

M Sc IVth Semester Special Paper

Objective Plant Pathology

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1. A systemic fungicide used for the control of blast of Paddy
a) Ridomil b) Alliete c) Beam d) Contof
2. The simplest technique for isolating bacteria in growth media is referred to as the
a) pour plate method b) streak plate method
c) serial dilution method d) MPN method
3. Primary source of inoculum for Angular leaf spot of cotton
a) Seed borne bacterium b) Bacteria present in soil
c) Bacteria transmitted through insect vectors d) Alternate host
4. *Agrobacterium tumefaciens* induces
a) Galls/tumours b) Soft rot c) Leaf spot d) Wilt
5. Effective control for Katte disease of Cardamom is
a) Eradication and burning of affected clumps b) Spraying of systemic fungicide
c) Application of *Trichoderma viridae* to soil d) Destruction of alternate host
6. Khaira disease of Paddy is due to the deficiency of
a) Zinc deficiency b) Phanerogams c) Boron deficiency d) Cuscuta
7. Which of the following is not a DNA virus?
a) luteovirus b) caulimovirus c) geminivirus d) begomovirus
8. The sexual spore produced by Downy mildew fungus is
a) Oospore b) Zygosporangium c) Ascospore d) Basidiospore
9. Antibiotic used to control bacterial diseases of plants
a) Streptomycin b) Aureofungin c) Blastidicin d) Chloropicrin
10. Cell wall of fungi belonging to ascomycetes contains
a) Chitin b) Cellulose c) Peptidoglycan d) Polysaccharide
11. The number of ascospore produced in a typical asci are
a) 4 b) 8 c) innumerable d) 12
12. Black mold fungus usually refers to
a) *Penicillium digitatum* b) *Rhizopus spp* c) *Aspergillus niger* d) *Aspergillus flavus*
13. Fungal nucleolus consist mostly of
a) RNA b) DNA c) Both RNA and DNA d) Proteins
14. The perfect stage of *Aspergillus nidulans* is
a) Emericella b) Eurotium c) Sartoria d) Talaromyces

15. Demi cyclic rust fungus lack
a) Uredial stage b) Telial stage c) Aecial stage d) Pycnial
16. Typical conditions used for sterilization are
a) 100° C for 10 minutes b) 121° C at 15 psi for 15 minutes
c) 80° C for 15 minutes d) 176° C for 15 seconds
17. Fungus producing conidia either in Pycnidia or acervuli belong to
a) Hypomycetidae b) Coelomycetidae c) Blastomycetidae d) None of the above
18. Dictyospora is a spore with
a) Only horizontal septa b) Only vertical septa
c) Both horizontal and vertical septa d) No septa
19. The first expert (Advisory) system in Plant Pathology was developed in USA in the year
a) 1983 b) 1996 c) 2000 d) 1986
20. The maximum tolerance level for potato leaf roll virus in certified seed potatoes is
a) 0.5-1.0% b) 1-2 % c) 1.5-2.0% d) < 0.5%
21. A fungicide which does not belong to Triazole group is
a) Bayleton b) Tilt c) Ethazol d) Vitavax
22. Powdery mildew diseases are effectively controlled by spraying
a) Rubigon b) Oxycarboxin(plantavax) c) Fosetyl-Al d) Ridomil-MZ
23. inclusion bodies found in
a) poty virus b) tobamo virus c) cucumber virus d) rhabdovirus
24. A sterol inhibiting fungicide is
a) Kitazin b) Prochloroz c) Ipridione d) Plantvax
25. Benzimidazole fungicides interfere with
a) Chitin synthesis b) Nuclear division
c) Mitochondrial respiration d) Electron transport
26. The teliospores of *Sphacelotheca sorghi* causing grain smut of sorghum can remain viable for
a) 2 year b) 4 years c) 13 years d) < 1 year
27. Fungi with coenocytic hyaline mycelium producing sporangiophores similar to vegetative hyphae or if different than of indefinite growth belong to family
a) Pythiaceae b) Perenosporaceae c) Albuginaceae d) Mucoraceae

