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# M.Sc. (Semester - I) (New) (NEP CBCS) Examination: Oct/Nov-2023 AGROCHEMICALS AND PEST MANGEMENT Chemistry of Pesticides, Soil Science & Fertilizers (2301101)

	C	hen	AGROCHEMICALS AND nistry of Pesticides, Soil Sc		1101)
•	& Da	te: Fr	riday, 05-01-2024 M To 05:30 PM	•	Max. Marks: 60
Instr	uctic		1) All questions are compulsory. 2) Figure to right indicate full mark	3.	
Q.1	A)	<b>Ch</b> (1)	oose the correct alternative.  Red colored soil is due to the pr a) Boron c) Nitrogen	esence of in the soil. b) Iron d) Potassium	08
		2)	Fire Hazard causes due to a) Ammonium nitrate c) Calcium nitrate	_fertilizers. b) Diammonium phos d) None of these	phate
		3)	Ethylene gas is used for a) Fruit ripening c) Soil development	b) Plant growth d) None of these	
		4)	Which of the following is concen a) F.Y.M. c) Guanod	rated organic manure? b) Oil cake d) Compost	
		5)	Interveinal chlorosis occurred du a) Ca c) Cu	e to b) Mg d) K	
		6)	Biogas plant produces ga a) Chlorine c) Ethane	s. b) Butane d) Methane	
		7)	Gibberellic acid is found in a) Avena sativa c) Corn germ oil	 b) Giberella fujikori d) Micoriza	
		8)	Which of the following is micron a) Boron c) Phosphorous	trient? b) Nitrogen d) Potassium	
	B)	Fill 1) 2) 3) 4)	in the blanks.  Urea contains of nitrogen    plant hormone is growth Bangalore method of compostin Guano is obtained from excreta	etardant. I was developed by	04

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Q.2	Ans	swer the following. (Any six)	12
	a)	Define micronutrients.	
	b)	Write the application of cytokinins in agriculture.	
	c)	Define pest and pesticide.	
	d)	Write examples of nitrogenous fertilizers.	
	e)	Define biofertilizers.	
	f)	Define manure.	
	g)	Write the deficiency symptoms of boron in plant.	
	h)	What is soil profile?	

#### Q.3 Answer the following. (Any three)

12

- a) Write the deficiency symptoms of Molybdenum in plant.
- b) Describe the manufacture of phosphate fertilizers.
- c) Write a note on blue green algae as biofertilizers.
- d) Write the effect of modern agro technology and effect of pesticides on soil.

#### Q.4 Answer the following. (Any two)

12

- a) Write classification of pesticides based on chemical nature and types of target.
- **b)** Write a note on acidic and alkaline soil. Describe reclamation of acidic and alkaline soil
- c) Describe in brief nitrogenous fertilizers.

#### Q.5 Answer the following. (Any two)

12

- a) Describe in brief vermicompost and vermiwash.
- b) What is phosphatic fertilizer and write the classification of phosphatic fertilizers.
- c) Describe the process of soil formation.

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# M.Sc. (Semester - I) (New) (NEP CBCS) Examination: Oct/Nov-2023 AGROCHEMICALS AND PEST MANAGEMENT Introductory and Industrial Entomology (2301102)

•	Day & Date: Sunday, 07-01-2024 Time: 03:00 PM To 05:30 PM					Max. Mark	s: 60
Instr	uctio		-	uestions are compulsory. Ire to right indicate full marks	<b>5.</b>		
Q.1	A)	<b>Choo</b> 1)		ne correct alternatives. naging stage of Cockroach is only nymph larval	b) d)	 nymph and adult only adult	80
		2)	a)	nite is the common name of Microtermus obesus Tobacco caterpillar	b) d)	 Cyst forming nematode None of the above	
		3)	a)	is pest. Stored grain Vertebrate	b) d)	Medicinal Forest	
		4)	a) ̈	is pest. Monophagous Stored grain	b) d)	Household Molluscan	
		5)	a)	cycle of Aphid completes by Egg-larva-adult Egg- larva-pupa-adult	b) d)	_ stages. Egg - nymph – adult none of the above	
		6)	a) c)	_ is the polyphagous pest. Monkey Both 'a' and 'b'	b) d)	Polu bettle Grasshopper	
		7)	,	_ is called as Rock bee. Apis dorsata Apis mellifera	b) d)	Apis floraea Apis indica	
		8)	Filifo a) c)	ormantennae occurs in Termite Cricket	_inse b) d)	ect. Grasshopper None of the above	
	B)	1) <i>i</i> 2)	Rattu	blanks/ write true or false is norvegicus is the scientific types of legs found in Cock and slug are controlled by _ is the scientific name of mu	kroacl	h.	04

Q.2	Ans a) b) c) d) e) f) g)	Tricho card used for controlling which pest. What is the scientific name of Cyst forming nematode? Write down scientific name of Mango stem borer. Where termite lives? Which Sucking pest secretes stickysecretion on their host plant? Write note on applied entomology. Enlist different pest and their host in your area. Describe production of NPV.	12
Q.3	Ans a) b) c) d)	ewer the following (Any Three) Explain Aphid. Control measures on Termite. Damages caused by Grasshopper. Explain parasites and predators.	12
Q.4	Ans a) b) c)	wer the following (Any Two)  Describe the life cycle pattern of red hairy caterpillar.  Explain Snail as molluscan pest.  Importance of sericulture.	12
Q.5	Ans a) b) c)	wer the following (Any Two)  Describe the life cycle pattern of White ants.  Describe termite as a social insect.  What is apiculture? Describe various components of apiculture.	12

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# M.Sc. (Semester - I) (New) (NEP CBCS) Examination: Oct/Nov-2023 AGROCHEMICALS AND PEST MANAGEMENT Plant Pathology and Weed Management (2301106)

			Plant Pathology and We	ed Man	agement (2301106)	
•			esday, 09-01-2024 To 05:30 PM		Max. Mai	rks: 60
Instr	uctio		) All questions are compulsory ) Figure to right indicate full m			
Q.1 A)	<b>Cho</b> (1)	Applications of appropriate for the disease but care should seeds from treated plants to a) Food & Feed c) Transplanting	be taken		08	
		2)	Papaya Ring spots are caus a) Virus c) MLOs	b) d)	 Fungus Ergot	
		3)	The study of epidemics and as a) Plant Pathology c) Fungicide	the facto b) d)	rs that influence them is a called  Epidemiology  none of above	
		4)	Hoeing is method of value a) Biological c) Chemical	weed con b) d)	trol. Hot water Physical	
		5)	Most plant viruses are a) Rod shaped c) Parallel shaped	 b) d)	Curved shaped none of above	
		6)	Leaf curl of chili caused by _a) Odium sp. c) Gemini virus	b) d)	<i>Plasmopara halstedi</i> Wilt	
		7)	Club rot of cabbage is a) <i>MLos</i> c) Powdery mildew	_ disease b) d)	es. Fungal Viral	
		8)			plant which interfere with the sthus adversely affect human  Disease  Cercospora	
	B)	1)	Fill in the blanks. i) Mancozeb is type oii) Use as chemical is known	_		02
		2)	Write the True and False.  i) 2- 4-D is non selective He ii) Red rot of Sugarcane cau		iruses.	02

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Q.2	An	swer the following. (Any Six)	
	a)	Write the definition of weed.	

