

Test Booklet No. \_\_\_\_\_

**This booklet consists of 150 questions and 18 printed pages.**

**RGUPET/2024/\_\_\_/\_\_\_**

**RGUPET 2024  
Common Entrance Test, 2024**

**DOCTOR OF PHILOSOPHY IN PLANT PATHOLOGY**

**Full Marks: 150  
Hours**

**Time: 3**

Roll No.

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Day and Date of Examination: \_\_\_\_\_

Signature of Invigilator(s) \_\_\_\_\_

Signature of Candidate \_\_\_\_\_

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*General Instructions:*

***PLEASE READ ALL THE INSTRUCTIONS CAREFULLY BEFORE MAKING ANY ENTRY.***

1. DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO.
2. Candidate must write his/her Roll Number on the space provided.
3. This Test Booklet contains 150 Multiple Choice Questions (MCQs) from the concerned subject. Each question carries 1 mark.
4. Please check the Test Booklet to verify that the total pages and total number of questions contained in the test booklet are the same as those printed on the top of the first page. Also check whether the questions are in sequential order or not.
5. Candidates are not permitted to enter into the examination hall after the commencement of the entrance test or leave the examination hall within two hour.
6. Making any identification mark in the OMR Answer Sheet or writing Roll Number anywhere other than the specified places will lead to disqualification of the candidate.
7. Candidates shall maintain silence inside and outside the examination hall. If candidates are found violating the instructions mentioned herein or announced in the examination hall, they will be summarily disqualified from the entrance test.
8. In case of any dispute, the decision of the Entrance Test Committee shall be final and binding.
9. The OMR Answer Sheet consists of two copies, the Original copy and the Student's copy.



	change awareness.				
9	Which Indian city recently launched the country's first underwater metro project?				
	a) Mumbai	b) Kolkata	c) Chennai	d) Kochi	b
10	Who is the Governor of Reserve Bank of India (RBI) as of 2021?				
	a) Urjit Patel	b) Raghuram Rajan	c) Shaktikanta Das	d) Duvvuri Subbarao	c
11	"Operation Flood" is a				
	a) Mission to increase performance of the dairy sector	b) River Management Mission	c) Mission to save rain water for irrigation	d) Mission to increase underground water	a
12	Which of the following passes in Arunachal Pradesh is a traditional trade route to Tibet?				
	a) Bum La Pass	b) Sela Pass	c) Mechuka Pass	d) Kibithu Pass	a
13	In the year _____, Indira Gandhi, the then Prime Minister of India, issued special stamps titled 'Wheat Revolution' to usher in the Green Revolution.				
	a) 1987	b) 1975	c) 1943	d) 1968	d
14	Launching of Sansad Adarsh Gram Yojna is related to the				
	a) Vallabh Bhai Patel	b) Deen Dayal Upadhyay	c) Mahatma Gandhi	d) Vinayak Damodar Savarkar	c
15	India recently inaugurated the Atal Tunnel, which is the world's longest highway tunnel above an altitude of 10,000 feet. In which state is it located?				
	a) Himachal Pradesh	b) Jammu and Kashmir	c) Uttarakhand	d) Arunachal Pradesh	a
16	The ratio of ages of A and B 4 years ago was 5:3. The sum of present ages of A, B and C is 80 years. If present age of C is equal to sum of present ages of A and B. find the present age of A.?				
	a) 17 years	b) 24 years	c) 20 years	d) 22 years	b
17	Manoj gave 60% of his salary to his wife and invested rest amount in mutual funds. His wife spends 30% amount on grocery and 20% on rent. From remaining amount, she purchased gold worth Rs. 18000. Find salary of Manoj?				
	a) Rs 60000	b) 54000	c) 64000	d) 58000	a
18	A can do a work in 36 days while B can do the same in 48 days. If A work for 'x' days while B work for 'x+2' days, then one-third of the work is complete. Find the value of x.				
	a) 4	b) 8	c) 6	d) 7	c



