P P SAVANI UNIVERSITY

14

2nd Semester of B.Sc. (Hons.) Agriculture End Semester Examination

December - 2022

SGAG1160- Introductory Plant Nematology

21.12.2022, Wednesday Time: 10:00 a.m. to 12:00 p.m. Maximum Marks: 50

Instruction:

1. Draw a neat and labeled diagram whenever it is required.
2. Start new questions from new page.

Q.1	**Multiple choice questions (01 mark each)**	**(15)**	**CO**	**BTL**
1.1	The body colour of plant parasitic nematodes is		2	1
	a. Green c. Colour less			
	b. Red d. Brown			
1.2	One ovary present, to anterior side of vulva know as		2	2
	a. Didelphic Prodelphic c. Monodelphic Ophithodelphic			
	b. Monodelphic Prodelphic d. None			
1.3	Longest plant parasitic nematode is		2	1
	a. *Hetrodera* spp. c. *Longidorus* spp.			
	b. *Globodera* spp. d. None			
1.4	In plant parasitic nematodes, oral opening surrounded with		2	1
	a. 6 lips c. 16 lips			
	b. 8 lips d. 12 lips			
1.5	Sting nematode is		2	1
	a. *Cricone mella sp.* c. *Longidorus sp.*			
	b. *Belonolaimus* d. *Xiphinema sp.*			
1.6	Ring nematode is		2	1
	a. *Criconcmella* c. *Hetrodera*			
	b. *Belonolainas* d. None			
1.7	Which species is known as spiral nematode		2	2
	a. *Heterodera spp.* c. *Xiphinema spp.*			
	b. *Meloidogyue spp.* d. *Helicotylenchus sp.*			
1.8	Out of total nematode, plant parasitic nematode is		2	2
	a. 15% c. 25%			
	b. 20% d. 10%			
1.9	NETU Viruse is transmitted by		1	3
	a. *Xiphinema sp.* c. *Paratrichodorus sp.*			
	b. *Trichodorus sp.* d. Both B & C			

1.10	Size of male of plant parasitic nematode is		**2**	**2**
	a. Equal to female nematode	c. Smaller than female nematode		
	b. Bigger than female nematode	d. None		
1.11	Sedentary semiendoparasitic nematode is		**2**	**1**
	a. *Rotylenchulus sp.*	c. *Tylenchus sp.*		
	b. Both A and B	d. None		
1.12	Pear shaped Nematode		**2**	**1**
	a. *Hetrodera spp.*	c. *Meloidogyne spp.*		
	b. *Globodera spp.*	d. None		
1.13	Root-knot Nematode		**2**	**1**
	a. *Hetrodera spp.*	c. *Meloidogyne spp.*		
	b. *Globodera spp.*	d. None		
1.14	Onchio stylet is present in		**2**	**2**
	a. Dagger nematode	c. Needle nematode		
	b. Root-knot nematode	d. Both A and B		
1.15	Part of nerves system of plant parasitic nematode is		**2**	**1**
	a. Stylet	c. Intestine		
	b. Ampulla	d. Derid		

Q.2	**Define/ Explain (Attempt any six- 01 marks each)**	**(06)**	
2.1	Sedentary ectoparasites	**2**	**1**
2.2	Migratory endoparasite	**2**	**1**
2.3	Helminthology	**1**	**1**
2.4	Nematodes	**1**	**1**
2.5	Sex reversal	**3**	**1**
2.6	Leaf discolouration	**3**	**1**
2.7	Stunting	**3**	**1**
2.8	Full form of NEPO – virsus	**1**	**2**

Q.3	**Blanks (01 mark each)**	**(05)**	
3.1	circulatory and respiratory systems are absent but governed by the _____ fluid.	**1**	**2**
3.2	Nematodes are _____ in nature.	**2**	**2**
3.3	Father of Helminthology is _____.	**1**	**1**
3.4	The length of the nematode may vary from _____ to _____.	**2**	**1**
3.5	Nematodes reproduce by _____ reproduction.	**1**	**1**

Q.4	**Short notes (Attempt any six- 02 marks each)**	**(12)**		
4.1	Difference between root galls and root nodules		**2**	**1**
4.2	Describe Nematode – fungus Interaction		**1**	**3**
4.3	Draw a labeled figure of a male Nematode		**1**	**3**
4.4	Enlist 10 historical events in the field of plant nematology		**1**	**1**
4.5	Draw a vertical Section of the Nematode body tube		**2**	**3**
4.6	Function of the digestive system		**2**	**1**
4.7	Describe the parts of the nematode body		**2**	**3**
4.8	Describe Nematode –virus Interaction		**3**	**1**
Q.5	**Answer the following questions in detail (Attempt any three- 04 marks each)**	**(12)**		
5.1	Write down the lifecycle of root-knot nematodes		**1**	**3**
5.2	Common characteristics of members of the phylum Nemata		**2**	**2**
5.3	Explain the reproductive system in nematodes		**1**	**2**
5.4	Describe the ecological classification of above-ground feeders with examples		**1**	**1**
5.5	Describe Symptoms produced by above-ground feeding nematode		**2**	**2**

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CO : Course Outcome Number **BTL** : Blooms Taxonomy Level

Level of Bloom's Revised Taxonomy in Assessment

1: Remember	2: Understand	3: Apply
4: Analyze	5: Evaluate	6: Create