- b) Write the Casual organism of leaf curl of chili.
- c) Defined epidemiology on plant disease.
- d) Write the symptoms of Banana leaf spot.
- e) Advantages of weed.
- f) Write the control method of leaf spot.
- g) Enlist the All fungal diseases in our syllabus.
- h) Defined the plant Disease.

#### Q.3 Answer the following. (Any Three)

12

12

- a) Define the weed write classification of weed.
- **b)** Explain the concept of plant disease.
- c) Write Koch's postulates.
- d) Advantages of weed.

#### Q.4 Answer the following. (Any Two)

12

- a) Enlist the types of fungal diseases write the common symptoms on fungal disease.
- **b)** Write the causal organism, symptoms and control method of yellow vein mosaic of beans.
- c) Enlist method of weed control write brief cultural method.

#### Q.5 Answer the following. (Any Two)

12

- a) Write the Common symptoms and control method of viral diseases
- b) Explain the factors affecting of epidemic development.
- c) Write the causal organism, symptoms and control method of Red rot of sugarcane

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# M.Sc. (Semester - I) (New) (NEP CBCS) Examination: Oct/Nov-2023 AGROCHEMICALS AND PEST MANAGEMENT Research Methodology (2301103)

			Research Methodology (2301103)	
Time	e: 03:	00 PN <b>ons:</b> 1	Max. Marks:  M To 05:30 PM  I) All questions are compulsory.	: 60
		4	2) Figures to the right indicate full marks.	
Q.1	A)	<b>Cho</b> 1)	ose correct alternative.  The main concept behind doing research is to  a) Study and explore knowledge.  b) Start with predefined and clear-cut objectives  c) Get new ideas.  d) Define clear objectives.	08
		2)	In order to begin research, one must  a) Start with a number of clear goals. b) Start with a number of predefined objectives. c) Have a well-defined research method. d) Solve the research problem.	
		3)	<ul> <li>Doing research requires drafting a working outline.</li> <li>a) Having a pre-defined and clear-cut objectives.</li> <li>b) Planning to get answer for what, why &amp; where type of question.</li> <li>c) Having clear idea about research problem.</li> <li>d) Have a well-defined research method.</li> </ul>	
		4)	<ul> <li>Research objectives fail into a number of categories that include</li> <li>a) Planning to get answer for what, why &amp; where type of question.</li> <li>b) Considering the logic behind the method we use in the content of research.</li> <li>c) Formulation, concept, and planning for research method.</li> <li>d) Exploratory, descriptive, diagnostic, and experimental research.</li> </ul>	<u> </u>
		5)	Formulative research studies in a category of research that aims to a) Achieve new insights of a concept. b) Analyze characteristics of something. c) Determine the frequency with which something occurs. d) Test the relationship between variables.	

		6)	The formula C <sub>6</sub> H <sub>4</sub> O <sub>2</sub> .C <sub>6</sub> H <sub>4</sub> (OH) <sub>2</sub> represent  a) Quinhydrone b) hydroquinone c) quinine d) None of these	
		7)	The electrolyte solution within the glass electrode (ref) of the pH meter is  a) Saturated KCL b) Con.HCL c) Dilute KC1 d) Dilute HCL	
		8)	<ul> <li>Research is considered to be more than just a way of skills, it is</li> <li>a) Planning to what, why &amp; where type of question.</li> <li>b) A way of critical thinking about professional aspects of relate to your work.</li> <li>c) The research methods used within research methodology.</li> <li>d) Discovering the relation between variables.</li> </ul>	
	B)	Fill i 1) 2) 3) 4)	According to advanced learners' dictionaries research is search for is the measure of the capability of the material to pass the flow of electric current.  Titration in which end point are determined by measurement of EMF is called  In an electrolytic cell, metal passes in to ions at	4
Q.2	Ans a) b) c) d) e) f) g) h)	What Define What Define What Define Define Define What	he following. (Any Six)  t is research?  ne research design?  t is pH?  e application of potentiometer.  ne electrical conductivity.  t is reference electrode?  ne hypothesis?  t is Sci-finder?	2
Q.3	Ans a) b) c) d)	Write Write Expl	the following. (Any Three)  e the objectives of research. e the note of research design. ain scientific writing & ethics. e the application of pH meter.	2
Q.4	Ans a) b) c)	Des Com	he following. (Any Two)  cribe the types of Research.  puter -based application of pesticide development.  cribe types of electrodes.	2

12

- Q.5 Answer the following. (Any Two)a) Describe types of research design.
  - b) Write the use of computer-based equipment for pesticide analysis.
    c) Describe working of potentiometry.

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# M.Sc. (Semester-I) (Old) (CBCS) Examination: Oct/Nov-2023

	Ch	omic	AGROCHEMICALS AND			
Dav			day, 05-01-2024	п го	rmulations – I (MSC26101) Max. Marks	s: 80
•			To 06:00 PM			
Instr	uctio	2	Question no. 1 and 2 are comp Attempt any three questions fr Figure to right indicate full man	om Q	•	
Q.1	A)	<b>Choo</b> 1)	ose the correct alternatives. (In Among the tertiary butyl halide a) Fluoride c) Bromide		is better leaving group.	10
		2)	Highest antioxidant property of a) Water c) Hexane		n extract is found in —— solvent. Alcohol Ether	
		3)	Quinalphos contains ——— rii a) Quinoxaline c) Quinoline	•	ts structure. Pyridine Quinolone	
		4)	While spraying pesticid a) E.C c) S. P		nstant agitation is required. W. P S. L	
		5)	Acid catalysed dehydration of follows mechanism.	alcoho	ols gives alkene. This reaction	
			a) E2 c) E1cb	b) d)	E1 E2cb	
		6)	Reformatsky reaction involves Intermediate.  a) Organomagnesium c) Free radical	b)	Carbene	
		7)	Structure of pyrethroid a) Fenvalerate c) Deltamethrin	does b) d)	not contains cyclopropyl ring. Cypermethrin Permethrin	
		8)	<ul><li>2-Butene on reaction with HBr</li><li>a) 3-Butene</li><li>c) 2-Bromobutane</li></ul>	gives b) d)	product. 3- Bromobutane 2-Chlorobutane	
		9)	Honey bees produces certain predator, called pheroma) Trail c) Alarm		, when they are attacked by a Sex Epideictic	
		10)	Anticoagulants are rat poisons to inability to produce a) Vit. A c) Vit. C	b) d)	rat due to hemorrhage, this is due  Vit. B  Vit. K	