	a) Conducting experiments without proper authorization.	b) Falsifying or fabricating data.	c) Presenting someone else's work or ideas as your own.	d) Including all relevant data in research publications.	c
27	What is the purpose of obtaining informed consent from research participants?				
	a) To ensure participants are compensated for their time.	b) To protect researchers from legal liability.	c) To inform participants about the risks and benefits of participation.	d) To coerce participants into participating in the research.	c
28	Spill the beans ?				
	a) Waste money	b) Give away a secret	c) Perform magic	d) Work hard	b
29	Which wildlife sanctuary in Arunachal Pradesh is known for its population of clouded leopards?				
	a) Pakke Wildlife Sanctuary	b) Kamlang Wildlife Sanctuary	c) Dibang Wildlife Sanctuary	d) Eaglenest Wildlife Sanctuary	a
30	What is the longest river in the world?				
	a) Mississippi	b) Nile	c) Amazon	d) Ganga	b
31	Which of the following is an example of a qualitative research method?				
	a) Surveys	b) Experiments	c) Case studies	d) Interview	c
32	Which of the following is NOT a characteristic of a well-designed experiment?				
	a) Replicability	b) Randomization	c) Bias	d) Control	c
33	Which of the following is NOT an example of research misconduct?				
	a) Fabrication of data	b) Proper citation	c) Plagiarism	d) Falsification of data	b
34	What is the primary purpose of research ethics training for graduate students?				
	a) To ensure compliance with institutional policies	b) To promote responsible conduct of research	c) To increase publication output	d) To secure funding for research projects	b
35	State true or false Phytopathology is published from a. UK b. USA c. France d. Germany				
	a) Only a	b) only b	c) a and c	d) only d	b

36	The error degree of freedom for a RBD design with 10 treatments and 4 replication is				
	a) 27	b) 36	c) 30	d) 40	a
37	International Plant Protection Convention (IPPC) came into existence from				
	a) April 4, 1991	b) April 4, 1994	c) July 4, 1984	d) July 4, 1986	a
38	Indian Virological Society publishes which journal?				
	a) Virus Disease	b) Indian Journal of Virology	c) Journal of Virology	d) Archives of Virology	b
39	Indian Journal of Mycology and Plant Pathology is published from				
	a) Udaipur	b) New Delhi	c) Kolkata	d) Hyderabad	a
40	The Indian Phytopathological Society was established by				
	a) E.J Butler	b) J.F Dastur	c) B.B. Mundkar	d) T.S. Sadasivan	c
41	Which of the following is a promising area of research for controlling plant diseases?				
	a) Traditional breeding methods	b) Chemical fertilizers	c) Gene editing techniques	d) Mechanical cultivation	c
42	There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below A) Plagiarism is act of using someone else's work, ideas, or words without proper acknowledgment or citation. R) Proper citation and attribution are essential to maintain integrity and give credit to the original creators of ideas and work.				
	a) Both A and R are true and R is the correct explanation of A.	b) A and R are true but R is not the correct explanation of A.	c) A is true but R is false.	d) A is false but R is true.	b
43	There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below A) Randomization is the process of assigning participants to groups or conditions in a research study R) It helps in reducing bias and increasing the validity of study results				
	a) Both A and R are true and R is the correct explanation of A.	b) A and R are true but R is not the correct explanation of A.	c) A is true but R is false.	d) A is false but R is true.	a
44	A) Analysis of Variance (ANOVA) is commonly used statistical technique to analyze data from split-plot designs R) ANOVA efficiently analyzes multiple data groups to determine the variability between samples and within samples				
	a) Both A and R are true and	b) A and R are true but R is not	c) A is true but R is false.	d) A is false but R is true.	a







