

# FARMING SYSTEM AND ORGANIC FARMING FOR SUSTAINABLE AGRICULTURE

## Multiple choice questions for the course Farming system and organic farming

1. Process of harnessing solar energy in the form of economic plant and animal product  
A) Farming B) Farming system C) cropping system D) none of the above
2. Farming type where entire production is used for family consumption  
A) Subsistence B) Intensive C) Extensive D) mixed farming
3. Farming type where entire production is to sell in market is  
A) Subsistence B) commercial C) Extensive D) mixed farming
4. Farming type which refers to the livestock production along with usual cultivated crops  
A) Subsistence B) commercial C) Extensive D) mixed farming
5. More area can be brought under cultivation to increase the output is called as .....cultivation  
A) Intensive B) extensive C) commercial D) none of the above
6. Farm in which no enterprise is contributing to 50% or more income is called as ..... farming  
A) Specialized B) Diversified C) mixed D) commercialized
7. Combination of crop with rearing of livestock where at least 10% of its gross income must be from livestock activity is called as .....farming  
A) Specialized B) Diversified C) mixed D) commercialized
8. It refers to farming system in which land under vegetation is cleared by slash and burn method is called as .....cultivation  
A) Shifting B) Taungya C) Zabo D) mixed
9. Farming in which linking together of two or more normally separate farming systems which become subsystem of a whole farming system is .....  
A) Specialized B) integrated farming C) Diversifies farming D) none of the above
10. Sustainable agriculture is derives from .....word  
A) Greek B) Latin C) Italic D) none of the above
11. Agriculture production system comprising a set of farming practices adapted to the requirements of crops, whose farming and soil management techniques protect the soil from erosion and degradation is called as .....

- A) Conservation agriculture B) degraded agriculture C) conventional agriculture D) intensive agriculture
12. Use of ex-situ FYM/Composts is used in .....
- A) Conservation agriculture B) degraded agriculture C) conventional agriculture D) intensive agriculture
13. HEIA stands for .....
14. LEISA stands for.....
15. Maintenance of diversity is possible in .....farming
- A) HEIA B) LEISA C) LEISA D) none of the above
16. The practice of growing different crops of varying height, rooting pattern and duration is called as.....
- A) multi-storied cropping B) multi-tier cropping C) both of the above D) None of the above
17. Which type of farming improves the soil fertility
- A) Dairy farming B) Mushroom C) vermicompost D) all of the above
18. Culture of honeybees and their management is called as .....
- A) apiculture B) sericulture C) Vermiculture D) none of the above
19. Practice of combining mulberry cultivation, silkworm rearing and silk reeling is called as ...
- A) apiculture B) sericulture C) Vermiculture D) none of the above
20. The gas is generated from the cow dung during anaerobic decomposition is called as.....
- A) Biogas B) methane gas C) CO<sub>2</sub> D) All the above
21. summing the products of land area to each crop, multiplied by the actual duration of that crop divided by the total cultivated land times 365 days is called as.....
- A) Cultivated Land Utilization Index B) resource use efficiency C) land utilization index D) none of the above
22. Energy output (MJ/ ha) / energy input (MJ/ ha) is called as
- A) Energy efficiency B) Energy productivity C) Energy intensity D) Net energy
23. Energy output (MJ/ ha) - energy input (MJ/ ha) is called as
- A) Energy efficiency B) Energy productivity C) Energy intensity D) Net energy
24. Ratio between marketable crop yield and water used by the crop in evapotranspiration.
- A) Crop WUE B) WUE C) Fertiliser use efficiency D) none of the above

