THIRUVALLUVAR UNIVERSITY
PERIYAR ARTS COLLEGE- CUDDALORE
P.G. and Research DEPARTMENT OF ZOOLOGY
II B.Sc. Botany ODD Semester
Non-Major Vermiculture BNZO 33A

Answer ALL the Questions

1. What is vermicomposting?
   a) Composting using rats
   b) Composting using birds
   c) Composting using worms
   d) Composting using microbes
2. Worm castings are rich in
   (a) Nitrogen
   (b) Phosphorus
   (c) Calcium and others
   (d) All the above
3. Some commonly used earth worm species
   (a) Eisenia fetida
   (b) Perionix excavatus
   (c) both (a) and (b) are correct
   (d) neither (a) nor (b) is correct
4. Degradation of organic wastes by using earth worms is called
   (a) Vermicomposting
   (b) Compost bedding
   (c) Humus
   (d) none of the above
5. The vermicompost is ____ in colour.
   (a) red
   (b) black
   (c) white
   (d) brown
6. One of the following is not a benefit of vermicompost
   (a) Protection of water bodies from pollution
   (b) Reduction in microbial activity
   (c) increased availability of minerals
   (d) increased hydration and aeration

7. pH of vermiculture is kept at
   (a) Near neutral
   (b) Alkaline
   (c) Acidic
   (d) Highly alkaline.
8. The chemical used for providing protection to vermibed from ants is
   (a) Chloramphenicol
   (b) Griseofulvin
   (c) Chlorpyrio phosphate
   (d) DDT
9. The highly degraded organic matter rich in phosphorus, nitrogen and potassium in particular, resulting from the activity of earthworms is called
   (a) Compost bedding
   (b) Humus
   (c) Worm casting
   (d) Vermicompost
10. _____ is employed for rearing of earthworms
   (a) Bamboo tray
   (b) Apiary
   (c) Vermibox
   (d) Poultry farm
11. Earthworms which are seen on the surface are called
   (a) Epigeic (epigenic)
   (b) Endogeic (endogenic)
   (c) Annecic
   (d) Hygienic
12. The colour of body of earthworm is brown, due to presence of
   (a) Blood
   (b) Haemoglobin
   (c) Haemocyanin
   (d) Porphyrin
13. Salivary gland in earthworm is found in
   (a) Pharyngeal wall
   (b) Ventral wall of buccal cavity
   (c) Dorsal wall of buccal cavity
   (d) None of the above
14. Earthworm has no skeleton, but during burrowing the anterior end becomes turgid and act as a hydraulic skeleton due to
   (a) Satae

(b) Gut peristalsis
(c) Setae
(d) Coelomic fluid

15. Body of earthworm is divided in to how many similar segments which are called metameres or somites
(a) 60 – 120
(b) 100 – 120
(c) 120 – 150
(d) 130 and more

16. Spermatheca in earthworm is
(a) For storage of sperms obtained from male earthworm during copulation and used in future
(b) Sperm production
(c) For both A and B
(d) None of the above

17. Earthworms are hermaphrodite and reproduce primarily by
(a) Self fertilization
(b) Cross fertilization
(c) Asexually
(d) None of the above

18. In earthworm gizzard is found in
(a) 8^{th} segment
(b) 10^{th} segment
(c) 13^{th} segment
(d) 12^{th} segment

19. Which of the following nephridia are not found in earthworm
(a) Macro nephridia
(b) Septal nephridia
(c) Pharyngeal nephridia
(d) Integumentary nephridia

20. Which one of the following species of earthworm is not recommended for vermicomposting
(a) Eudrilus eugeniae
(b) Eisenia foetida
(c) Pherituma posthuma
(d) Perionyx excavates

21. How much worms can eat a day
(a) Half of their body weight
(b) Equal to their body weight
(c) Double to their body weight