	D. Golden Nematode iv 1941 Please match the correct answer				
	a) A - i, B - ii, C -iv, D-iii	b) A - ii, B - i, C -iii, D-iv	c) A - iii, B - ii, C -i, D-iv	d) A - i, B - ii, C -iii, D-iv	d
59	Please select the true statement ITCC stands for				
	a) Indian Type Culture Collection.	b) International Type Culture Collection.	c) Indian Type Cell Collection.	d) International Type Cell Collection.	a
60	There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below (A) Phytophthora is a soil borne pathogen. (R) Phytophthora producing sclerotia in soil.				
	a) Both A and R are true and R is the correct explanation of A.	b) Both A and R are true but R is not the correct explanation of A.	c) A is true but R is false.	d) A is false but R is true.	c
61	Please match the correct answer  A. Phyllody i Virus B. Vein bending ii Mycoplasma C. Wilting iii Fungus D. Blast iv Bacteria and Fungus				
	a) A - ii, B - i, C -iv, D-iii	b) A - ii, B - i, C -iii, D-iv	c) A - iv, B - iii, C -ii, D-i	d) A - i, B - ii, C -iii, D-iv	a
62	Consider about soil treatment chemicals. 1.Complete control of the plant disease is obtained. 2.Complete control of the plant disease is not obtained. 3.The fungal disease is suppressed by the chemical. 4.The fungus always killed by the chemical. 5.Nematicides destroy the nematodes but eggs escape.				
	a) Only 2, 3 and 5 are true	b) Only 1, 3 and 4 are true	c) Only 1, 2 and 5 are true	d) All are true	a
63	What is the role of haustoria in fungal structures?				
	a) To produce spores	b) To absorb nutrients from the host	c) To support the fungal body	d) To store food reserves	b
64	What is the primary mode of nutrition for fungi?				
	a) Photosynthetic	b) Absorptive	c) Ingestive	d) Chemo-synthetic	b
65	There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below (A) Bacteria produces endospore. (R) Endospore are the manifestation of exospore.				

	a) Both A and R are true and R is the correct explanation of A.	b) Both A and R are true but R is not the correct explanation of A.	c) A is true but R is false.	d) A is false but R is true.	c
66	Which of the following is NOT a structural defense mechanism in plants against pathogens				
	a) Cuticle and epidermal cells	b) Sclerenchyma cells	c) Phytoalexins	d) Cork layers	c
67	Which of the following is a post-infectious structural defense mechanism in plants				
	a) Cuticle	b) Tyloses	c) Waxes	d) Sclerenchyma cells	b
68	Which category of fungicides is effective only when used before infection				
	a) Protectants	b) Eradicants	c) Therapeutants	d) Antibiotics	a
69	Which of the given diseases is related to Bajra?				
	a) Leaf Rust	b) Late Blight	c) Canker	d) Ergot	d
70	There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below (A) Virus infected cells secrete proteins called interferons which protect non-infected cells from further viral infection. (R) virus is mesobiotic in nature.				
	a) Both A and R are true and R is the correct explanation of A.	b) Both A and R are true but R is not the correct explanation of A.	c) A is true but R is false.	d) A is false but R is true.	d
71	Micro and macro conidia are present in				
	a) <i>Alternaria</i>	b) <i>Aspergillus</i>	c) <i>Mucor</i>	d) <i>Fusarium</i>	d
72	In which of the following gills are present				
	a) <i>Aspergillus</i>	b) <i>Alternaria</i>	c) <i>Agaricus</i>	d) <i>Mucor</i>	c
73	There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below (A) Cyanobacteria like Nostoc and Anabaena are used as biofertilizers. (R) Cyanobacteria absorb phosphorus from soil and pass it to crop.				
	a) Both A and R are true and R is the correct explanation of A.	b) Both A and R are true but R is not the correct explanation of A.	c) A is true but R is false.	d) A is false but R is true.	c