	B)	FIII I	n the blanks.	06
		1)	Neem oil inhibits ecdysone formation in insects, which is responsible	
			for —— process in insects.	
		2)	Formation of Cinnamic acid on reaction of Benzaldehyde, Diethyl	
			malonate and Pyridine is example of —— reaction.	
		3)	fumigant is used as a grain preservative.	
		4)	Monocrotophos shows insecticidal and property.	
		5)	Two atoms of Bromine are present in structure of pyrethroid.	
		6)	Lactone intermediate formation takes place in reaction.	
	_			
<b>Q.2</b>			ne following	16
	a)	Discus	ss granules in detail advantages and disadvantages of E. C ation.	
	b)	Write a	a note on. Friedel crafts acylation reaction.	
	c)	Explai	n mode of action of Organochlorine and Carbamate pesticides.	
	d)	Give s	ynthesis and uses of Fenvalerate.	
Q.3	۸nc	swar th	ne following.	
Q.J	a)		synthesis, properties and uses of Chlorpyriohos.	80
	•		are different neem based products. Discuss insecticidal property.	08
	IJ,	vviiat	are different fleem based products. Discuss insecticidal property.	00
Q.4	Ans	swer th	ne following.	
	a)	Write I	Pinacol to Pinacolone rearrangement reaction with mechanism.	80
	b)		nethods like baits, lures, attractants and repellents are used for insect	80
		contro	l in agriculture.	
<b>~</b> =	A	41-	a fallendere	
Q.5			ne following.	00
	•		is mean by adjuvants? Write different adjuvants in detail.	80
	b)	vvnati	is addition reaction? Write addition of H <sub>2</sub> and HBr to alkene.	80
Q.6	Ans	swer th	ne following.	
	a)	Write I	Benzoin condensation reaction with mechanism.	80
	b)	Write \$	SN <sup>2</sup> reaction with respect to example, mechanism, stereochemistry	80
	•		nergy profile diagram.	
0.7	۸na	4L	oo following	
Q.7			ne following.  Nitration, Sulphonation and Halogenation reactions of Benzene	08
	a) b)		Nitration, Sulphonation and Halogenation reactions of Benzene. the synthesis, environmental fate and uses of Phorate.	08
	b)	vviile i	uie synniesis, environinentai iate and uses di Filorate.	UO

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# M.Sc. (Semester - I) (Old) (CBCS) Examination: Oct/Nov-2023 AGROCHEMICALS AND PEST MANAGEMENT

So	il Sc	cienc	_	Fertilizers, Micronutrients (MSC2610)	an	d Plant Growth Regulators
Time	: 03:0	00 PN <b>ons:</b> 1	/I To I) Q.	y, 07-01-2024 06:00 PM Nos. 1 and 2 are compulsory.	ĺ	Max. Marks: 80
			,	tempt any Three questions fron gures to the right indicate full m		
Q.1	A)	<b>Cho</b>		the correct alternative. (MCQ I colloid is a part of	2)	10
		')		sand loam	b) d)	clay humus
		2)	a)	ter holding capacity of soil is go type of soil color of soil	b)	ned by organic matter of soil alkalinity of soil
		3)	sto	e product formed by mixing amr ne is called lime chalk nitro chalk		ium hydrate with 40% lime dolomite chalk lime stone chalk
		4)		example of concentrated organ FYM Oil cake	b)	nanure is Bone meal Sewage
		5)	a)	berllic acid is found in Avena sativa Corn germ oil	b) d)	Gibberella fujikuori Micorhiza
		6)	Wh a) c)	ich one of the following is not m Zn Mo	b)	onutrient? Cl P
		7)		drogen ion concentration is increactive acidity Salinity		es in soil, causes active alkalinity none of these
		8)		luminum oxides are abundance Bouxite Khader		aterite is called Basalt Colloids
		9)	a)	e chemical composition of single [3 Ca (CH <sub>2</sub> PO <sub>4</sub> ) <sub>2</sub> H <sub>2</sub> O] [Ca (H <sub>2</sub> PO <sub>4</sub> ) <sub>2</sub> H <sub>2</sub> O]	b)	Ca <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>
		10)		eaking of seed dormancy is mad Auxin Cytokinin		y the treatment of Gibberellic acid CCC

	B)	Fill in the blanks  1) Interveinal chlorosis occurred due to  2) is an example of bulky organic manure.  3) Cow pea (Vigna cajana) is an example of  4) Biogas is composed of  5) Bangalore method of composting was developed by  6) Coconut milk contains growth hormone.	06
Q.2	a) b) c)	Swer the following. Classification of fertilizers. Bangalore method of composting. Liquid manure. Role of Mn and Mo.	16
Q.3	Ans a) b)	wer the following.  What are biofertilizers? Describe the manufacture of Ammonium molybdate.  Write a note on specifications of grades of ammonium Phosphate.	16
Q.4	Ans a) b)	swer the following.  Describe the structure of soil.  Describe in brief chemical properties of soil.	16
Q.5		wer the following.  What are phytohormones? Describe the practical applications of GAA  Write in brief - role of ethelene.	16
Q.6	Ans a) b)	wer the following. Write a short note on Blue green algae as a Biofertilizer. Explain Role of micronutrients.	16
Q.7	Ans a) b)	wer the following.  Write a note on Manufacture of Micronutrients.  Describe in brief 'Production and marketing of Biofertilizers of NAFED	16

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# M.Sc. (Semester - I) (Old) (CBCS) Examination: Oct/Nov-2023 AGROCHEMICALS AND PEST MANAGEMENT Introductory and Industrial Entomology (MSC26103)

				•		<b>5</b> , (	,
•				y, 09-01-2024 06:00 PM			Max. Marks: 80
Instr	uctio	2	) Atte	estion 1 and 2 are compuls empt any Three questions f ure to right indicate full man	rom Q.:	3 to Q.7.	
Q.1	A)	<b>Choo</b> 1)	Stud a)	he correct alternative (Mody) dy of insect is called as Physiology	 b)	Anatomy	10
		2)	a)	Entomology is the biocontrol agent. silkworm	d) b)	Pathology white grub	
			,	Trichogramma	d)	Nematods	
		3)		ernal study of insect is calle Ecology Physiology	ed as _ b) d)	Anatomy none of above	
		4)	a)	berry silkworm belongs to f <i>Bombycidae</i> <i>Aantheraea assama</i>	b) _	Attacus ricinii a) and b) both	
		5)	a) c)	metamorphosis is pres Complete Disturbed	sent in v b) d)	white grub. Incomplete Merged	
		6)		kroach belongs to phylum Echinodermata Arthropoda	b) d)	Mollusca Brachiopod	
		7)	Nes a) c)	t of honey bee is called as Borrows Crivices	b)	 Hive None of above	
		8)	a) c)	in honey bee colony is Queen drone	feed w b) d)	ith royal jelly. worker all of above	
		9)	a) c)	mouth parts are preser Pearcing and sucking Rasping	nt in cod b) d)	ckroach. biting and chewing sponging	
		10)		is viral disease found i		•	
			a) c)	sac brood disease Nosema disease	b) d)	American foul disease none of Above	e