25. Ability of a firm to produce a given level of output with minimum quantity of inputs under a given technology is called as  
A) Technical efficiency **B) Allocative efficiency** C) Economic efficiency D) environmental efficiency
26. Measure of the degree of success in achieving the best combination of different inputs in producing a specific level of output considering the relative prices of these inputs is called as  
A) Technical efficiency **B) Allocative efficiency** C) Economic efficiency D) environmental efficiency
27. Production system which avoids or largely excludes the use of synthetic compounded fertilizers, pesticides, growth regulators and livestock feed additives".  
A) Organic farming B) natural farming C) both of the above D) Nateuco Farming
28. IFOAM stands for  
A) International Federation of Organic Agriculture Movement  
B) Indian Federation of Organic Agriculture Movement  
C) International Federation of Organic Agri Movement  
D) Indian Federation of Organic Agri Movement
29. According to IFOAM organic farming is based on .....principles  
A) 3 B) 4 C) 5 D) 2
30. Organic Agriculture should be managed in a precautionary and responsible manner to protect the health and well-being of current and future generations and the environment comes under principle of .....  
A) Health B) care C) Fairness D) Ecology
31. Plant and animal wastes that are used as sources of plant nutrients which release nutrients after decomposition are called as.....  
A) Fertilizers B) Manures C) both of the above D) none of the above
32. Vermicompost is an example of .....  
A) Bulky organic manure B) concentrated organic manure C) fertilizers D) Biofertilizers
33. Oilcakes are examples of  
A) Bulky organic manure B) concentrated organic manure C) fertilizers D) Biofertilizers
34. Nutrient composition of .....contains 0.5% N, 0.2% P<sub>2</sub>O<sub>5</sub> and 0.5% K<sub>2</sub>O  
A) FYM B) Vermicompost C) sheep manure D) goat manure

35. Decomposed mixture of dung and urine of farm animals along with litter and left over material from roughages or fodder fed to the cattle is called as....  
A) FYM B) vermicompost C) sheep manure D) none of the above
36. ....method of collection of manure will be efficient  
A) Byre method B) dry earth C) both of the above D) None of the above
37. Most method of storage of manure in India is .....  
A) Pit method B) Heap method C) Covered pit method D) None of the above
38. Best method of storage of manure in India is .....  
A) Pit method B) Heap method C) Covered pit method D) None of the above
39. Movement of nutrients along with water during preparation and storage of manure is called as .....  
A) Leaching B) Volatilization C) runoff D) None of the above
40. Losses of nutrients in gaseous form is called as.....  
A) Leaching B) Volatilization C) runoff D) None of the above
41. Sheep and goats are allowed to stay overnight in the field and urine and fecal matter is added to the soil which is incorporated to a shallow depth is called as.....  
A) Penning B) Heaping C) Both of the above D) None of the above
42. A mass of rotted organic matter made from waste is called as.....  
A) FYM B) Compost C) Vermicompost D) Oilcakes
43. The compost made from farm waste like sugarcane trash, paddy straw, weeds and other plants and other waste is called as.....  
A) Farm compost B) Town compost C) Vermin compost D) None of the above
44. The compost made from town refuses like street sweepings and dustbin refuse is called as.....  
A) Farm compost B) Town compost C) Vermin compost D) None of the above
45. Nutrient composition of .....is 0.5% N, 0.15%  $P_2O_5$  and 0.5%  $K_2O$ .  
A) Farm compost B) Town compost C) vermicompost D) none of the above
46. Nutrient composition of .....is 1.4 % N, 1.0%  $P_2O_5$  and 1.4 %  $K_2O$ .  
A) Farm compost B) Town compost C) Vermicompost D) None of the above
47. In .....method of composting organic wastes are spread in the cattle shed to serve as bedding.  
A) Coimbatore B) Indore C) Bangalore D) NADEP