74	Please match the correct answer				
	A. Parasitic		i Drosera		
	B. Insectivorous		ii Yeast		
	C. Saprophytic		iii Lichen		
	D. Symbiotic		iv Loranthus		
	a) A - ii; B - i; C - iii; D - iv	b) A - iii; B - ii; C - iv; D - i	c) A - iii; B -ii; C - i; D - iv	d) A - iv; B - i; C - ii; D - iii	d
75	Which one is counted as the pest				
	a) Chemicals	b) Biological	c) Cultural	d) weeds	d
76	Example of pesticide includes				
	a) Fungus	b) Bacteria	c) Nematode	d) Insecticide	d
77	Plant pathology is the study of				
	a) Bacteria	b) Fungi	c) Nematodes	d) Plant diseases	d
78	Nature of powdery mildews and downy mildew fungus are				
	a) Obligate parasite	b) Saprophyte	c) Facultative parasite	d) Facultative saprophytes	a
79	Mushroom is Enriched food				
	a) Protein	b) Carbohydrates	c) Sugar	d) Starch	a
80	Which structure forms at the point of contact between an appressorium and the host cuticle				
	a) Haustorium	b) Penetration peg	c) Mycelial knot	d) Germ tube	b
81	Plant viruses often enter their hosts through injuries made by				
	a) Falling debris	b) Pruning cuts	c) Insect vectors	d) Animal grazing	c
82	Lenticels serve as a potential entry point for pathogens and are primarily involved in				
	a) Water absorption	b) Gas exchange	c) Nutrient transport	d) Light absorption	b
83	Fusaric acid is associated with which type of toxin classification				
	a) Pathotoxin	b) Phytotoxin	c) Vivotoxin	d) Mycotoxin	c
84	What is the term for fungi that normally feed on dead material but can infect living hosts?				
	a) Obligate parasites	b) Facultative parasites	c) Obligate saprophytes	d) Facultative saprophytes	d
85	What is the technical term for the sexual stage of fungi?				
	a) Teleomorphi c stage	b) Imperfect stage	c) Holocarpic stage	d) Eucarpic stage	a

86	Which group of plant pathogenic organisms includes both biotic and mesobiotic agents?				
	a) Fungi	b) Bacteria	c) Viruses	d) Algae	c
87	What is the purpose of a sclerotium in fungi?				
	a) To capture sunlight	b) To produce spores	c) To serve as a resistant storage form	d) To absorb nutrients	c
88	There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below (A) All fungus are parasite. (R) All parasite are fungus.				
	a) Both A and R are true and R is the correct explanation of A.	b) Both A and R are true but R is not the correct explanation of A.	c) A is true but R is false.	d) A is false but R is true.	c
89	The disease characterized by abnormal elongation of rice seedlings is				
	a) Moko disease	b) Wilt disease	c) Bakanae disease	d) Club root disease	c
90	The first cytokinin isolated was				
	a) Zeatin	b) Kinetin	c) IPA	d) GA3	b
91	Please match the correct answer				
	A. Plant virus B. Animal virus C. Viroids D. Prions	i Kuru disease ii Potato spindle tuber iii Polio iv Tobacco mosaic			
	a) A-(iv), B-(iii), C-(ii), D-(i)	b) A-(iv), B-(ii), C-(iii), D-(iv)	c) A-(iii), B-(iv), C-(i), D-(i)	d) A-(ii), B-(iii), C-(iv), D-(i)	a
92	Fruit cracking disease in tomatoes is mainly caused due to the deficiency of				
	a) Copper	b) Boron	c) Zinc	d) Molybdenum	b
93	Which one is most important factor for development of plant diseases?				
	a) Animals	b) Human	c) Birds	d) Environmental parameters	d
94	The green ear is a which type of disease?				
	a) Bacterial	b) Fungal	c) Viral	d) Protozoan	b
95	Which scientist developed the Bordeaux mixture to combat downy mildew in vineyards?				
	a) Pierre-Marie-Alexis Millardet	b) Louis Pasteur	c) Gregor Mendel	d) Anton de Bary	a
96	What phase follows plasmogamy in the sexual reproduction of fungi?				