(d) Triple to their body weight

22. What type of worms are best for vermicomposting
    (a) Black
    (b) Blue
    (c) Red
    (d) None of the above
23. How long will it take for your worm population to double
    (a) 30 days
    (b) 50 days
    (c) 60 days
    (d) 90 days
24. Why do you need to weigh your worms before putting them in to compost bin
    (a) To know how much to feed them
    (b) To know how many there are
    (c) To see how much weight they are
    (d) None of the above

25. What is the ratio of male and female worms required for effective worm reproduction?
    (a) 1 male and 1 female
    (b) 1 male and 2 female
    (c) It doesn't matter
    (d) 2 male and 1 female
26. How can you tell if a worm is sexually mature?
    (a) Their skin starts to shed
    (b) They get dark, red bands around their neck
    (c) The end of their body swells
    (d) None of the above
27. What type of bin is best for vermicomposting
    (a) Wooden
    (b) Plastic
    (c) Nylon
    (d) Fibre
28. What are worms afraid of
    (a) Noise
    (b) Light
    (c) Water
    (d) None of the above
29. What can be used for the bedding of a vermicomposting bin

(a) Egg shell
(b) Food
(c) Shredded paper
(d) None of the above

30. How do worms breathe
(a) Through their skin
(b) Through their lungs
(c) Through their mouth
(d) None of the above

31. The digestive system of worms is similar to that of
(a) Monkey
(b) Human
(c) Birds
(d) Fish

32. Which of the foods are bad for worms
(a) Orange
(b) Rice
(c) Potato
(d) None of the above

33. What does it mean if your compost bin begins to smell
(a) Too much bedding and not enough soil
(b) Feeding the worms too much
(c) Too many worms in the bin
(d) None of the above

34. What does it mean if you see tiny white sacks in the compost bin
(a) There are maggots in the bin
(b) The food is rotting in the bin
(c) There are worm egg sacks or young ones
(d) None of the above

35. With reference to vermicomposting what is black gold?
(a) Vermin wash
(b) Worm oil
(c) Worm cast
(d) Black worm

36. How can you separate the vermicast from the rest of the compost
(a) Feed the worms on one side of the bin for a week
(b) Take all the bin contents out and shift it
(c) Allow the cast to fall through the holes
(d) None of the above

37. In pit method minimum how many earthworms are required for 1 square meter
    (a) 2000-2500 worms
    (b) 3000-4000 worms
    (c) 100-200 worms
    (d) 500-700 worms
38. How many gram of earthworms are need to digest the 1 kg of organic waste
    (a) 25 – 50 gm
    (b) 125 – 150 gm
    (c) 400 – 500 gm
    (d) 500 – 600 gm
39. Worms are very sensitive to salts, preferring salt content less than
    (a) 1 %
    (b) 0.5 %
    (c) 2 %
    (d) None of the above
40. Earthworms are commonly called as
    (a) Saprophages
    (b) Detritivores
    (c) Geophages
    (d) All the above
41. Lumbricus terrestris belongs to
    (a) Epigeic
    (b) Endogeic
    (c) Anecic
    (d) None of the above
42. An earthworm contains …….percentage of water in its body
    (a) 75 – 90%
    (b) 60 – 75%
    (c) 50 – 60%
    (d) 40 – 50%
43. The composting material should be
    (a) Acidic
    (b) Alkalinity
    (c) Neither acidic nor alkalinity
    (d) None of the above
44. What is the optimum temperature required for vermicomposting
    (a) 27° ± 2 °C
    (b) 30 ° ± 2 °C

(c) 32 º ± 2 ºC
(d) 35 º ± 2 ºC

45. Earthworms does not like the leaf litters of
(a) Mango leaf
(b) Teak leaf
(c) Eucalyptus leaf
(d) All the three

46. Which of the following are the enemies of earthworm
(a) Ant
(b) Termite
(c) Rat
(d) All the three

47. NABARD stands for
(a) National Bank for Agriculture and Rural Development
(b) National Bank for rural development
(c) National bureau for agriculture and rural development
(d) National bureau of agricultural research development

