Multiple Choice Questions

AGRO-247

Farming System & Sustainable Agriculture

1. **Farming** is a process of harnessing solar energy in the form of economic plant & animal products.
2. **System** is a set of elements or components that are closely interred related and interact among themselves.
3. **Farm** is an area of land and its buildings which is used for growing crops and rearing animals.
4. Integration of farm enterprises for optimal utilization of available resources and bringing prosperity to the farmers is called as **Farming system.**
5. **Farming system** is a decision making tool and land use unit comprising the farm household, cropping and livestock systems that produce crops and animal products for consumption and sale.
6. **Farming system** is a resource management strategy to achieve economic and sustained agricultural production.
7. Integration of farm enterprises depends on many factors such as **Soil and climatic factors, availability of resources & economic factors.**
8. **Farming system** is a set of agricultural activities organized into functional unit for maintaining desirable level of biological diversity and ecological stability.
9. **Sustainability** is the objective of farming system.
10. **Sustainability** is the quality of being able to continue over a period of time.
11. Direct collection of farm products from non aerable lands is called as **Collective farming.**
12. The farming community cultivates the land for growing crops for obtaining maximum production per unit area is called as **Cultivation farming.**

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13. When farming is done on a small size of holding is called as **Small scale farming.**
14. **When farming is done on large scale with large amount of capital, labour and risk** is called as **Large scale farming.**
15. The farm in which 50% or more income is received from a single source is called as **Specialized farming.**
16. **Diversified** farming having several enterprises or sources of income but no sources of income equal as much as 50% of the total receipt.
17. Farming in which crop production is combined with raising of livestock is called as **Mixed farming.**
18. The livestock graze on the natural vegetation is called as **Ranching.**
19. The crops grown in region where annual rainfall is <750 mm is called as **Dry farming.**
20. More inputs are used to increase the production on same land is called as **Intensive** cultivation.
21. When more area is brought under cultivation to increase the income is called as **Extensive** cultivation.
22. In intensive cultivation **Land** is fixed only inputs are increased.
23. Farming without irrigation is referred as **Rainfed / Dry farming.**
24. Water is applied through external sources in addition to natural sources is called as **Irrigated farming.**
25. Rotational intensity of **Shifting cultivation** is **<33** %.
26. Rotational intensity of **Fallow farming** is **33-66** %.
27. Rotational intensity of **Permanent cultivation** is **>66** %.
28. Rotational intensity of **Multiple cropping** is **>100** %.
29. Grasses and legumes are utilized/grown for livestock production is called as **Ley system.**
30. **Commercialized farming** is a type of farming system where more than 50% produce is sold in market.

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31. In **Partly commercialized** farming system, more than 50% produce is left for home consumption.
32. **Subsistence farming** is a type of farming system in which no sale of crop and animal products.
33. **Plantation** farming is the farming where single cash crop is grown for sale.
34. **Total nomadism system** in which animal owners do not have permanent place of residence.
35. **Semi nomadism** in which animal owners have permanent place of residence.
36. **Transhumans** means seasonal migration of livestock to suitable grazing land.
37. **Partial nomadism** means owners have permanent place of residence and who have herds at their disposal, which remains in the vicinity.
38. **Stationary animal husbandry** occurs where the animals remain on the holding or in the village throughout the entire year.
39. Manual labour is used for the cultivation of crops is called as **Spade farming.**
40. Bullock power is used for the cultivation of crops is called as **Hoe farming.**
41. Power operated implements are used for the cultivation of crops is called as **Mechanized or Tractor farming.**
42. **Cropping** is an important component of farming system.
43. **Gir, Sahiwal & Sindhi** cows are high milk yielders, but the bullocks are of poor draft quality.
44. **Jersey, H.F & Brown Swiss** exotic cows breeds are high milk yielders.
45. **Goat** meat is preferred meat in the country.
46. A **goat** hoof fetches a better price than a **sheep** hoof.
47. **Goat** is called as poor man's cow.
48. The space requirement for a goat is **4.5** to **5.4** m^2.
49. Sheep is called as **Grazer** & Goat is called as **Brazer.**
50. **Pigs** are maintained for the production of pork.