48. In ..... method of composting dry waste material are used  
A) Coimbatore B) Indore C) Bangalore D) NADEP
49. ....method is the use of earthworms for composting organic residues.  
A) Compost B) Vermicompost C) Farm compost D) None of the above
50. Liquid fertilizer collected over passage of water through a column of worms in action useful as foliar spray is called as.....  
A) Vermicompost B) Vermiwash C) manures D) none of the above
51. Practice of ploughing in the green plant tissues grown in the field and incorporating them into the soil for is improving the physical structure as well as fertility of the soil is called as.....  
A) Green manuring B) Green leaf manuring C) Both of the above D) none of the above
52. Adding green plants with tender twigs or leaves from outside and incorporating them into the soil for is improving the physical structure as well as fertility of the soil is called as.....  
A) Green manuring B) Green leaf manuring C) Both of the above D) none of the above
53. Stage in which green manuring crop should be incorporated  
A) 50% flowering stage B) Maturity stage C) Seedling stage D) none of the above
54. C:N ratio for green manuring crops should be .....  
A) Low B) high C) both of the above D) none of the above
55. ....defined as preparations containing living cells or latent cells of efficient strains of microorganisms that help crop plants' uptake of nutrients by their interactions in the rhizosphere when applied through seed or soil.  
A) Biofertilizers B) vermicompost C) Vermiwash D) none of the above
56. Example of free living Nitrogen biofertilizers is  
A) Azotobacter B) Rhizobium C) Azospirillum D) Glomus
57. Example of symbiotic Nitrogen biofertilizers is  
A) Azotobacter B) Rhizobium C) Azospirillum D) Glomus
58. Example of associative symbiotic biofertilizers is  
A) Azotobacter B) Rhizobium C) Azospirillum D) Glomus
59. In leguminous crops .....biofertilizer is used  
A) Azotobacter B) Rhizobium C) Azospirillum D) Glomus
60. ....is a free-floating water fern that floats in water and fixes atmospheric nitrogen in association with nitrogen fixing blue green alga.

- A) Azolla B) Azotobacter C) Rhizobium D) azospirillum
61. Azolla is mostly used in which crop  
A) Sugarcane B) rice C) wheat D) sorghum
62. Reducing or removing crop residues and alternate host sites can be used to control some insects and many diseases is called as.....  
A) Field Sanitation B) Crop Residue Management C) both of the above D) none of the above
63. Growing of two or more crops in the same field with definite spacing at a time is called as.....  
A) Intercropping B) mixed cropping C) row cropping D) none of the above
64. Labour-intensive practice of walking the fields to remove diseased or insect-infested plants is called as.....  
A) Rouging B) Monitoring C) inspection D) None of the above
65. Neem oil and pheromone traps are .....in organic farming.  
A) Restricted B) Permitted C) none of the above D) not decided
66. Chloride of lime and copper salts are .....in organic farming.  
A) Restricted B) Permitted C) none of the above D) not decided
67. Crops which grow densely and completely cover the ground are called as.....  
A) Cover crops B) Nurse crops C) mulch crops D) none of the above
68. Systematic collection of weed and crop data from the field is called as.....  
A) Field scouting B) Roughing C) inspection D) none of the above
69. Covering the soil surface can prevent weed seed germination by blocking light transmission preventing seed germination is called as.....  
A) mulching B) roughing C) cover crops D) none of the above
70. Irrigating the field with water just before sowing is called as.....  
A) Stale seed bed B) Irrigation C) Flooding D) none of the above
71. Rupturing plant cells when the sap rapidly expands in the cells occurs in .....  
A) Flamers B) soil solarization C) Infra red weeders D) none of the above
72. Liquid nitrogen and solid carbondioxide (dry ice) can be used for .....  
A) Flamers B) soil solarization C) Freezing D) None of the above
73. ....is the direct or indirect chemical effect of one plant on the germination, growth or development of neighboring plants.  
A) Allelopathy B) inoculation C) soil solarization D) None of the above
74. *Bactra verutana* is used as bioagent in which crop  
A) *Cyperus rotundus* B) *Parthenism hysterothorus* C) *Ludwigia parviflora* D) *Opuntia dilleni*
75. *Zygrogramma bicolarata* is used as bioagent in which crop  
A) *Cyperus rotundus* B) *Parthenism hysterothorus* C) *Ludwigia parviflora* D) *Opuntia dilleni*
76. *Dactylopius tomentosus* is used as bioagent in which crop

A) *Cyperus rotundus* B) *Parthenism hysterothorus* C) *Ludwigia parviflora* D) *Opuntia dilleni*

77. Trade name of devine is .....

A) *Phyophthora palmivora* B) *Colletotrichum gleosporoides* C) *Biopolaris sorghicola* D) *Streptomyces hygroscopius*

78. Trade name of *collego* is .....

A) *Phyophthora palmivora* B) *Colletotrichum gleosporoides* C) *Biopolaris sorghicola* D) *Streptomyces hygroscopius*