28. Hallucinogenic chemicals are produced by
a) actinomycetes b) basidiomycetes c) ascomycetes d) zygomycetes
29. Mycoplasmas differ from viruses is that they are sensitive to
a) penicillin b) tetracycline c) sugars d) amino acids
30. Genetic recombination occurs in bacteria through the transfer of
a) pili b) plasmids c) endospores d) autospores
31. MLO's (Phytoplasmas) in plant system were translocated through
a) Phloem sieve tubes b) Xylem vessels
c) Cambium tissues d) Plasmodesmata connections
32. The total amount of DNA in the chromosomes of a bacterium *viz Escherichia coli* is about
a) 9800 kilobase b) 4700 kilobase c) 100 kilobase d) 800 kilobase
33. The thickness of the plasma membrane of bacterial cell is
a) 8 nm b) 20 nm c) 5 nm d) 17 nm
34. N-Acetylglucosaminoacid and N-acetyl muramic acid in the peptidoglycon unit is linked by
a) β 1, 4- glycosidic bond b) Interpeptide linkage c) Phosphate bond d) S-H bond
35. Gram positive bacteria belonging to the group
a) gracillicute b) firmicute c) tenevicutes d) mendosicutes
36. Fungi belonging to order Melonconiales produce conidia within
a) Pycnidium b) Acervulus c) Sporodochium d) Synemmata
37. Genus *Alternaria* belong to family
a) Tuberculariaceae b) Moniliaceae c) Dematiaceae d) None
38. Tyndalisation is carried at
a) 100°C for 10min on 3 days b) 100°C for 20min on 2 days
c) 110°C for 20min on 3 days d) 100°C for 20min on 3 days
39. The protein content in a bacterial cell on dry weight basis is
a) 15 % b) 60 % c) 35 % d) 70%
40. Which one is the example of host specific toxin
a) tabtoxin b) fusaric acid c) pyricularin d) victorin
41. Bergeys manual of Determinative Bacteriology is published in
a) 4 volumes b) 11 sections c) 2 volumes d) 3 volumes
42. The protein associated with the genetic transformation process in bacteria is

- a) Flagellin b) Glycoprotein c) Rec A protein d) Pilin
43. Plant pathogenic bacteria which does not belong to coryneform group is
 a) *Clavibacter* b) *Pseudomonas* c) *Curtobacter* d) *Ralstonia*
44. LOPAT test is used for the identification of
 a) *Xanthomonas* b) Fluorescent *Pseudomonas* c) *Xylella* d) *Agrobacterium*
45. Ti Plasmid is present in
 a) *Agrobacterium radibacter* b) *Agrobacterium tumefaciens*
 c) *Xylella fastidiosa* d) *Xanthomonas*
46. Turnip shaped single celled pedicellate teliospore is a character of genus
 a) *Puccinia* b) *Uromyces* c) *Hemilia* d) *Melampsora*
47. Bakane disease of rice caused due to the production of any one of the following by the fungal pathogen
 a) Gibberellins b) Cytokinins c) Toxins d) Auxins
48. Plant disease which affect the absorption and accumulation of water and minerals
 a) Root rot b) Wilts c) Damping off d) Soft rot
49. The incubation period for stem rust of wheat in South India is
 a) one month b) 27 days c) 12-15 days d) 60 days
50. Antibiotic affecting nucleic acid synthesis is
 a) Streptomycin b) Griseofulvin c) Cycloheximide d) Kanamycin
51. Oxanthiin fungicides act on the fungal cell by
 a) Inhibiting mitochondrial respiration b) Inhibiting cell membrane permeability
 c) Inhibiting protein synthesis d) Inhibiting electron transport
52. Papaya ring spot is caused by
 a) poty virus b) cucumo virus c) como virus d) tobamo virus
53. Most viruses move longer distances through the plants in the
 a) Xylem b) Plasmodesmata c) Phloem d) a&b
54. Virus with split genome
 a) Tobra virus b) Potato virus Y c) Cauliflower mosaic virus d) TMV
55. The number of days required for most of the viruses to move out of inoculated leaf is
 a) 2 to 5 days b) 1 month c) 45 days d) 7 days
56. The rice tungro virus contains
 a) ss RNA b) ds RNA c) ds DNA d) a&c
57. Genome of viroid is
 a) ss RNA b) ds RNA c) ds DNA d) ss DNA