	В)	1) eyes are present in cockroach. 2) honey bee is called as little bee. 3) Scientific name of mango stem borer is 4) White grub beetle belongs to order 5) Chalk brood disease is fungal disease found in the 6) type of life cycle is present in the grasshopper.	06
Q.2	Ans a) b) c) d)	wer the following. Give the general description of the insect Abdomen. Write the note on insect predator. Describe the types of honey bee. Give the general life cycle pattern of jowar stem borer.	16
Q.3	Ans a) b)	wer the following.  Define Apiculture. Give the life cycle of honey bee.  Explain the general life cycle pattern of the aphid and its control measure.	16
Q.4	Ans a) b)	wer the following.  Draw the neat labeled diagram of bee box and describe it.  Describe the life cycle pattern of Termite and write its nature of damage and control measure.	16
Q.5	Ans a) b)	wer the following.  Describe the digestive system of cockroach with neat labeled diagram.  Define Sericulture and describe mulberry cultivation.	16
Q.6	Ans a) b)	wer the following. Write a disease caused in honey bee with control measure. Describe the biting and chewing type of mouth part with labeled diagram.	16
Q.7	Ans	wer the following. What is nuptial flight in honey bee? Give food and medicinal value of honey	16

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# M.Sc. (Semester - I) (Old) (CBCS) Examination: Oct/Nov-2023 AGROCHEMICALS AND PEST MANAGEMENT Plant Pathology and Weed Management (MSC26108)

	F	Plant Pathology and Weed Mar	
•	Date: Th	ursday, 11-01-2024 1 To 06:00 PM	Max. Marks: 80
Instruc	2	) Question 1and 2 are compulsory. 2) Attempt any Three questions from ( 3) Figure to right indicate full marks.	Q.3 to Q.7.
Q.1 A	-	ose the correct alternative. (MCQ)  The relative capability of a pathogen a) Pathogenicity b) c) Infection d)	Virulence
	2)	Diseases that are seen only occasion geographic concentration, are called a) Epidemic b) c) Pandemic d)	d diseases. Sporadic
	3)	Exclusion of plant disease by legisla a) Plant quarantine b) c) Biological control of plant d)	Disease quarantine
	4)	The hand weeding is method a) Biological b) c) Chemical d)	
	5)	Red rot of sugar cane is caused by a) Claviceps fusiformis b) c) Puccinia penneseti d)	Colletotrichum falcatum
	6)	The Greening Disease of Citrus is to a) Dragonfly b) c) Grass hopper d)	ransferred by insect Fruit fly Psyllid
	7)	Dodder (Cuscuta) is  a) Algal pathogen b)  c) parasitic insect d)	• •
	8)	Weeds having life cycle of one year a) Annual b) c) Perennial d)	Biennial
	9)	Bacterial Blight of Bean is caused by a) Xanthomonas aculli b) c) Xanthomonas axonopodis d)	Xanthomonas citri
	10)	Reproduction in fungi is carried out a) Sexual b) c) Vegetative d)	Asexual

	B)	<ol> <li>Fill in the blanks.</li> <li>Fungi, which can grow on living host plant, are called parasite.</li> <li>The fungi Pseudocercospora musicola cause the disease in banana crop.</li> <li>Crown gall of grapes caused by spp.</li> <li>Plant pathology is also known as</li> <li>Little leaf of brinjal is caused by</li> <li>The disease occurring throughout the continent or sub-continent is known as</li> </ol>	06
Q.2	Ans a) b) c) d)	wer the following. Write a short note on Koch Postulates. Explain Red rot of Sugarcane with respect to causal organism, symptoms, disease cycle, and control measures. Explain the general characters of bacteria. Write a note on plant quarantine.	16
Q.3	Ans a) b)	swer the following. Define Plant disease. Write a note on stages of plant disease development. Define Epidemiology. Explain the slow and rapid epiphytotic.	16
Q.4	Ans a) b)	Explain the following viral disease of plant with respect to causal organism, symptoms and control measures.  i) Leaf curl of Chillies  ii) Tobacco mosaic virus  Explain the following disease of plant with respect to causal organism, symptoms and control measures.  i) Sandle spike  ii) Little Leaf Brinjal	16
Q.5		Explain the following disease of plant with respect to causal organism, symptoms and control measures.  i) Wilt of Banana  ii) Bacterial blight of Bean Explain the following disease of plant with respect to causal organism, symptoms and control measures.  i) Banana leaf spot  ii) Ergot of Bajara	16
Q.6	Ans a) b)	Write a detail note on concept of plant disease. Explain the following disease of plant with respect to causal organism, symptoms and control measures. i) Grassy shoot disease of Sugarcane ii) Yellow vein mosaic of Bean.	16
Q.7	Ans a) b)	wer the following.  Define weed. Explain in detail the classification of weeds.  Enlist the methods of weed control. Explain chemical & biological methods of weed control.	16

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	•	AGROC	HEMICALS	AND PE	ST	mination: Oct/Nov-2023 MANAGEMENT ulations - II (MSC26201)	
Day & Dat Time: 11:0						Max. Mark	s: 80
Instructio	2	) Attempt	and 2 are com any Three ques to the right indi	stions from		No.3 to Q.No.7.	
Q.1 A)	1)	Synthesis a) Fries				te the sentence. _ rearrangement reaction. Cope Claisen	10
	•		hlorate is tive herbicide ticide	_•	b) d)	Non selective herbicide Fungicide	
	•	Thallium ( a) Miticio c) Ovicio		d as	 b) d)	Avicide Rodenticide	
	ŕ	The comp called a) Aeros c) Fumi	 sole	g pesticida	b) d)	operty in gaseous state is  Dust  Granules	
	ŕ	insecticida) $\alpha$	omer of hexachl al activity?	orocycloh	b)	•	
	6)	<ul><li>c) γ</li><li>Fungicida</li><li>to</li><li>a) Suga</li><li>c) Insec</li></ul>	it. r	ordeaux m	d) ixtui b) d)	ੱ re is increased by adding Salt Jaggery	
	,	Carbofura a) Furac	an has trade na dan	me	b)	Sevin	

d) Z-78

b) Bactericide

d) Herbicide

Nitronaphthalene containing halogen atom in its structure acts as \_\_\_\_\_.

c) Gamaxone

a) Fungicide

c) Insecticide

8)

	9)			၁ <sub>2</sub> gro၊	ups ar	e pres	ent in									
		a) c)	One Thre	е				b) d)	Tv Fo							
	10)		Inse	ialkyl u cticide ericide		are us	ed as _	b)		ungici erbici						
B)	Fill i 1) 2) 3) 4) 5) 6)	Tin Hyd fun Pho Cal Niti	drazin ctiona enyl th rbama ralin is is	oounds e com Il group niocyar ates co s used	pound o. nate ad ntain _ in agri o treat	s used	lly used as performed as	in ci	rop: gro	s. up.				— ay		06
Ans a) b) c) d)	Write Write Write	e us e a r e sy	note o nthesi	_	amate irbofur	pestican.		cide.								16
Ans a) b)	Desc to ac	cribe cetyl	coline	tructur		-	lationsl s.	hip o	f ca	arban	nates	with	refer	rence	,	16
Ans a) b)	Expl	ain s		esis, pr			d uses ises of				) <u>.</u>				,	16
Ans a) b)	Expl	ain s	•	esis an			itachlo nyl tolu		<b>)</b> .						,	16
Ans a) b)	Write	e pro	•	es and		-	rogen equipr	•					•		,	16
Ans a) b)	Write Desc	e pro cribe	•	es and			oxide ticide d			•	•		ulatio	n	,	16