48. IRDA stands for
(a) Industrial research and development authority
(b) Insurance regulatory and development authority
(c) Indian research and development authority
(d) None of the above

49. Vermicompost is an
(a) Inorganic fertilizer
(b) Synthetic fertilizer
(c) Organic biofertilizer
(d) Toxic substances

50. Earthworm is placed in
(a) Arthropoda
(b) Polychaeta
(c) Oligochaeta
(d) Tunicates

51. Segment of earthworm bearing mouth is
(a) Prostomium
(b) Peristomium
(c) Clitellar
(d) Deustrostomium

52. What is typhlosole of earthworm
(a) Defence organ
(b) Excretory organ

(c) A part of circulatory system
(d) A fold of the intestine

53. The most common earthworm of india is
(a) Eisenia foetida
(b) Pheretima posthuma
(c) Eudrilus eugeniae
(d) None of the above

54. What are the common names for the vermicomposting worm Eisenia foetida
(a) Tiger worm
(b) Red worm
(c) American worm
(d) All the three

55. How many young ones can an earthworm produces in an year
(a) 100 to 200 worms
(b) 10 to 20 worms
(c) 20 to 40 worms
(d) 5 to 10 worms

56. How many cocoons can an earthworm produces in an year
(a) 1 to 2 cocoons
(b) 2 to 3 cocoons
(c) 3 to 80 cocoons
(d) None of the above

57. How many types of vermicomposting
(a) 5
(b) 3
(c) 7
(d) 8

58. How many months does it takes to vermicompost
(a) One to six months
(b) Two to four months
(c) Three to nine months
(d) Three to six months

59. Which soil is best for vermicompost
(a) Loamy soil
(b) Chalky soil
(c) Plain soil
(d) None of the above

60. What is the pH of vermicompost
(a) 1 to 5

(b) 5 to 9
(c) 6 to 7
(d) 6 to 9

61. What is the colour of vermicompost
(a) Brown colour
(b) Black colour
(c) Red colour
(d) Blue colour

62. How many years do worms live
(a) One year
(b) Two year
(c) Four year
(d) Five year

63. How many worms need to start a farm
(a) 100 worms
(b) 50 worms
(c) 500 worms
(d) 1000 worms

64. How long will it take for you to double the population of worms
(a) 30 to 60 days
(b) 50 to 70 days
(c) 60 to 90 days
(d) 120 to 150 days

65. Vermicompost enhances
(a) Germination
(b) Plant growth
(c) Crop yield
(d) All the three

66. Vermicompost enriches soil with microorganisms by adding hormones
(a) Auxins
(b) Gibberllic acid
(c) Both A and B
(d) None of the above

67. ……are good examples of getting the best out of waste
(a) Compost and throwing
(b) Vermicomposting and burning
(c) Composting and vermicomposting
(d) Burning and throwing

68. Vermi cast is rich in
(a) Nitrogen

(b) Phosphorous
(c) Potassium
(d) All the three

69. Earthworms move from one place to another place during
(a) Day time
(b) Night time
(c) Afternoon
(d) Evening

70. Which of the following affects the vermicomposting process
(a) Temperature
(b) Light
(c) Moisture
(d) All the three

71. Which of the following is necessary for vermicomposting
(a) C:N ratio
(b) Magnesium
(c) Calcium
(d) None of the above

72. Which bacteria reduces the carbon content by oxidizing in to CO_2
(a) Autotrophic bacteria
(b) Heterotrophic bacteria
(c) Thermophilic bacteria
(d) None of the above

73. Vermicomposting increases the
(a) Fertility of the soil
(b) Physical structure of the soil
(c) The water holding capacity of the soil
(d) All the three

74. Which of the following is not a vermicomposting method
(a) Pit method
(b) Heap method
(c) Tank method
(d) Tray method

75. Which one of the following is practiced for large scale vermicomposting
(a) Pit method
(b) Tank method
(c) Windrow method
(d) None of the above