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51. **Yorkshire & Landrace** are the imported breeds of pigs are being used widely in country.
52. **Poultry** is one of the fastest growing food industries in the world.
53. As per the nutritional recommendation the per capita eggs consumption is estimated at **180 eggs & 9 kg meat/year**.
54. Important Indian duck breeds are **Sylhet mete & Nageswari** are mostly found in the eastern region of the country.
55. Rearing of Honeybees is called as **Apiculture**.
56. ***Apis cerana*** is known as Indian bee & ***Apis mellifera*** is known as European bee.
57. Rearing of Fish (Fingerlings) is called as **Pisiculture/Aquaculture**.
58. **Grass carp** is called as fast growing exotic fish.
59. Cultivation of mulberry plants is called as **Moriculture**.
60. **Karnataka** is the major silk producing state in India
61. The average yield of mulberry leaves is **30-40 t/ha/year**.
62. The rearing of silk moths and their larvae for the production of silk is called as **Sericulture**.
63. **Mushroom** is called as edible fungus.
64. **Mushroom** is a vegetable that is a cultivated in protected farms in a highly sanitized atmosphere.
65. **Biogas** is a clean, unpolluted and cheap source of energy, which can be obtained by a simple mechanism and little investment.
66. Biogas contains **Methane & CO_2** gases.
67. Biogas generation is a complex **Bio-chemical process** in which cellulolytic material is broken down in **Methane** and **CO_2** by different group of micro-organism.
68. **Slurry** is obtained after the production of biogas.
69. The dry slurry contains about **1.8 % N, 1.10 % P** and **1.50% K.**
70. The maximum temperature required for the production of biogas is **30** to **35^{0}C.**

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71. Cultivation of agricultural crops + forest trees is called as **Agri-silviculture.**
72. A **Cropping system** refers to a set of crop systems, making up the cropping activities of a farm system.
73. **Cropping system** is the cropping patterns used on a farm and their interaction with farm resources, other farm enterprises and available technology which determine their make up.
74. The yearly sequence and spatial arrangement of crops on a given area is called as **Cropping pattern**
75. Growing number of crops on the same piece of land during the given period of time is called as **Intensive cropping**.
76. Growing of only one crop year after year on the same piece of land is called as **Mono cropping**.
77. **Mono cropping** increases incidence of pest & diseases.
78. Growing two or more crops on the same field in a year is called as **Multiple cropping system.**
79. Growing of any legume crop in cropping system, it increases **Soil fertility & crop yield.**
80. Growing two or more crops simultaneously on the same field with definite row pattern is called as **Intercropping**.
81. Growing two or more crops simultaneously where one or more crops are planted in rows is called as **Row intercropping**. Ex. Maize + greengram (1:1).
82. Growing two or more crops simultaneously in strips wide enough to permit independent cultivation but narrow enough for the crops to interact agronomically is called as **Strip intercropping**. Ex. Groundnut + Redgram (6:4) strip.
83. Growing two or more crops simultaneously on the same field with no distinct row arrangement is called as **Mixed cropping**.
84. Growing of two or more crops simultaneously during the part of the life cycle of each is called as **Relay cropping.**

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85. **Relay cropping** is a second crop is planted after the first crop has reached its reproductive stage of growth, but, before it is ready for harvest.
86. Food crops are grown in alley formed by hedge rows of trees or shrubs in arable lands is called as **Alley cropping.**
87. In **Alley cropping** system agricultural, horticultural or forage crops are cultivated.
88. Growing plants of different height in the same field at the same time is termed as **Multistoried (Multi-tier) cropping**.
89. **Multistoried cropping** is the practice of different crops of varying heights, rooting pattern and duration to cultivate together.
90. Growing two or more crops in sequence on the same field in a farming year is called as **Sequence cropping.**
91. Growing of two crops in a year in sequence is called as **Double cropping.**
92. Growing of three crops in a year in sequence is called as **Triple cropping.**
93. Growing of four crops in a year in sequence is called as **Quadruple cropping.**
94. The cultivation of crop re-growth after harvest is called as **Ratoon cropping / Ratooning.**
95. **Ratooning** reduces the cost of cultivation of sugarcane crop.
96. **Fallowing** means ploughed but left unseeded during a growing season.
97. When land is limited **Intensive cropping** is adapted to fully utilize available water and labour.
98. In low rainfall regions (<750 mm/annum), **Mono cropping** is followed.
99. When rainfall is more than 750 mm/annum, **Intercropping** is followed.
100. When rainfall is between 750-1150 mm/annum, **triple and quadruple cropping** is adopted.
101. **Multiple cropping index** is the ratio of total cropped area to the total land area available for cultivation (%).
102. **Cropping intensity (CI)** is the ratio of total cropped area to the net cultivable area multiplied by 100.