58. Who established that nucleic acid is the infectious agent in plant virus
a) W.M.Stanley b) Gierer and Schramm
c) Bawden and Pirie d) Gibbs and Harrison
59. Bacteria as causal agent of plant disease was first reported by
a) N.A.Cobb b) De bary c) T.J.Burill d) Adolf Meyer
60. Fungi causing smut diseases belong to
a) Ascomycotina b) Basidiomycotina c) Deuteromycotina d) Zygomycotina
61. The no. of spores produced by *Puccinia graminis tritici* during its life cycle is
a) 5 b) 3 c) 2 d) 4
62. Brown rot of Potato is caused by
a) *Ralstonia solanacearum* b) *Erwinia carotovora*
c) *Pseudomonas syringe* d) *Streptomyces scabies*
63. Hinosan is used to control
a) Powdery mildew b) Fusarial wilt of tomato c) Blast of Paddy d) Downy mildew
64. bimodal transmission is seen in case of
a) geminivirus b) bromovirus c) caulimovirus d) tobamovirus
65. Alternate host for *Puccinia graminis tritici*
a) *Barberry vulgaris* b) Brinjal plant c) *Oxalis corniculata* d) Mohania
66. Angular leaf spot of cotton is caused by
a) *Xanthomonas campestris pv.malvacearum* b) *Agrobacterium tumefaciens*
c) *Erwinia carotovora* d) *Colletotrichum falcatum*
67. A disease occurring severely and confined to small locality /area is
a) Epidemic disease b) Endemic disease c) Pandemic disease d) Sporadic disease
68. A fungal antagonist used in the biological control of soil borne fungal diseases
a) *Trichoderma spp* b) *Fusarium solani* c) *Bacillus subtilis* d) *Pencillium spp*
69. Effective fungicide for the control of late blight of potato
a) Ridomil MZ b) Ipridione c) Bavistin d) Hinosan
70. *Colletotrichum falcatum* causes
a) Anthracnose of chilli b) Red rot of sugarcane
c) Sett rot of sugarcane d) Anthracnose of grapes
71. Koleroga of arecanut is controlled by spraying
a) Calixin b) Captan c) Bordeaux mixture d) Bavistin
72. Tomato leaf curl virus is transmitted by
a) *Myzus persicae* b) *Bemisia tabaci* c) *Aphis gossypii* d) *Thrips palmi*

73. Leaf shredding and green ear symptoms are noticed in
a) Downy mildew b) Wilt c) Rusts d) Smuts
74. The genetic material in a typical bacterial cell is contained in
a) Definite nucleus b) Chromosomal strand c) None of these d) Mesosome
75. Katte disease of cardamom is transmitted by
a) *Myzus persicae* b) *Thrips tabaci* c) *Pentalonia nigranervosa* d) *Aphis gossypii*
76. Citrus greening disease is caused by a
a) Phloem inhabiting fastidious vascular bacteria b) Virus
c) Xylem inhabiting fastidious vascular bacteria d) Fungus
77. A systemic fungicide used for the control of Powdery mildew diseases
a) Wettable Sulphur b) Tridemorph (Calixin) c) Tricyclazole (beam) d) Fosetyl-Al
78. Local quarantine regulation for koleroga of arecanut is present in
a) Kerela b) Tamil Nadu c) Karanataka d) Maharastra
79. Indicator plant used for citrus tristeza virus
a) Kagzi lime b) Sweet orange c) Trifoliolate orange d) Rangapur lime
80. Black rot of cabbage is caused by
a) *Xanthomonas campestris pv. campestris* b) *Rhizoctonia solani*
c) *Xanthomonas campestris pv. vesicatoria* d) *Fusarium solani*
81. Tikka disease of Groundnut can be controlled by spraying
a) Sulphur fungicide b) Thiram c) Bavistin d) Vitavax
82. Swollen shoot of cocoa is transmitted by
a) *Pentalonia nigranervosa f.sp. caladii* b) *Pseudococcus njalensis*
c) *Nephotettix cincticeps* d) *Aphis craccivora*
83. Phytoalexin is produced by plants in response to fungal infection are
a) phenolic compound b) glycoprotein c) protein d) lipid
84. Stem rust of wheat is caused by *Puccinia graminis tritici* has been successfully cultured on medium by
a) Waksman b) Williams c) Coleman d) Cobb
85. Cell wall of fungi belonging to Oomycetes contain
a) Chitin b) Cellulose c) Peptidoglycon d) Glucan
86. Pseudomycelium is formed in
a) *Synchytrium* b) *Rhizopus* c) *Yeast* d) *Pythium*
87. *Amomum subulatum* is one of the alternate host for
a) Leaf curl of tomato b) Katte disease of cardamom