Seat	Sat	D
No.	Set	<u> </u>

#### M.Sc. (Semester - II) (New) (CBCS) Examination: Oct/Nov-2023 Agrochemicals and Pest Management Analytical Techniques for Agrochemicals (MSC26202)

-			uesday, 19-12-2023 И То 02:00 PM		Max. Marks: 8	30
Instr	uctio	2	1) Q. Nos. 1 and 2 are compulso 2) Attempt any Three questions t 3) Figures to the right indicate fu	from Q.		
Q.1	A)	Cho 1)	ose the correct alternative. (M	-		10
		',	<ul><li>a) Hydrogen</li><li>c) Quinhydrone</li></ul>	b)	Platinum Glass	
		2)	<ul><li>All chromatographic techniques</li><li>a) Precipitation</li><li>c) Electrolysis</li></ul>	b)	sed on the principle of Solvation Separation	
		3)	a) Structural arrangement	b)	pase indicator depend on Ionization of indicator All of these	
		4)	Resistance of solution is measural Potentiometric bridge c) Wheatstone bridge	b)	Potentiometer	
		5)	Methyl red is in acid solu a) Red c) Orange		Yellow Pink	
		6)	The process of extracting smal material representing its true coa) Extracting c) Quantitative analysis	ompone b)	ents. Sampling	
		7)	SI unit of conductance is a) Siemen c) Mho	 b) d)	Ohm None of these	
		8)	The P <sup>H</sup> range of color change of a) 7-10 c) 8.3-10	b)	olphthalein indicator is 4-7 7.3-9.5	
		9)	The hottest flame in O <sub>2</sub> is produ a) Acetylene c) Cyanogen	•	Butane	
		10)	Thin layer chromatography is _ a) Partition c) Electrical mobility	b)	chromatography. Adsorption None of these	

	B)	Fill in the blanks.	06
	,	1) A chemical reaction between a titrant and titrand is called as	
		2) Erichrome black T also known as	
		3) Silica gel is phase in TLC.	
		4) Titration in which end point are determined by emf measurement	
		are called	
		5) Quinhydrone is mixture of quinone and hydroquinone.	
		6) In simple flame photometers the monochromator is	
Q.2	Ans	swer the following.	16
<b>~</b>	a)	Write note on specific and equivalence condunctance.	. •
	b)	Write applications of atomic absorption spectroscopy.	
	c)	Write applications of turbidimetry.	
	d)	Describe gravimetric estimation of Fe.	
	,	<del>g</del>	
Q.3	Ans	swer the following.	16
	a)	What are acid base titrations? Explain their types with suitable example.	
	b)	What is Paper chromatography? Explain various types of development of	
	,	paper chromatography.	
	_		
Q.4		swer the followings.	16
	a)	Describe principle, working and applications of Thin layer chromatography.	
	b)	What are complexometric titrations? Describe metallochromic indicators.	
Q.5	Ans	swer the followings.	16
	a)	Draw the circuit diagram of P <sup>H</sup> meter and explain its working.	
	b)	Describe principle and application of Nephelometer.	
Q.6	Ans	swer the followings.	16
	a)	What is chromatography? Write classification of chromatography with	
		principle of each class.	
	b)	Write note on stripping voltametry. Give applications of voltametry in	
		trace analysis.	
Q.7	Δns	swer the followings.	16
~	a)	Write principle and working of flame photometer.	. •
	b)	Describe principle and application of polarimeter in optical active pesticide.	

Seat	Sat	D
No.	Set	

# M.Sc. (Semester - II) (New) (CBCS) Examination: Oct/Nov-2023 AGROCHEMICALS AND PEST MANAGEMENT Economic Entomology (MSC26206)

				Economic Entomol	ogy (	(MSC26206)	
				sday, 20-12-2023 02:00 PM		N	lax. Marks: 80
Insti	ructio	2	) Atte	estion 1and 2 are compulsor empt any Three questions fro ure to the right indicate full n	om Q.	No. 3 to Q. No. 7.	
Q.1	A)	<b>Choo</b> 1)		he correct alternative is household pets. Thrips Bed bug	b) d)	Nematode Mite	10
		2)	a)	ckroach has type of m Sucking Siphoning		art. Biting and chewing Sponging	
		3)	a)	ເຣe sparrow belongs to phylເ vertebrate nematohelminthes	ım b) d)	 arthropoda platyhelminthes	
		4)	a)	cycle of sucking cattle louse Egg-larva-pupa-adult Egg-nymph-adult		oletes by stages. Egg-nymph-pupa-adult Nymph-adult	
		5)		is polyphagous pest. <i>Spodoptera species</i> Leaf caterpillar	b) d)	Leaf minor Silver fish	
		6)		ite grub completes ge One Three	nerati b) d)	on in year. Two Four	
		7)		st damaging stage of nemato first fourth	ode is b) d)	third second	
		8)	a) c)	is the pest of livestock. Rice weevil Nematode	b) d)	Black fly Pulse beetle	
		9)	Lima a) c)	ax spp. is pest of agri vertebrate molluscan	cultur b) d)	al crop. insect nematode	
		10)	a) c)	is polyhouse pest. Khapara beetle Rat	b) d)	Cut worm Bed bug	

	В)	<ol> <li>fill in the blanks.</li> <li>Maleria caused by species of mosquito.</li> <li>Scientific name of Aphid is</li> <li>Chemicals used to control nematode are known as</li> <li> is the order of Rat.</li> <li> is branch of science dealing with the scientific study of insects.</li> <li>Male Anopheles mosquito sucks the</li> </ol>	06
Q.2	Ans a) b) c) d)	wer the following. Control measures of mosquitoes. Write a note on House hold pest. Describe damages caused by hairy caterpillar Control measures of Rat.	16
Q.3	Ans a) b)	wer the following.  Describe life cycle pattern of nematode and write its damage caused in agriculture crop.  Describe life cycle pattern of cockroach its damage caused in agriculture crop.	16
Q.4	Ans a) b)	wer the following. Write a nature of damage, control measure and life cycle of termites. What are vertebrate pest? Explain nature of damage of monkey.	16
Q.5	Ans a) b)	wer the following. Write a note on polyhouse pest and give its nature of damage and control measure. Explain slug as a molluscan pest of agricultural crops.	16
Q.6	Ans a) b)	swer the following.  Explain different species of Rodent.  Describe the life cycle pattern of Cotton white fly and write its control measures.	16
Q.7	Ans a) b)	wer the following.  Describe damages caused by cut worms and grasshopper.  Write a note on Indian field mouse and give its nature of damage and control measure.	16

Seat	Set	D
No.	Set	

# M.Sc. (Semester - III) (New) (CBCS) Examination: Oct/Nov-2023 AGROCHEMICALS AND PEST MANAGEMENT Pesticides Residues and Toxicology (MSC26301)

			Pesticides Residues and To	oxico	ology (MSC2630	<b>)1)</b>
			iday, 05-01-2024 /I To 02:00 PM			Max. Marks: 80
Instr	uctio	2	) Q. No. 1 and 2 are compulsory. 2) Attempt any Three questions fro 3) Figures to the right indicate full	om Q.		
Q.1	A)	<b>Mul</b> (	iple choice question is cardiac poison. a) Hcl c) Alcohol	,	opium Prussic acid	10
		2)	Chlorine gas leaked in environmental pollutant c) contaminant	ent is b)		·
		3)	a) environmental c) wildlife		of cause of mortalit forensic clinical	y.
		4)	The chemical which causes cand a) poison c) toxicant	cer is b) d)		
		5)	<ul><li>poison affects on the nerv</li><li>a) corrosive</li><li>c) Neurotics</li></ul>	b)	ystem of man. Irritants cardiac	
		6)	The research institute of toxicolo a) Mumbai c) Delhi	b)	established in Pune Lucknow	
		7)	The process of tumour formation a) Neoplasia c) metaplasia	b)	own as hyperplasia Anaplasia	
		8)	The deep sleep and coma is pro a) narcotics c) irritants		l by in huma spasmodic cardiac poison	ın beings.