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103. It is calculated: **Total Cropped area / Net Cultivable area X 100.**
104. Cropping intensity is expressed in **Percentage (%)**.
105. **Rotational intensity (RI)** is the ratio of number of crops grown in a field to the years of rotation multiplied by 100.
106. It is calculated: **No. of crops grown in a field / Years of rotation X 100.**
107. **Gross returns=** Value of M.P. + Value of B.P.
108. **Cost of cultivation=** Total expenditure incurred
109. **Net returns=** Gross return - Cost of Cultivation
110. **B:C ratio=** Gross return / Cost of Cultivation
111. **Per day return=** Net returns / Cropping period (days)
112. **Sustainable** is a **Latin** (Sustinere) word, means to maintain.
113. **Sustainable agriculture** is also known as Eco farming/ Natural farming/ Organic farming/ Permaculture.
114. **Sustainable agriculture** is the form of agriculture aimed at meeting the needs of present generation without endangering the resource base of the future generation.
115. **Sustainable agriculture** is the successful management of resources for agriculture to satisfy the changing human needs, while maintaining the quality of environment and conserving natural resources.
116. Major goals of sustainable agriculture are **Environmental health, economic profitability** and **social and economic equity.**
117. In sustainable agriculture **non-renewable** resources are most efficiently used.
118. **Conservation agriculture** is a recent agricultural management system that is used in many parts of India.
119. **Conservation agriculture** is defined as minimum soil disturbance (no-till) and permanent soil cover (mulch) combined with crop rotations.
120. **Conservation agriculture** is a farming system that maintains a permanent soil cover, avoids soil tillage and cultivates diverse crops to

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improve soil condition, reduce land degradation and increase water and nutrient use efficiency.

121. Major principles of conservation agriculture are **No tillage, crop rotation & mulching.**
122. **Integrated Farming System (IFS)** is a set of agricultural activities organized into a functional unit to profitably harness the solar energy while preserving land productivity, environmental quality and maintaining the desirable level of biological diversity and ecological stability.
123. IFS started in **1960** at South-east Asia.
124. **IFS** is a integration of different agricultural allied enterprises with crop activity to reuse and recycle waste material of one component as input in the other linked component and to reduce the cost of production and enhance net income of farm.
125. **IFWMS** developed by Prof. Chan (Fiji).
126. IFWMS: **Integrated Food & Waste Management System.**
127. Efficient recycling of farm and animal waste is the main objective of **IFS.**
128. In **IFS** the combination of one or more enterprises gives greater income than single enterprises to small and marginal farmers.
129. Integrated Farming System is most beneficial to **Small** and **marginal farmers.**
130. Dry land cropping + Sheep/Goat + Tree/Grass fodder is an IFS model for **Dryland / Rainfed** situation.
131. IFS model for wet land situation is **Cropping + Fish + Poultry + Mushroom.**
132. Cropping + Cattle + Biogas plant + Mushroom is an IFS model for **Irrigated / Garden** situation.
133. **LEIA** means maximum utilization of local resources with less cost on external inputs for agriculture production.
134. LEIA: **Low External Input Agriculture.**

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135. **HEIA** means maximum use of external inputs and chemical fertilizers.
136. HEIA: **High External Input Agriculture**
137. **LEISA** is an integrated agriculture system consisting biodynamic, natural organic and regeneration subsystem.
138. LEISA: **Low External Input and Sustainable Agriculture.**
139. Reduction of purchased inputs and increase use of on-farm resources is called as **LEIA.**
140. **Organic farming** is the backbone of sustainable agriculture.
141. Energy required for carrying various operations from sowing to harvesting is called as **Direct energy.**
142. Energy used in manufacture, packaging and transport of fertilizers, pesticides and machinery is called as **Indirect energy.**
143. **IFS** perform better than conventional farming in respect to floral & faunal diversity.
144. **Efficiency** is an expression of obtainable output with the addition of unit amount of input.
145. **Resource use efficiency** includes the concepts of technical efficiency, allocative efficiency & economic efficiency.
146. **Technical efficiency** is the ability of a firm to produce output with minimum quantity of inputs under given technology.
147. **Allocative efficiency** measures the degree of success in achieving the best combination of different inputs in producing output under the relative prices of these inputs.
148. **Economic efficiency** is a product of technical & allocative efficiency.
149. **Agro-biodiversity** is the variety and variability of plants, animals & microorganisms.
150. First International Agro Biodiversity Congress 2016 is being held in **New Delhi**
151. **Mizoram** is called as bamboo state.