79. Trade name of *bipolaris* is .....

A) *Phyophthora palmivora* B) *Colletotrichum gleosporoides* C) *Biopolaris sorghicola* D) *Streptomyces hygroscopius*

### ***Fill in the blanks***

1. Examples of Draft breeds of cow = Nagore, Hallikar, Kngeyam, Mali
2. Examples of Dairy breeds of cow = Sahiwal, Sindhi, Gir
3. Examples of Dual purpose breeds of cow = Haryana, Ongole and Kankrej
4. Examples of Exotic breeds of cow = Jersey, Holstein-Fresian, Aryshire, Brown swiss and Guernsey
5. Examples of Dairy breeds of buffalo = Murrah, Nili Rvi, Mehsana, Sati, Godavari, Zaffarbadi, Bhadawari
6. Recommended space requirement for cow = 12-18 m<sup>2</sup>
7. Recommended space requirement for buffalo = 12-15 m<sup>2</sup>
8. Gestation period of cow = 280 days
9. Best time to serve a cow = last stage of heat
10. Lactation period for cow = 9-10 months
11. Lactation period for buffalo = 7-9 months
12. She buffalo comes to heat every= 21-23 days
13. Gestation period of buffalo = 310 days
14. The space requirement for goat = 4.5-5.4 m<sup>2</sup>
15. Gestation period of goat = 145-155 days
16. Goat matures in = 6-7 months
17. Number of kits are given birth at a time = 1-3
18. Mother is allowed for mating after = 45-60 days
19. Optimum time of service in sheep = end of heat period
20. Gestation period in sheep = 142-152 days
21. Ram will be in full vigour = 2.5-5 years
22. Popular sheep breeds of temperate Himalayan region= Gurez, Karanah, Bhakarwal, Gaddi
23. Popular sheep breeds of dry western region = Lohi, Bikaneri, Kutchi, Kathiawari
24. Popular sheep breeds of southern region = Deccani, Nellore, Bellary, Mandya, Bandar

25. Meat of pigs is called = Pork
26. Number of piglets farrowed by pig at a time= 10-12
27. Popular breeds of pigs = White Yorkshire and Land race
28. Sows are weaned after= 40 days
29. Gestation period of pig = 114 days
30. Normal time of farrowing in pigs = 1.5-4 hours
31. Global per capita egg consumption per year = 120 eggs
32. Per capita egg consumption per year in India = 32-33 eggs
33. Recommended meat and egg per capita per year = 9 kg meat and 180 eggs per year
34. Floor area required for light bird = 0.2 m<sup>2</sup>
35. Floor area required for heavy bird = 0.3-0.4 m<sup>2</sup>
36. Percentage of expenditure spent on feed of poultry = 60-70%
37. Total duration of rearing a broiler= 6 weeks (1-1.5 kg body weight)
38. Total duration of rearing a layer=upto 1.5 years
39. Number of eggs produced by duck per year = 130-140 eggs
40. Incubation period for ducks = 28 days
41. Popular duck breeds for egg laying = Khaki Campbell and Indian runner
42. Popular duck breeds for meat = White pekin, Muscovy and Aylesbury
43. Rearing of honey bees is called = Apiculture
44. Two popularly reared honey bees in India = *Apis cerana indica* and *A. mellifera*
45. European honey bee = *Apis mellifera*
46. Calories in honey = 3500 calories per kg
47. Stocking density of composite fish culture = 5000-7500 fingerlings per hectare
48. Depth of pond for raising fish =1.5- 2 meter
49. Range of dissolved oxygen in fish pond = 5-7 ppm
50. Important species of fish = Catla Catla, *Labeo rohita*, *Labeo calbasu*, Silver carp, grass carp
51. Cultivation of mulberry is also called= moriculture
52. Types of silkworm = Mulberry silk worm (*Bombyx mori*); Eri silk worm (*Philosoma ricini*); Tasar silk worm (*Antheraca mylina*) and Muga silk worm (*Antheraca assami*)
53. Three types of mushroom popular in India= Oyster(*Pleurotus spp.*), Paddy straw (*Volvariella volvaceae*) and white button (*Agaricus bisporus*)
54. Mushrooms are rich source of = Vitamin B and Vitamin C
55. Yield from one bag of oystermushroom = 0.5-1 kg/bag
56. Optimum temperature for oyster = 22-28° C
57. Time of soaking for oyster mushroom= 4-6 hours
58. Length of straw in oyster mushroom should be = 3-5 cm
59. Yield from one bag of paddy straw mushroom = 1-1.5 kg/bag
60. Optimum temperature for paddy straw mushroom = 30-35° C
61. Time of soaking for paddy straw mushroom= 12 hours
62. Length of straw for paddy straw mushroom should be = 60-90 cm
63. Optimum temperature and RH for button mushroom=22-25°C and 90-95%
64. Yield of button mushroom = 6-7 kg/m<sup>2</sup>