		9)	,	Corrosive	ffects on th		b) <sup>•</sup>	ystem of man. Irritants		
		10)	C) Mir	Neurotics namata disea	see was ob		,	cardiac		
		10)		China Japan	ise was ob		b)	Africa India		
	B)	Fill i 1) 2) 3) 4) 5) 6)	The	e fungicide ki is the mo nor formation	ovement of n is called a abnormalitie	 pesticide as es in hum		water over a slopping embryo.	surface	06
Q.2	a) b)	Dese Write Wha	cribe e the at are	following (A e in brief envi e note on bio e point and n detail definiti	ironmental degradatio on-point so	n. ources of	wa	ter system.		16
Q.3	Ans a) b)	Write	e the	following. e symptoms a pesticide res				S.		16
Q.4	Ans a) b)	Give	the					is of organ system affe eir symptoms and treat		16
Q.5	Ans a) b)	Expl	ain i	f <b>ollowing.</b> n brief effect n detail the h				life in general.		16
Q.6	Ans a) b)	Write	e the	following. e mechanism pioaccumula				orine. iitable example.		16
Q.7	Ans a) b)	Des	cribe	f <b>ollowing.</b> e pesticide re e in detail gas			nt.			16

Seat	Sat	D
No.	Set	P

# M.Sc. (Semester - III) (New) (CBCS) Examination: Oct/Nov-2023

			AC	GROCHEMICALS AND Advances in Pest Con			
-			-	, 07-01-2024 02:00 PM		Max. Mark	s: 80
Instr	uctio	2	) Atte	estion no. 1and 2 are compu empt any three questions fro ure to right indicate full mark	m Q.		
Q.1	A)	<b>Choo</b> 1)		he correct alternatives fro dwich method is the known of the batch of insect. two leaves two crop		e given options. Int of insecticide is put between two insect two flower	10
		2)	be _	assay is the measurement of Chemical	,	potency of any stimulus which may physical all of the above.	
		3)	resp a)	Photo migration method of conse of insect larvae. Phototaxic Photo reflection	bioas b) d)	say is performed by using Dry Film Photo merge	
		4)	inse		effect b) d)	of the host plant on the of biology tolerance	
		5)	a)	R Stands for House Pest Resistance Host Plant Resistance	b) d)	Host Plan Resistance Host Plant Resisance	
		6)		I pheromone released by ins mating feeding		<del></del> : .	
		7)	Nee a) c)	em leaves is the example of attractants chemo sterilant	b) d)	 repellant pheromones	
		8)	Whi a) b) c) d)	ch of the following is not true Requires high investment Technical knowledge requi Can be misused to cultivat Plants through hydroponics	red e ban		

		9)	a) b) c)	Insectic Insect p	ides Mod est habit jue of hai	le of action	า		ppliances	
		10)	a) c)	is incl Avicide: Fungici	S	ler the pes	b)	In	secticides Il of the above	
	B)	1) I (2) F (3) (2) F (5) F (6)	In the chem Pyretl Tricho Bucker Pherco The to The The To To The To To The To	iical hroids ex ogramma et pump omone re species echnique	dose xtracted f a is sprayer h eleased b s is called	rom nave oy one sex l as vating plar	_ part sha <sub>l</sub> only b	of ( pec	t animal is introduced to  Chrysanthemum plant.  I handle. elicits response in both the sexutrient solution without the use	
Q.2	Ans a) b) c) d)	Write Write Define	a not a not e Bio	te on kna assay ar	emosteril apsack sp nd write a tixenosis.	orayer. a note on f	umiga	tior	n method of bioassay.	16
Q.3	Ans a) b)	Expla	in bic						est control. plants and their estimation.	16
Q.4	Ans a) b)	Give i mana	impor igeme	ent.		ffects of N		ase	ed preparations in insect pest	16
Q.5	Ans a) b)	Expla	in ins						ance management. ny four methods of bioassay.	16
Q.6	Ans a) b)	Write Bucke	types et and	d power	operated	type of sp	rayer.	ı	eat labeled diagram parts of c technique.	16
Q.7	Ans a) b)	Expla	in in			resistance n of neem		nt p	rotection and its application.	16

Seat	Sat	D
No.	Set	

# M.Sc. (Semester - III) (New) (CBCS) Examination: Oct/Nov-2023

			A	GROCHEMICALS AND  Diseases of Crop Pla			
•				y, 09-01-2024 02:00 PM		Max. Mar	ks: 80
Insti	uctio	2	) Atte	estion 1and 2 are compulsor empt any Three from Q.3 to oure to right indicate full mark	Q.7.		
Q.1	A)	<b>Choo</b> 1)	Ust a)	he correct alternatives fro ilago scitciminea caused due Fruit rot Leaf rust	e to _ b)	-	10
		2)	a)	vny Mildew caused due to fu Fusarium oxysporium Alternaria solani	b)	Peronosclerospora sorghi	
		3)	a)	imoploeospora indica diseas Fungicide Insecticide	b)	trol Monocrotophos a & b	
		4)	a)	st of sorghum caused due to Gleosporium ampelfagum Puccinia purpurea	b)	Colletotrichum falcatum	
		5)	a) b) c)	nacelotheca cruenta caused Loose smut- leaf spot <i>Colletotrichum gloeosporioi</i> Powdery mildew		oof Sorghum.	
		6)	a)	ck or stem rust is diseases o Sorghum Maize	b)	_crop. Wheat Sugarcane	
		7)	a)	ed treatment controldi Leaf Leaf spot	sease b) d)	Blight	
		8)	Spr a) c)	ay mancozeb is meth Chemical <i>Biological</i>	od of b) d)		
		9)		ad smut coused due to Fusarium oxysporium Sphacelotheca reiliana	b)	ases. <i>Colletrichum gloeosorioides</i> White rust	
		10)		disease resistance varieties Leaf Fruit		Primary and secondary	

	B)	Fill in the blanks.	06
		1) Bavistin is type of fungicide.	
		Disease free planting material is method of disease control.	
		<ul><li>3) Fungicides are used for soil are control disease.</li><li>4) White rust coursed due to</li></ul>	
		5) Udbatta disease are observed oncrop.	
		6) Wind flow and Rain flash are infection.	
Q.2	Ans	wer the following.	16
	a)	Write the symptoms and control method of Ergot on bajra.	
	•	Explain Leaf spot of castor.	
		Write the disease cycle and control wilt on Gram.	
	a)	common control method of fungal diseases.	
Q.3	Ans	wer the following.	16
۵.0	a)	Write the cousal organism, symptoms and management collar rot of Groundnut.	_
	b)		
Q.4	Ans	wer the following.	16
	a)	Enlist the diseases of sugarcane explain in detail smut.	
	b)	Write the general symptoms. Infection and control of Wilt.	
Q.5	Ans	wer the following.	16
		Write the diseases of sorghum details rust on sorghum.	
	b)	Write the diseases of sunflower Explain in detail powdery mildew.	
Q.6		wer the following.	16
	•	Write the common symptoms, disease cycle of fungal disease.	
	b)	Enlist the diseases of Tobacco write details Black shank.	
Q.7	Ans	wer the following.	16
	•	Explain the Rust and wilt disease of peas.	
	b)	Write the diseases soybean of explain Anthracnose disease.	