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152. **Silviculture** is the practice of controlling the establishment, growth, composition, health and quality of forests to meet diverse needs and values.
153. **India** is the second largest producer of silk in the world after China.
154. Suggest the best Allied Enterprise to the farmers, when the main crop grown is rice, **Fishery.**
155. Diversified Farming System is otherwise known as **IFS.**
156. Farming System is an **Individual & Holistic approach.**
157. The Directorate of cropping System research is located at **Modipuram Meerut, U.P.**
158. **Independent enterprise** included in farming system.
159. **Dependent enterprise** included in mixed system.
160. Pastoral farming is related to **rearing of animals**.

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Credits:-1(1+0) Semester: - IV (New)

Multiple Choice Questions

1. Crop mixture have proved biologically most dynamic under:

A. Water stress conditions
B. Irrigated condition
C. High soil fertility conditions
D. Large holding conditions

2. Crop production and animal husbandry collectively is known as:

A Mixed cropping
B Relay farming
C Mixed farming
D None of the above

3.Crop rotation is defined as a

A System of growing different kinds of crops on the same land
B System of growing different crop in succession on the same land
C A method of growing different crop
D System of growing the same crop on different fields

4. Cropping intensity is:

A The extent of the use of land for purposes other than cropping
B The extent of the use of land for cropping purposes during a given year
C Net cropped area
D Gross cropped area

5. Cropping intensity means:

A Percentage ratio of gross cropped area to net cropped area
B Percentage ratio of net-cropped area to gross cropped area
C Percentage ratio of the number of crops in rotation to period of one rotation
D Percentage ratio of gross cropped area to the net-cropped area

6. Cropping pattern is defined as:

A The proportion of area under different crops
B Growing different crops in a recurrent succession
C The proportion of area under different crops at a particular point of time
D A method of growing different crops

7. If farmer practices 'sugarcane-cotton-wheat' the cropping intensity at his farm will be:

A 100% B 150%

C 100% D 300%

8. Intercropping is a system of cropping to make the maximum use of:

A Solar energy B Water resources

C Soil resource D All above

9. What are the biological factors affecting farming system among the following?

A) Topography B) Livestock

C) Education D) Rainfall

10. Which of the following is not the objective of farming system?

A) Saving Energy B) Fodder Requirement

C) Input Use Efficiency D) Risk a version

11. *Avena fatua* comes under which factor of farming system?

A) Physical Factor B) Biological Factor

C) Chemical Factor D) Mechanical Factor

12. Suggest the best Allied Enterprise to the farmers, when the main crop grown is Rice.

A) Apiculture B) Sericulture

C) Fishery D) Biogas

13. Farming system is which kind of enterprise among the following?

A) Dependent Enterprise B) Independent Enterprise

C) Both A and B D) None of the Above

14. Mix Farming is which kind of enterprise among the following?

A) Dependent Enterprise B) Independent Enterprise

C) Both A and B D) None of the Above

15. Recycling of waste & residues is of Farming system.

A) Component B) Objective

C) Principle D) Advantage

16. Grazing of animals on public field is known as?

A) Dairy Farming B) Diversified Farming

C) Mix Farming D) Ranching Farming

17. Which of the following is/are the Socio Economic factors of Farming System?

A) Family Composition B) Education

C) Food Preference D) All the Above

18. The farm wastes are better recycled for productive purposes in which type of farming system?

A) Specialized Farming System
B) Integrated Farming System
C) Diversified Farming System
D) Both A and B

19. Olericulture refers to

A) Flower cultivation
B) Vegetable cultivation
C) Fish Rearing
D) Fruit cultivation

20. In context with Gender, Farming system is?

A) Sensitive
B) Insensitive
C) Unsusceptible
D) None of the Above

21. Farming System is a…

A) Atomistic approach
B) Individual approach
C) Holistic approach
D) Both B and C

22. In Diversified Farming, No source of income equal as much as ..... % in total income.

A) 25%
B) 50%
C) 75%
D) 35%

23. Specialized Farming System is aimed at.

A) Maximization of Production
B) Maximization of Time
C) Maximization of Area
D) All of the Above

24. IFS lead to

A) Low Benefit-Cost Ratio
B) High Benefit-Cost Ratio
C) Both A and B
D) None of the Above

25. Which of the following enterprises can be integrated in wetland ecosystem?

A) Poultry
B) Fisheries
C) Both A and B
D) None of the Above

26. Why Farming System is mainly recommended in India?

A) To increase productivity
B) 70% of India's population depends on agriculture
C) To increase income
D) Cheaper way of farming

27. Which of the following is not the component of IFS?

A) Olericulture
B) Specialized Farming
C) Fencing
D) Sericulture

28. Soil potentiality can be increased by

A) Inorganic Fertilizers
B) Organic
C) Intensified Irrigation
D) All of the above

