)**

1. Agro climatic zone in India is _____.
2. Agronomy is deriving from _____word *agros* means _____*nomas* means_____.
3. Cultivation in soil is known as_____.
4. The nature of surface earth (levelled or sloppy) is known as _____.
5. India's rank in fruits & vegetables production _____.
6. Response of plant to light direction is known as_____.
7. Cultivation in water is known as_____.
8. The range of temperature for maximum growth of most of the agriculture plants is between___.
9. India's rank in milk production_____.
10. The science of marine fish and inland fishes including shrimps and prawns is called_____.
11. Agro climatic zone is Gujarat is _____.
12. Agricultural Statistics and English are belonging to _____ group.
13. India's position in world for total geographical area is _____.
14. Shifting cultivation is also known as _____cultivation in Madhya Pradesh.
15. Plant breeding and genetics are belong to _____ group.
16. Wind movement for _____ per hour is suitable for more crops.
17. Plant pathology and Nematology are belonging to _____ group.
18. Soil may be acidic p^H_____, neutral p^H____saline and alkaline p^H _____.
19. A deep black soil range is _____.
20. Relative humidity of _____% is suitable for most of the crop plant.

Q.2 Match group A with group B. (Each of 0.50 marks) **(05)**

A	B
1) Food grain	a) Tomato and Maize
2) Phototropism	b) Tea, Coffee, coconut
3) Day neutral plant	c) Sunflower
4) Edaphic factor	d) Temperature
5) Plantation crops	e) Rice, Wheat, Maize
6) Climatic factor	f) Cotton, Jute, Sugarcane
7) Biotic factor	g) Soil temperature
8) Commercial crops	h) Plant & Animals
9) Aero-ponic	i) Water
10) Hydo-ponic	j) Air

Q.3 Define the following. (Any ten) **(05)**

1. Drought
2. Dry farming
3. Crop production
4. Horticulture
5. Animal Husbandry
6. Advanced Farming
7. Precipitation
8. Soil reaction (pH)
9. Relative Humidity -RH
10. Desert soils
11. PAR
12. FSA

Q.4 Answer the following. (Any ten) **(10)**

1. Atmospheric gases on plant growth
2. Marine Agriculture
3. livestock farming

4. Objectives of FSA
5. NRCWA
6. Shifting Cultivation
7. Present Day Agriculture (21st Century)
8. Advantages of Groups
9. Kisan Mandal (Farmers Club)
10. Biotic factors affecting for crop production
11. Enlist external factor for crop production
12. Enlist soil group in India

SECTION B

Q.1 Multiple choice type questions. (Each of 0.50 mark) **(10)**

1. In which farming system the principle of "Grow it and eat it" instead of growing crops on a commercial basis.
a) Shifting Cultivation
b) Mixed Farming
c) Subsidiary Farming
d) Subsistence Farming

2. Water is present in the atmosphere in the form of invisible water vapour, known as_____.
a) Soil moisture
b) Fogg
c) Humidity
d) temperature

3. Which gases released to atmosphere are toxic to plants_____.
a) SO_2, CO
b) N_2
c) O
d) None of these

4. Which is the example of Phototropism_____.
a) Sunflower
b) Tomato
c) Rose
d) Gerbera

5. Which range of Photo-synthetically Active Radiation is essential for production of carbohydrates and ultimately biomass_____.
a) 0.4 to 0.7µ
b) 0.4 to 0.5 µ
c) 0.5 to 0.6 µ
d) 0.6 to 0.6 µ

6. It utilizes all modern technologies developed on scientific principles such_____.
a) Crop improvement
b) Crop production
c) Crop protection
d) All of above

7. It is an important component for crop production and horticulture particularly to provide tools and implements is called_____.
a) Agricultural Engineering
b) Agricultural Meteorology
c) A & b
d) None of these

8. During_____, research and development (R&D) in fundamental and basic sciences were brought under applied aspects of agriculture.
a) 18^{th} century
b) 17^{th} century
c) 19^{th} century
d) 21th century

9. Which is genetic factor of crop production_____.
a) High yielding ability
b) Early maturity
c) Resistance to lodging
d) All of above

10. How many % of GDP in Indian agriculture _____.
a) 27 %
b) 47 %
c) 37 %
d) 57 %

11. The arrangement of crops is done to get minimum requirement of light or air is called_____.
a) Light reduction
b) Geometry
c) Light intensity
d) None of these

12. The meaning of asset is _____.
a) Everything must balance
b) Debt or financial obligation owed
c) Anything owned
d) None of these

13. Sea weed is used for_____.
a) Fertilizer
b) Cosmetics
c) Animal feed
d) All of above

14. The meaning of liability is _____.
a) Everything must balance
b) Debt or financial obligation owed
c) Anything owned
d) None of these

15. _____ is an essential nutrient which is involved in all basic physiological functions of the body.
a) Water
b) Fibre
c) Salt
d) Sugar

16. The term referring to both freshwater and marine farming of organisms is called _____.

a) Aquaculture c) Horticulture
b) Agriculture d) Forestry

17. The _____ soil receive 50 cm to less than 10 cm rainfall with high evaporation

a) Alluvial c) Laterites
b) Desert d) Black cotton soil

18. Areas which receive an annual rainfall of 750 mm or less and there is no irrigation facility for raising crops is called_____.

a) Dry lands c) Irrigated land
b) Rain-fed d) None of these

19. Which branch of agriculture including Spices Aromatic and Medicinal Plants and Plantation Crops_____.

a) Plant pathology c) Agronomy
b) Horticulture d) Entomology

20. It is an condition of insufficient moisture supply to the plants under which they fail to develop and mature properly. If may be caused by soil, atmosphere or both is called_____.

a) Water logging c) Drought
b) Stress d) None of these

Q.2 Answer the following. True or false. (Each of 0.50 mark) **(05)**

1. The desert soil receives 50 cm to less than 10 cm rainfall with high evaporation.
2. Approximately 70% of animal body weight is water, it varies by species and body part.
3. Black soil is formed in arid region.
4. Nori & Kombu is Greek name of sea weed.
5. Scientific management of soil and crops under dry lands without irrigation is called Dry land agriculture.
6. About 75 % people are living in rural areas and are still dependent on Agriculture.
7. First rank of India in Live Stock (castles, Buffaloes).
8. Dry lands areas which receive an annual rainfall 750 mm or less.
9. About 60 to 75 % of the rainfall is lost through evaporation.
10. Crop residues like wheat straw or cotton stalks etc., are left on the soil surface is called Stubble mulch.

Q.3 Write short notes. (Any five) **(10)**

1. Agriculture as art, science and business of crop production & agriculture grouped in four major categories
2. Climatic factor affecting for crop production.
3. Multi-Dimensional Role of Women.
4. Internal factors (Genetic factors) for crop production
5. Why are livestock important?
6. Write down different farming system.
7. Write down any five agriculture research centre and any five revolution for agriculture.

Q.4 Differentiate the following. (Any five) **(05)**

1. Subsistence Vs Commercial farming
2. Intensive Vs Extensive Farming
3. Mixed cropping Vs Mixed farming
4. SDP Vs LDP
5. Black soil Vs Red soil
6. Dry land Vs Rain-fed farming
7. Soil mineral matter Vs Soil Organic matter