Seat	Sat	D
No.	Set	

# M.Sc. (Semester - IV) (New) (CBCS) Examination: Oct/Nov-2023

				ro-Based Marketing M	_	_	
				y,18-12-2023 06:00 PM		Max. Mar	ks: 80
Insti	ructio	2	) Att	Nos. 1 and 2 are compulsor empt any three questions fr jure to right indicate full mar	om Q.	No. 3 to Q. No. 7.	
Q.1	A)	<b>Choo</b> 1)	Pro a)	the correct answer from on oduct installation service is a after sales service indirect selling	an exar		10
		2)	a)	goods are purchased by nking. Specially Convenience	y a per b) d)	son after proper planning & Shopping Luxury	
		3)	a)	riding the total market in to o research segmentation	differen b) d)	t small parts is known as market analysis differentiation	·
		4)	a) c)	is a delivery of standard Marketing Consumption		ng to the societies. Production Purchasing power	
		5)		nerally the price of specially low medium	goods b) d)	are high moderate	
		6)		Problems are/is faced be Competition Govt. Policy	y agro b) d)		
		7)	Agı a) c)	ro based marketing manage social Devel increase in sales	ement ( b) d)	used for growth of agro sector none of above	
		8)	Pro a) c)	oducer to Consumer one level three level	channe b) d)	el. two level four level	
		9)	a) c)	is a part of 4p's. Product Promotion	b)	Price All of above	
		10)	a) c)	is more important in agr Public relation Publicity	o mark b) d)	seting. Sales Promotion Corporate image	

	B)	Fill in the blanks.	06
		1) is the systematic objective & search for the study of facts	
		relevant to any problem in the field of Marketing.	
		<ol> <li>The term is generally used with reference to the steps taken externally apart from general advertising for raising the existing level of sales to higher levels.</li> </ol>	
		<ol> <li>Channels of is a set of independent organization involved in the process of making a product or services available for use of consumption.</li> </ol>	·
		<ol> <li>E-business means use of for purchase &amp; sales of goods &amp; services.</li> </ol>	
		5) The main aim of regulated markets is	
		<ol> <li>is the policy adopted by manufacturers to get success in the field of marketing.</li> </ol>	
Q.2	An	swer the following.	16
		Nature of marketing.	
	b)	Types of consumer goods.	
		Explain marketing planning Process.	
	d)	Importance of price in 4p's.	
Q.3	An	swer the following.	16
	-	Important of marketing.	
	b)	Problems of agro base marketing.	
<b>Q.4</b>	An	swer the following.	16
	•	Explain the types of market.	
	b)	Role of Marketing in agro based business.	
Q.5			16
		Describe the marketing research procedure.	
	b)	Factor affecting consumer behavior.	
Q.6	An		16
	a)	Explain various stages in product life cycle.	
	b)	Types of e-business.	
<b>Q.7</b>			16
	•	Use of 5 p's for Soni Seeds.	
	b)	Explain the base of Market Segmentation.	

Seat	Sat	D
No.	Set	

#### M.Sc. (Semester - IV) (New) (CBCS) Examination Oct/Nov-2023 AGROCHEMICALS AND PEST MANAGEMENT Advances in Pest Control – II (MSC26402)

				Advances in Pest (			•			
•			esda	y, 19-12-2023 06:00 PM		,	Max. Marks: 80			
Insti	ructio	2	) Atte	estion 1and 2 are compu empt any Three from Q.3 ure to right indicate full r	3 to Q.7.					
Q.1	A)	<b>Cho</b> (1)	para	pse the correct alternative. (MCQ) is a type of parasitism in which a parasitoid attacks another parasitoid.  a) Super parasitism b) Multiple parasitism						
				Hyper parasitism						
		2)	a)	nt activated pesticide do lamp fertilizers	es the effe b) d)	water	·			
		3)	a)	is a free-living orga parasite parasitoid		lls the prey, which is predator host	smaller than him.			
		4)	the a)	ogical control refers to umanagement of insect pathogens parasitoid	ests. b)	ural enemies such as predator All of these	s for			
		5)	a)	chogramma is Egg parasitoid Predator	b) d)	Larval parasitoid All the above.				
		6)	prog a)	nacional variation refers genies. Anther culture Tissue culture	b)	on observed in Root culture Callus culture	derived			
		7)	In g a) c)	enetic engineering, prac into a simple prokary Isolated Cloned						
		8)	The a) b) c) d)	full form of NPV is Nuclear Polyhedrosis \ Nuclear Polyhy Virus Nuclear Porous Virus None of the above	 Virus					
		9)	Alar a)	rm pheromone released feeding	by insect b)	for purpose. protection				

		10) 'Bt' insecticidal formulations act as a) Contact poison b) Stomach poison c) Resperatory poison d) All the above	
	B)	Fill in the blanks.  1) IPM stands for  2) are the main source of active ingredient of neem.  3) Use of fungi, Bacteria and viruses against pest is the example of control.  4) The full form of "Bt"  5) Insect having complete life cycle has stages.  6) Harmonal IGRs work by mimicking or inhibiting harmone.	06
Q.2	a) b)	wer the following.  Write a note on sex pheromones.  Explain in short attractants and repellants.  Chemical method of pest control.  Nucleur Polyhydrosis Virus.	16
Q.3	Ans a) b)	wer the following.  Describe the importance of biotechnological applications in pest management.  Describe in brief the methodology of genetic engineering to introduce gene into plant so as to produce transgenic plants.	16
Q.4	Ans a) b)	wer the following.  Define the biological control. Explain the different techniques used in Biological control with suitable example.  Define parasite & predators. Write a note role of parasitoid in insect pest management.	16
Q.5	Ans a) b)		16
Q.6	Ans a) b)	wer the following.  Explain in detail use of Fungus in pest management.  Write a note Light activated pesticides.	16
Q.7	Ans a) b)	wer the following. What are the semiochemicals? Discus the importance of pheromones. Define Somaclonal variability. Explain Nucleur Polyhydrosis Virus in pest control.	16