- c) Coconut (wilt) disease d) Koleroga of arecanut
88. Certain bacteria to gain entry into host tissues to dissolve cell wall of the plant it produce
 a) Pectolytic enzyme b) Gibberellic acid c) Phytotoxin d) Polysaccharide
89. Nuclear position of secondary mycelium of basidiomycotina is
 a) $n+n$ b) $2n$ c) n d) $3n$
90. *Rhizoctonia solani* a root rot causing pathogen comes under order
 a) Monilia b) Sphaeropsidales c) Mycelia sterilia d) Melanconiales
91. In case of *Uncinula nicator* ascocarp consists of more number of asci appendages type is
 a) Coiled type b) Myceloid type c) Dichotomously branched type d) Bulbous base type
92. In 1927 discovered the functions of Spermatia and their role in dikaryotization by
 a) Craigie b) Bawden c) Thirumalachar d) William
93. One of the important cultural method suggested for eradication of
Fusarium oxysporum fsp. cubense from soil is
 a) Summer ploughing b) Flooding the soil c) FYM application d) Soil solarization
94. Anthracnose of beans caused by
 a) *Colletotrichum lindemuthianum* b) *Fusarium solani* c) *Cercospora sp.* d) *Alternaria*
95. *Viscum spp.* is a plant parasite
 a) Partial parasite b) Complete parasite c) Root parasite d) Stem parasite
96. Insect vector transmitted viruses are more serious during
 a) Winter season b) Rainy season c) Summer season d) Spring season
97. A fungus requires only one single host for completion of its life cycle is called
 a) Heterocious b) Autoecious c) Heterothallism d) Heterosporus
98. A major threat for pomegranate cultivation in recent days is bacterial
 blight and it is caused by
 a) *Xanthomonas campestris pv. campestris* b) *Ralstonia solanacearum*
 c) *Erwinia caratovora* d) *Xanthomonas axonopodis pv. punicae*
99. 1882-85 discovered Bordeaux mixture by
 a) Mc Ray b) P.M.A. Millardet c) Prevost d) Mason
100. Citrus tristeza could be effectively managed by
 a) Grafting b) Spraying insecticides c) Cross protection d) Boarder cropping

Answer

1. c	11. b	21. c	31. a	41. a	51. a	61. a	71. c	81. c	91. a
2. b	12. c	22. a	32. b	42. c	52. a	62. a	72. b	82. b	92. a
3. a	13. a	23. a	33. a	43. b	53. c	63. c	73. a	83. a	93. b
4. a	14. a	24. c	34. a	44. b	54. a	64. c	74. b	84. b	94. a
5. a	15. a	25. b	35. b	45. b	55. a	65. a	75. c	85. b	95. a
6. a	16. b	26. c	36. b	46. c	56. d	66. a	76. a	86. c	96. c
7. a	17. b	27. a	37. c	47. a	57. a	67. b	77. b	87. b	97. b
8. a	18. c	28. c	38. d	48. b	58. b	68. a	78. c	88. a	98. d
9. a	19. a	29. b	39. b	49. c	59. c	69. a	79. a	89. a	99. b
10. a	20. a	30. b	40. d	50. b	60. b	70. b	80. a	90. c	100. c