65. Cropping duration of button mushroom = 60-75 days
66. Agri-silviculture = Crops+trees
67. Agri-horticulture = Crops + fruit trees
68. Silvi-pasture = Trees+pasture+animals
69. Agri-horti-silviculture = crops+fruit trees + multi purpose trees (MPT) +pasture
70. Agri-silvi-pasture= crops+ trees +pasture
71. Silvi-apiculture = trees + honey bees
72. Two main designs of a biogas plant = Float dome type and Fixed dome type
73. Float dome shaped = KVIC vertical and horizontal, pragati model, ganesh model
74. Fixed dome type = Janata and Deen-Bandhu
75. 1cc capacity plant requires = 2-3 animals and 25 kg dung
76. 2m<sup>3</sup> plant is sufficient to meet the needs of = 6-10 members
77. Gas production is maximum at = 30-35°C
78. Slurry produced after production of biogas = Bio-gas slurry
79. The conversion of crop yield into one form to compare the crops in mixed/ inter sequentially cropped is called= Crop equivalent yield
80. The relative land area under sole crop that is required to produce the yields achieved in inter-cropping = Land Equivalent Ratio (LER)
81. If LER is more than 1.0 it means intercropping is = profitable
82. If LER is less than 1.0 it means that the intercropping is = not profitable
83. Relative crowding co-efficient is less than one=less yield
84. Relative crowding co-efficient is more than one = More yield
85. Relative crowding co-efficient assumes mixture treatments from = Replacement series
86. It assumes that mixture from a replacement series and it gives a simple measure how much the relative yield increases in species a is greater than that for species b is known as = Aggressivity
87. A cropping system in which the same crop is grown year after year in the same field = Monocropping
88. Taking two crops in a year in year from same piece of land is called = double cropping
89. Growing two or more crops consecutively on the same field in the same year is called = multiple cropping
90. Crop sown broadcasted in the standing crop of lowland rice before its harvest where the residual moisture is used for the establishment of sown crop is called = Paira/utera cropping
91. For getting 10% advantage the LER should be = 1.10
92. For getting 20 % advantage the LER should be = 1.20
93. Rice-Rice-Rice rotation indicates=Monoculture
94. Growing of coconut, blackpepper and ginger simultaneously in the same field is called = Multistoried cropping
95. It is farming enterprise which provides food and commodities just sufficient to farming family and there is no surplus to sell = Subsistence farming

96. A crop which is grown under certain problematic condition when no other crop can be grown as floating rice in flood prone areas is called = Subsistence crop
97. Growing two and more crops in different strips simultaneously wide enough to permit independent cultivation but narrow enough for crop to interact agronomically is called = Strip intercropping
98. The type farming aiming at maximum output per unit area = Intensive farming
99. The type of farming aiming at maximum output from large patches = Extensive farming
100. It refers to livestock production along with usually cultivated crops = Mixed Farming
101. Land holding in India to get qualified for large scale farming is = 40-50 ha
102. Farm in which 50% or more income of total crop production is derived from a single crop is called = specialised farming
103. Growing of field crops in rotation with grasses and fodder legumes is called = Lay farming
104. Farming in which more than 50% of produce is for sale = commercial farming
105. Farming in which more than 50% of produce is for home consumption = partly commercial farming
106. Farming in which there is no sale of crop or animal product and 100% produce if for home consumption is called = Subsistence farming