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Registration number:

**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU-27**

**OPEN ELECTIVE - I SEMESTER**

**SEMESTER EXAMINATION: OCTOBER 2021**

**ES OE1 – Environment and Sustainable Agriculture**

**TIME: 2 HOURS MAX MARKS: 60**

**This question paper comprises of 60 questions**

**Each question carries of 1 mark**

1. India has \_\_\_\_\_ number of agro-climatic zones
2. 10
3. 12
4. 15
5. 20
6. The word ‘Environment’ derived from
   1. French word ‘Environner’ or “Environia’
   2. Greek word ‘Environ’
   3. Arabic word ‘Envi’
   4. Latin word ‘Envies’
7. Soil factor that does not affect the crops is
   1. Soil moisture
   2. Soil air
   3. Soil colour
   4. Soil organic matter
8. Rice is largely a
   1. Kharif crop
   2. Rabi crop
   3. Zaid crop
   4. Commercial crop
9. Cropping system in which succeeding crop (next crop) is sown or planted when the first crop (preceding crop) has reached its physiological maturity stage is
   1. Alley cropping
   2. Relay cropping
   3. Alley cropping
   4. Sequential cropping
10. Prohibition of piggery for Muslims, growing tobacco by Sikhs etc are considered as \_\_\_\_ barriers in agriculture
    1. Religious
    2. Cultural
    3. Traditional
    4. Administration
11. Action that can be a threat to food security is
    1. Keeping buffer stock of food grains
    2. Adoption of public distribution system
    3. Growing indigenous crops
    4. Population control
12. The technique of growing crops under the solar panel is called as
    1. Agri-voltaic
    2. Agri-electric
    3. Energy plantation
    4. Electro-ponics
13. To recognise an area under Dryland farming the rainfall of an area has to be
    1. Less than 750 mm annually
    2. Between 750-1150 mm annually
    3. More than 1150 mm annually
    4. More than 1000 mm annually
14. Identify the ground water resource
    1. Borewell
    2. Tank
    3. Pond
    4. Reservoir
15. Pick the crop variety that is sensitive to water scarcity
    1. Millets
    2. Cotton
    3. Maize
    4. Vegetables
16. If you are a farmer and want to draw water through tube well, the factor that does not affect your decision is
    1. Free electricity
    2. Quality of water
    3. Depth of water
    4. Quantity of water available
17. Advantage of conventional farming is
    1. Not using insecticides and pesticides
    2. Higher cost of production
    3. Less cost and high gains
    4. Least health hazard and environmental affect
18. Minimum Support Price is announced by the government is to provide:
    1. Incentives to farmers
    2. incentives to middlemen
    3. incentives to government officials
    4. none of the above
19. The organic farming is based on the ……………………………
    1. Ecological orientation
    2. Economical orientation
    3. Pesticide
    4. Herbicide
20. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ showers are preferred coffee plantations.
21. Mango showers
22. Blossom Showers
23. Orange Showers
24. None of the above
25. If you have a small land holding, less capital and are located in a remote location, the agriculture practice you would adopt to support your family would be\_\_\_\_\_\_\_\_\_\_\_\_\_.
    1. Commercial agriculture
    2. Extensive agriculture
    3. Extensive agriculture
    4. Subsistence farming
26. **Prof. Verghese Kuerin is known for\_\_\_\_\_\_\_ in India**
    1. White revolution
    2. Green revolution
    3. Blue revolution
    4. Silver revolution
27. Select one of the following practices that does not include rearing of fishes.
    1. Pisciculture
    2. Aquaculture
    3. Aquaponics
    4. Hydroponics
28. If you are assigned to look after a farm that has problem of soil erosion, less market demand for a crop, low input cost, then, the method of agriculture you would adopt is
    1. Monoculture
    2. Polyculture
    3. Intensive agriculture
    4. Commercial agriculture
29. Green revolution involves
    1. Managing farm biodiversity
    2. Use of organic fertilizers
    3. Growing only one crop per year
    4. Use of High yielding varieties
30. The disadvantage of transboundary crop is that it
    1. may not have native pests and pollinators
    2. can become weed over a period of time
    3. can have good growth and development
    4. can help in increasing economic exchequer
31. Golden rice is a best example of biofortification of
    1. Vitamin A
    2. Vitamin B complex
    3. Vitamin C
    4. Vitamin K
32. The Bt- *Bacillus thuringiensis* is a bacteria obtained from
    1. Air
    2. Soil
    3. Water
    4. Animals
33. Following is the not a technique of obtaining GMO crops
    1. Transgenic
    2. Cisgenic
    3. Sub-genic
    4. Con-genic
34. Fallow land is a
    1. Cultivated land
    2. Field left uncultivated
    3. Land for sale
    4. Land converted from forest to agriculture
35. Mulching helps to
    1. Conserve soil moisture
    2. Safeguard nutrients
    3. Safeguard soil microflora
    4. Conserve soil erosion
36. Full Form of APMC
    1. Agricultural Produce Market Committee
    2. Asia Products Marketing Committee
    3. Agricultural Products Manufacturing Committee
    4. Agricultural Products Market Corporation
37. Climate-Smart Agriculture (CSA) is an integrated approach towards mitigating the effects of climate change and to ensure\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
    1. World Peace
    2. Global Food Security
    3. Forest Conservation
    4. Agronomic Stability
38. The disadvantage of crop burning is
39. it is cheap
40. it removes pests
41. it reduces soil organic matter
42. it is quick
43. \_\_\_\_\_\_\_\_\_\_\_\_\_number of agricultural policies were implemented under Farm bill 2020 in India.
44. 4
45. 3
46. 2
47. 1
48. Crop diversity loss threatens \_\_\_\_\_\_
    1. Global food security
    2. Life
    3. Population
    4. Agriculture
49. The full form of GMO is
    1. Generally Modified Organism
    2. Genomically Modified Organism
    3. Genetically Modified Organism
    4. None of the above
50. In a pisciculture area you are likely to experience \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
    1. Water pollution and foul smell
    2. Costly and bad quality fish
    3. Poor income of farmers
    4. Easy access of fish ponds
51. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a greenhouse gas
    1. Helium
    2. Oxygen
    3. Hydrogen
    4. Nitrous Oxide
52. Consider the following statements on MSP.