	a) Meiosis	b) Mitosis	c) Karyogamy	d) Germination	c
97	Which type of asexual spore is typical in <i>Penicillium</i> ?				
	a) Zoospores	b) Conidia	c) Sporangiospores	d) Chlamydozoospores	b
98	Which of the following is an example of data falsification in research?				
	a) Accurately reporting experimental results.	b) Manipulating data to support desired conclusions.	c) Collaborating with other researchers to verify findings.	d) Including all relevant data in research publications.	b
99	Which of the following is an example of proper attribution in research?				
	a) Presenting someone else's ideas without acknowledgment.	b) Citing the original source when using someone else's work.	c) Using research findings without permission.	d) Including references in a research paper without verifying their accuracy.	b
100..	Mancozeb is a formulation of				
	a) mancozeb and zinc	b) maneb and zinc ion	c) manganese and zinc	d) maneb and manzate	b
101	Which type of resistance is typically governed by a single or a few genes and is race-specific?				
	a) Vertical resistance	b) Horizontal resistance	c) Tolerance resistance	d) Susceptibility resistance	a
102	What is the primary mechanism responsible for disease escape in plants?				
	a) Thick cuticles	b) Hypersensitive reaction	c) Early maturity	d) Tissue culture	c
103	Which type of fungal thallus is entirely converted into reproductive structures?				
	a) Eucarpic	b) Plasmodial	c) Holocarpic	d) Unicellular	c
104	What is a septum in fungi?				
	a) A type of hypha	b) A reproductive structure	c) A partition in a hypha	d) A form of spore	c
105	There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below (A) <i>Saccharomyces cerevisiae</i> is used for making bread. (R) Fermentation carried out by Yeast enzymes produces CO <sub>2</sub> .				
	a) Both A and R are true and R is the correct explanation of A.	b) Both A and R are true but R is not the correct explanation of A.	c) A is true but R is false.	d) A is false but R is true.	c

106	Please match the correct answer				
	A. Endosperm B. Zygote C. Stigma D. Gametes	i Carpel ii Haploid iii Nutrition iv Fertilisation			
	a) A - i, B - iv, C -iii, D - ii	b) A - ii, B - iii, C - iv, D - i	c) A - iii, B - iv, C - i, D - ii	d) A - iv, B - iii, C - ii, D - i	c
107	Who is considered the father of plant pathology?				
	a) Anton de Bary	b) Louis Pasteur	c) Robert Hooke	d) Gregor Mendel	b
108	Most of the plant viruses contains?				
	a) DNA	b) RNA	c) a and b	d) a or b	b
109	Plant parasitic nature of fungi was proven by?				
	a) Anton de Bary	b) Louis Pasteur	c) P.A. Micheli	d) J.F. Kuhn	a
110	Peach leaf curl is caused by which agent?				
	a) Virus	b) Bacteria	c) Phytoplasma	d) Fungi	b
111	Rhizomorph is characteristic to which of the following?				
	a) <i>Armillaria</i>	b) <i>Rhizoctonia</i>	c) <i>Verticillium</i>	d) <i>Claviceps</i>	a
112	Lemon shaped sporangia is produced by?				
	a) <i>Albugo</i>	b) <i>Phytophthora</i>	c) <i>Phytium</i>	d) <i>peronospora</i>	b
113	The most sensitive factor for nematode population is?				
	a) Temperature	b) Moisture	c) Rainfall	d) Light Intensity	a
114	Red ring disease of coconut is caused by				
	a) <i>Rhadinaphelenchus cocophilus</i>	b) <i>Bursaphelenchus xylophilus</i>	c) <i>Ditylenchus similis</i>	d) <i>Tylenchulus semipenetrans</i>	a
115	Mantek disease of rice is caused by?				
	a) <i>Hirschmanniella oryzae</i>	b) <i>Meloidogyne graminicola</i>	c) <i>Heterodera oryzae</i>	d) <i>Ditylenchus angustus</i>	d
116	Stem and bulb nematode is				
	a) <i>Ditylenchus dipsaci</i>	b) <i>Ditylenchus angustus</i>	c) <i>Tylenchulus semipenetrans</i>	d) <i>Aphelenchoides besseyi</i>	a
117	Father of seed pathology is				
	a) Mary Noble	b) Paul Neergard	c) V. K. Agarwal	d) L.C. Doyer	b
118	State true or False Wilt causing <i>Fusarium</i> sp. in red gram produces a. Macro conidia b. Micro conidia				