Seat	Set	D
No.	Set	

# M.Sc. (Semester - IV) (New) (CBCS) Examination: Oct/Nov-2023 AGROCHEMICALS AND PEST MANAGEMENT Manufacture of Agrochemicals (MSC26403)

				anufacture of Agroche			
-				esday, 20-12-2023 06:00 PM		М	ax. Marks: 80
Instr	ucti	2	2) At	Nos. 1 and 2 are compulso tempt any three questions f gure to right indicate full ma	rom	Q. No. 3 to Q. No. 7	
Q.1	A)	<b>Cho</b> (1)	Sol sol a)	the correct alternative.  Ivent extraction involves distorate which are  Immiscible  Partially miscible	b)	iion of solute between tw Miscible All of these	<b>10</b> vo
		2)	a)	tillation is not used for sepa Liquid components Volatile Components	b)	Solid components	is
		3)	hor a)	rstallization is the formation mogeneous liquid phase. Liquid Gas	b)	particles within Solid Semisolid	
		4)	a)	cost includes the cost of ious stages of manufacture. Optimizing Prevention	b)	raction and testing of go Failure Appraisal	oods at
		5)	ser a)	ring the assessment of the part to the store.  To make the funds availab  To confirm that goods arriv  To assure that goods are of All of these	le fo e in	r purchase of goods satisfactory condition	order is
		6)	a) c)	disease is caused due to Heart Kidney	o fre b) d)	quent exposure to pesti Skin Stomach	cides.
		7)	The a) c)	e ISI mark is mandatory for <sub>.</sub> Food material Pesticides	b) d)	 Portland cement Sanitizer	
		8)		dacloprid is used as  Herbicide  Neonicotinoid insecticide	b) d)	Fungicide Rodenticide	

		9) is the synthon of 2, 4-D. a) Alcohol b) Phenol c) Acid d) Ketone	
		10) Asthama is inflammatory disease of a) Heart b) Lungs c) Head d) Eyes	
Q.1	B)	Fill in the blanks.  1) For preparation of powder from fruit juice dryer is used.  2) Thimethoxan belongs to class of insecticides.  3) is a protective fungicide.  4) For control of scab disease of apple fungicide is used.  5) Ionizing radiations are used for treatment of  6) Recruitment and selection of employees come under jurisdiction of manager.	06
Q.2	a) b)	Explain types of disconnections with example. Write causes of Asthama and Pulmonary diseases. Write synthesis and uses of maneb. Write synthesis and uses of chlorothalonil.	16
Q.3		wer the following: Write synthesis, mode of action, environmental effect and applications of metalaxyl. Explain BIS and ASTM specifications	16
Q.4	Ans a) b)	<b>swer the following.</b> Explain health management and industrial safety of workers. Write note on HRD	16
Q.5		swer the following.  Describe unit process of captan.  Write types of distillation. Explain steam distillation in brief.	16
Q.6	Ans a) b)	wer the following. What are the types of dryers? Explain the working of spray dryer. Write retro synthetic approach of endosulphon and IAA.	16
Q.7	a)	wer the following. Write synthesis, mode of action, environmental effects and applications of Imidacloprid	16
	b١	Explain construction and working of multiple effect evaporator	

Coot	Γ	
Seat	Set	D
No.	Set	

# M.Sc. (Semester - IV) (New) (CBCS) Examination: Oct/Nov-2023 AGROCHEMICALS AND PEST MANAGEMENT Diseases of Crop Plants II (MSC26407)

		Diseases of Crop Pla	nts II (MSC26407)	
•		ursday, 21-12-2023 I To 06:00 PM	N	Max. Marks: 80
Instructi	2	) Question 1and 2 are compulsory ) Attempt any Three questions fro ) Figure to the right indicate full m	m Q. No. 3 to Q. No. 7.	
Q.1 A)	<b>Cho</b> 1)	ose the correct alternatives from The most significant reason why that fungi a) are chemoorganotrophic he b) are procaryotes c) have unicellular and multi-c d) are eucaryotes	fungi are not in kingdom Plan	10 tae is
	2)	Blast of Rice is caused by a) Magnaporthe grisea c) Ephelis oryzae	b) Drechslera oryzae d) Rhizoctonia solani	
	3)	Late blight of potato can be cont a) Ridomil MZ c) Captan	rolled by spraying b) Dithane Z-78 d) Ipridione	
	4)	Late blight of Potato is caused by a) Alternaria solani b) Phytophthora infestans c) Synchytrium endobioticum d) Septoria lycopersici		
	5)	A fungus causing wart of potato  a) a saprophyte  c) a facultative saprophyte	is b) a facultative parasite d) an obligate	
	6)	Stem canker and black scurf of particles a) One fungus b) Two fungi c) One fungus and one bacter d) none of these	·	
	7)	The activity of Rhizoctonia solan of potato can be suppressed by a a) Gliocladium c) Trichoderma		ck scurf
	8)	Sulphur fungicides are very effect a) Anthracnose disease c) Wilts	ctive in the control of  b) Powdery mildews d) Downy mildews	

		<ul> <li>Choose the correct statement</li> <li>a) Zoospores of chytridiomycetes and hyphochytridiomycetes are uniflagellate but tinsel type in former and whiplash type in later.</li> <li>b) above-mentioned classes have tinsel type flagellum.</li> <li>c) both the classes have whiplash type flagellum.</li> <li>d) All of these</li> </ul>			
		<ul> <li>Seed potato is not transported from Darjeeling area to other parts of the country because of</li> <li>a) Domestic quarantine</li> <li>b) High transport cost involved</li> <li>c) It does not perform well in the plains</li> <li>d) All of these</li> </ul>			
	B)	Fill in the blanks OR write True/False.  1) In plains of India wheat rust appears firstly.  2) The downy mildew of Bajra is caused by  3) A.P.S. stands for  4) Brown spot of maize is caused by  5) The major storage fungi that affect the food grain is  6) Black heart is a physiological disorder of	06		
Q.2	Ans a) b) c) d)	Write down the symptoms of Blight disease of Tomato. Write down the symptoms of Powdery mildew of Bhendi. Write down the nature of damage of Leaf spot disease of Chilli. Write down the control measures of Anthracnose of mango.	16		
Q.3	Ans a) b)	Write down the symptoms, disease cycle, and nature of damage and control measures of oily spot of pomegranate. Write down the symptoms, disease cycle, and nature of damage and control measures of Powdery mildew of Santalum.			
Q.4	Ans a) b)	Write down the symptoms and disease cycle of:  1) Star spot diseases of Bamboo  2) Rust of Sisso Write down the nature of damage and control measures of:  1) Black spot of Roses  2) Powdery mildew of Chrysanthemum	16		
Q.5	Ans a) b)	wer the following.  Write down the symptoms, disease cycle, and nature of damage and control measures of Brown rot of Citrus.  Write down the symptoms, disease cycle, and nature of damage and control measures of Sigatoka of Banana.	16		
Q.6	Ans a)	Swer the following. Discuss the symptoms and control measures of:  1) Fruit Rot of Guava  2) Downey mildew of Grapes	16		
	b)	Discuss the symptoms and control measures of:  1) Wilt of Coconut  2) Leaf spot of Chickoo			

#### Q.7 Answer the following.

- Write down the symptoms, disease cycle, and nature of damage and control measures of Fruit rot of Papaya.
  Write down the symptoms, and nature of damage and control measures of
- b) Black root disease of Sugar beet.

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