29. Which objective favors Benefit-Cost ratio?
A) High Input use efficiency
B) Cash flow round the year
C) Profitability
D) Productivity

30. Biogas is composed of
A) Co2
B) Methane, Co2
C) Hydrogen, Fluorine
D) Methane, Co2, Hydrogen Sulphide

31. Conventional Source of Energy among the following..
A) Solar Energy
B) Wind Energy
C) Natural Gas
D) BOTH A and B

32. *Apis cerena* is better acclimatized to?
A) Plains
B) Lower Altitudes
C) Higher Altitudes
D) All the Above

33. Gir cow comes under which Breeder form?
A) Dual Breeder
B) Dairy Breeder
C) Buffalo
D) Draft Breeder

34. Which of the following falls under the category of Exotic Breed
A) Murrah
B) Jersey
C) Gir
D) Ongole Bull

35. The most recommended depth of pond for fish rearing is?
A) 1-2 mt
B) 1.5-2 mt
C) 3-4 mt
D) 5-6 mt

36. *Apis Mellifera* is otherwise known as…
A) Indian Bee
B) Italian Bee
C) Rock Bee
D) None of the Above

37. Temperature required for gas production in Biogas Plant?
A) 15 – 20 c
B) 20 – 25 c
C) 30 – 35 c
D) 40 – 45 c

38. Which type of Gas plant is constructed underground?
A) Fixed Dome type
B) Float Type
C) Either of them
D) none of these

39. 1st Biogas plant in the world was established in the year?
A) 1947
B) 1935
C) 1939
D) 1835

40. Primary Products of Biogas are?
A) Methane
B) Hydrogen
C) Hydrogen Sulphide
D) Both A and B

41. Phytoplankton stands as a necessary term in?
A) Sericulture
B) Fisheries
C) Apiculture
D) None of the Above

42. A farmer planted his 1 st crop CORN and prior to harvesting corn, He planted his 2 nd crop WHEAT. This Type of Cropping pattern is known as?
A) Sequential
B) Relay
C) Mix
D) Differential

43. A farmer planted his 1st crop Rice and after harvesting the crop, he introduced his2 nd crop POTATO in to the field. This Type of cropping pattern is known as?
A) Sequential
B) Relay
C) Mix
D) Differential

44. Which among the following enterprises provide constant income?
A) Poultry
B) Dairy
C) Fishery
D) Apiculture

45. Gas Generation is the function of?
A) Methane Availability
B) C02 Availability
C) Dung Availability
D) Slurry

46. Sugar rich compound present in flowers?
A) Honey
B) Nectar
C) Pollen
D) Pasturager

47. Gas production considerably high in which Season?
A) Winter
B) Summer
C) Autumn
D) Rainy

48. Which is the largest producer of Mulberry Silk?
A) India
B) China
C) Philippines
D) Srilanka

49. Which of the following conditions are adopted by Bees?
A) Smothering
B) Spawing
C) Swarming
D) Both A and C

50. Which of the following is a pasturager?
A) Sunhemp
B) Sunflower
C) Safflower
D) Potato

51. Which type of soil is highly recommended for fish rearing?

A) Sandy B) Silty

C) Clay D) Alluvial

52. Which of the following Allied Enterprise is an Emerging enterprise?

A) Dairy B) Fishery

C) Poultry D) Sheep and goat

53. Growing two or more crops on the same piece of land simultaneously with definite Row pattern is?

A) Relay Cropping B) Sequence Cropping

C) Intercropping D) Mix Cropping

54. Which type of treatment is done to Gobar to produce Fuel gas?

A) Aerobic Treatment B) Anaerobic Treatment

C) Both of them D) none of the above

55. The major reasons for Multiple Cropping are..

1. Weed Control 2. To control Soil Erosion 3. To maintain sustainability 4. To save water

A) ONLY 1, 2 CORRECT B) ONLY 1, 3 CORRECT

C) 1, 2, 3 CORRECT D) ALL ARE CORRECT

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Answer Key

Question No.	Ans
1	B
2	C
3	B
4	B
5	A
6	B
7	D
8	C
9	B
10	D
11	B
12	C
13	A
14	B
15	C
16	D
17	D
18	D
19	B
20	A
21	C
22	B
23	D
24	B
25	C

Question No.	Ans
26	B
27	D
28	B
29	A
30	D
31	D
32	C
33	B
34	B
35	B
36	B
37	C
38	A
39	C
40	A
41	B
42	B
43	A
44	B
45	C
46	B
47	B
48	B
49	C
50	B

Question No.	Ans
51	C
52	C
53	C
54	B
55	C