	c. Micro, Macro and chlamydo spores d. Chlamydo spores				
	a) Only a	b) a and b	c) only c	d) a and d	c
119	State true or false Mycoplasma contains a. Lipids b. Sterols c. Carotenols d. Lipids and sterols				
	a) Only a	b) a and b	c) only d	d) a, b and c	d
120	State true or false Bdellovibrio are gram negative bacteria eating a. Gram negative bacteria b. Gram positive bacteria c. Viruses d. Gram positive and viruses				
	a) Only a	b) Only b	c) a and b	d) only d	a
121	There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below A) The Bengal Famine is a bacterial disease R) It caused an epidemic in the year 1942				
	a) Both A and R are true and R is the correct explanation of A.	b) Both A and R are true but R is not the correct explanation of A.	c) A is true but R is false.	d) A is false but R is true.	d
122	There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below A) Hollings first reported mycovirus on cultivated mushroom R) Mycoviruses are viruses infecting fungi				
	a) Both A and R are true and R is the correct explanation of A.	b) Both A and R are true but R is not the correct explanation of A.	c) A is true but R is false.	d) A is false but R is true.	a
123	Match the pairs A. Pahala B. Heart rot of sugarbeet C. Whip tail of cauliflower D. Exanthema I. Boron II. Molybdenum III. Copper IV. Manganese				
	a) A-III, B-I, C-IV, D-II	b) A-IV, B-I, C-II, D-III	c) A-II, B-I, C-III, D-IV	d) A-I, B-IV, C-II, D-III	b
124	Match the pairs A. Central Potato Research Institute B. Indian Type Culture Collection Centre C. Commonwealth Institute of Biological Control I. New Delhi II. Bangalore III. Mau				

	D. National Bureau of Agriculturally Important Microorganisms Shimla				
	a) A-I, B-III, C-II, D-IV	b) A-IV, B-I, C-II, D-III	c) A-II, B-I, C-III, D-IV	d) A-I, B-IV, C-II, D-III	b
125	The antagonistic activity between two organisms can be studied by				
	a) Poison food technique	b) Dual culture technique	c) Selective medium	d) EPN	a
126	The pore size of filters used in the laminar air flow chamber is				
	a) 0.3 $\mu\text{m}$	b) 0.03 $\mu\text{m}$	c) 3.0 $\mu\text{m}$	d) 1.25 $\mu\text{m}$	b
127	The most commonly used mounting medium in permanent slide preparation is				
	a) Congo red	b) Crystal violet	c) Lactophenol blue	d) Canada balsam	d
128	The solution used to preserve the green coloured diseased sample of the plant tissue is				
	a) Copper sulphate	b) Zinc chloride	c) Zinc sulphate	d) Formaldehyde	a
129	There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below A) Aphids are the only known vectors for transmitting plant viruses in non-persistent manner R) Virus acquisition period is brief and have no latent period				
	a) Both A and R are true and R is the correct explanation of A.	b) Both A and R are true but R is not the correct explanation of A.	c) A is true but R is false.	d) A is false but R is true.	a
130	There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below A) Short distance movement occurs in plant viruses R) Intercellular communication is facilitated by plasmodesmata				
	a) Both A and R are true and R is the correct explanation of A.	b) Both A and R are true but R is not the correct explanation of A.	c) A is true but R is false.	d) A is false but R is true.	a
131	State true or false Insect parasitizing fungus is a. Entomogenous fungus b. Nematophagous fungus c. Mycoparasitic fungus d. Mycoviruses				
	a) Only a	b) a and b	c) a and c	d) only d	a
132	State true or false Club root of crucifers enters the host through				