1) MSP has no relation with cost of cultivation

2) It covers all the crops grown in India

3) Market price of an agriculture produce can fall below MSP

4) Rice is the highest procured crop under MSP in volume

Pick the right statements.

* 1. 1 & 4
  2. 2 & 3
  3. 3 & 4
  4. 1, 2, 3 & 4

1. Bad example for Ratoon cropping is
   1. Sugarcane
   2. Hybrid Jowar
   3. Red gram
   4. Wheat
2. One of the following is not a cause of desertification
   1. Deforestation
   2. Overgrazing
   3. Droughts
   4. Organic farming
3. Categorisation of farmers such as Large, Marginal, Small etc is based on
   1. Size of land holding
   2. Total income earned in a year
   3. Quantity of farm out put
   4. Number of people working in the farm
4. Agriculture is not well recognised as
   1. An art
   2. Science
   3. Business
   4. Social service
5. This is not a possible adverse effect of global warming
   1. Sea level rise
   2. An increase of UVB radiation
   3. Retreat of glaciers
   4. Extraordinary weather patterns
6. Pick the wrong statement
7. A poor soil can contribute to global warming by releasing stored CO2
8. On an average, it takes 2000 years to form top 10cm of fertile soil
9. Soil is by concept non-renewable resource
10. Degraded soil does not affect the quantity of yield
11. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_is the gradual accumulation of substances, such as pesticides or other chemicals, in an organism.
    1. Bioaccumulation
    2. Biomagnification
    3. Biofortification
    4. Biopesticide
12. The present concentration of CO2 in atmosphere is approximately
    1. 350 ppm
    2. 400 ppm
    3. 450 ppm
    4. 500 ppm
13. State with highest farmer suicide is \_\_\_\_\_\_\_\_\_\_\_\_\_.
    1. Maharashtra
    2. Karnataka
    3. Uttar Pradesh
    4. Madhya Pradesh
14. LD50 refers to the condition when
    1. An organism stops growing
    2. Half of the body of an organism actually dies
    3. Half of the experimental population dies
    4. No experimental organism dies
15. When a population grows past the carrying capacity of the ecosystem
    1. The population is not affected
    2. The population reduces to stabilise at the carrying capacity
    3. Population completely dies
    4. The carrying capacity increases exponentially with growing population
16. Excess oestrogen/estrogen hormone is found in
    1. Poultry chicken and eggs
    2. Sheep and goat meat
    3. Fishes and shells
    4. Beef
17. The best way to increase the shelf life of imported individual apples is to cover them with
    1. Plastic coat
    2. Paraffin wax
    3. Recycled paper
    4. Wooden box
18. Ecological footprint refers to the
    1. Impact of a person on overall population
    2. Impact of the activities of a person on the environment
    3. Impact of a person towards erosion
    4. Number of children that a women can have in her lifespan
19. Cultivation of \_\_\_\_\_\_\_\_\_\_\_\_\_ promotes conservation of water.
    1. Rice
    2. Wheat
    3. Ragi
    4. Vegetables
20. The chemical used to ripen fruits artificially is
21. Calcium carbide
22. Calcium carbonate
23. Sodium carbide
24. Sodium chloride
25. The day ZERO was experienced in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
26. Mozambique, East Africa
27. Cape Town, South Africa
28. Burkina Faso, West Africa
29. Tunis, North Africa
30. Agent orange was used as\_\_\_\_\_\_\_\_\_\_\_\_
31. Herbicide
32. Pesticide
33. Poison
34. Medicine
35. Any area with a common drain is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
    1. Command area
    2. Catchment area
    3. Watershed
    4. Farm area
36. \_\_\_\_\_\_\_\_\_\_\_\_\_is not native to India.
    1. Chickpea
    2. Eggplant
    3. Mango
    4. Chilly
37. Typical characteristic of an exotic cow breed is
    1. Flat back with no hump
    2. Small body
    3. Distinct and large horns
    4. Resistant to diseases
38. The minimum support price (MSP) is recommended by
39. Commission for Agricultural Costs and Prices
40. NABARD
41. Ministry Agriculture and Farmer Welfare
42. Food Corporation of India
43. Indian Long Term Ecological Observatories (I-LTEO) is set up by
    1. Ministry of Environment, Forests and Climate Change
    2. Department of Agriculture and Farmers Welfare
    3. NABARD
    4. NITI Aayog
44. One of the following is not an Element of the Environment
    1. Physical
    2. Biological
    3. Chemical
    4. Cultural