	a. Stomata b. Root hairs c. Lenticels d. Wounds				
	a) a and b	b) only b	c) b and c	d) only d	b
133	Proteinaceous toxin produced by bacteria to inhibit the growth of similar/closely related bacterial strain is				
	a) Bacteriocin	b) Saponins	c) Siderophores	d) Bulbiformin	a
134	The chemical used for cleaning glassware is				
	a) Formalin	b) Mercuric chloride	c) Potassium dichromate	d) Sodium chloride	c
135	Complete resistance against pathogen is provided by				
	a) Multi gene	b) Qualitative gene	c) Quantitative gene	d) Race-non specific gene	b
136	Generally, true resistance is controlled by the genes located in				
	a) Nucleus	b) Chloroplast	c) Mitochondria	d) All of the above	a
137	The type of secretion system present in almost all plant pathogenic bacteria is				
	a) Type I	b) Type II	c) Type III	d) Type IV	a
138	The enzyme playing most important role in bacterial pathogenesis is				
	a) Cellulases	b) Proteases	c) Pectinases	d) Xylanases	c
139	The pathogen known as “store house of antibiotics” is				
	a) <i>Trichoderma</i> spp.	b) <i>Agrobacterium</i> spp.	c) <i>Pseudomonas</i> spp.	d) Streptomyces	d
140	Which of the following micro-organism is not harmful to plants?				
	a) <i>Rhizoctonia</i>	b) <i>Rhizopus</i>	c) <i>Rhizobium</i>	d) <i>Ralstonia</i>	c
141	Akiochi disease is due to				
	a) Sulphur toxicity	b) Aluminium toxicity	c) Copper toxicity	d) Iron toxicity	a
142	There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below A) Green Ear of bajra belong to Oomycota phylum R) Zoospores are the sexual spores of green ear fungi				
	a) Both A and R are true and R is the correct explanation of A.	b) Both A and R are true but R is not the correct explanation of A.	c) A is true but R is false.	d) A is false but R is true.	c

143	There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below A) Gene pyramiding aims at assembling multiple desirable genes from multiple parents into single genotype R) All the major genes are incorporated in a single cultivar that provides protection against several races of a pathogen				
	a) Both A and R are true and R is the correct explanation of A.	b) Both A and R are true but R is not the correct explanation of A.	c) A is true but R is false.	d) A is false but R is true.	a
144	Match the pairs A. <i>Reovirus</i> I. Respiratory enteric orphan virus B. <i>Illarvirus</i> II. Fungus transmitting rod shaped viruses C. <i>Furoviruses</i> III. Nematode transmitted polyhedral virus D. <i>Nepovirus</i> IV. Isometric labile ring spot viruses				
	a) A-I, B-III, C-II, D-IV	b) A-IV, B-I, C-II, D-III	c) A-II, B-I, C-III, D-IV	d) A-I, B-IV, C-II, D-III	d
145	The method involved the transfer of micro-organism from soil to culture medium with an aim to obtain pure culture is				
	a) Serial dilution plate method	b) Soil washing	c) Pour plate technique	d) Streak plate method	a
146	Chemical used for negative staining in ISEM				
	a) Uranyl acetate	b) Safranin	c) Lactophenol blue	d) Nigrosain	a
147	High volume sprayer can spray how much quantity of liquid per unit area?				
	a) > 400 litres/ ha	b) 5-400 litres/ ha	c) 5-50 litres/ ha	d) 1-10 litres/ ha	a
148	The fluorescence producing dye is known as				
	a) Chromophore	b) Flurochrome	c) Luminance	d) All of the above	b
149	Ear showing honey dew symptoms is a characteristic of which disease?				
	a) Green ear of Bajra	b) Grain smut of Bajra	c) Ergot of Bajra	d) All of the above	c
150	Dispersal of plant pathogens by wind is called				
	a) Hydrochory	b) Zoochory	c) Anemochory	d) Ornithochory	c