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No.	

Total No. of Pages: 12

M.Phil./Ph.D. Entrance Examination, September - 2019 AGROCHEMICALS AND PEST MANAGEMENT

		AGRO	CHEMICALS AND P	EST MANAGEMENT
Day	and	Date : Fri	day, 20 - 09 - 2019	Total Marks: 100
Tim	e : 4.	00 p.m. to	6.00 p.m.	
Inst	ructio	,	All questions are compulso	
		2) 3)	Each question carries 2 ma	ed in the given OMR answer sheet by
		3)	darkening the appropriate	option.
		4)	Use black ball point pen on stray mark on the OMR A	ly for marking the circle. Do not make any nswer Sheet.
		5)	Follow the instructions giv	
		6)	Rough work shall be done of paper.	on the sheet provided at the end of question
		7)	Only non programmable ca	llculators are allowed.
1)	The	main adv	vantage of Fluorescence _	
	A)	Its sensit	tivity	
	B)	Its comp	patibility with separation te	echniques
	C)	Its comp	oatibility with most analyte	es
	D)	None of	these	
2)		ich of th omatograp	•	eature of carrier gas used in gas
	A)	It must b	e chemically inert	
	B)	It should	d be suitable for the detect	or employed
	C)	It should	d not be completely pure	
	D)	It should	d be cheap	

3)	What must be done to the solid samples for it to be introduced into the column without using solid injection syringes in gas chromatography?							
	A)	Introduced in hot-zone of the colu	mn					
	B)	B) Dissolved in volatile liquids						
	C)	Introduced using rotary sample va	lve					
	D)	Introduced using sampling loops						
4)	Whi	ich of the following is not a Column	-type	Liquid chromatography?				
	A)	Gel permeation	B)	Ion exchange				
	C)	Liquid-solid	D)	Paper				
5)	Pola	arographic cells are not sensitive to	which	of the following gases?				
	A)	Carbon monoxide	B)	Carbon dioxide				
	C)	Nitrous oxide	D)	Oxygen				
6)	Wha	at is the wavelength range for UV sp	ectru	m of light?				
	A)	400 nm - 700 nm	B)	700 nm to 1mm				
	C)	0.01 nm to 10 nm	D)	10 nm to 400 nm				
7)	reso	ich of the following main compon olving the ions into their characteri r mass-to-charge ratio?						
	A)	Ion Source	B)	Analyzer				
	C)	Detector System	D)	Analyzer tube				

8)	Which species of the following is used to bombard with the sample for which mass spectroscopy has been performed?						
	A)	Alpha particles	B)	Neutrons			
	C)	Electrons	D)	Protons			
9)		which factors the vibrational stretchend?	ning fr	requencies of diatomic molecule			
	A)	Force constant	B)	Atomic population			
	C)	Temperature	D)	Magnetic field			
10)		ich of the following is not a compotometer?	nent (of the emission system in Flame			
	A)	Burner	B)	Atomiser			
	C)	Fuel gases and their regulation	D)	Chopper			
11)	Am	monium nitrate (a fertiliser) is	coate	ed with limestone powder to			
	A)	Increase its nitrogen content	B)	Cut down its production cost			
	C)	Avoid the risk of explosion	D)	Add extra nutrient as fertiliser			
12)	Whi	ich of the following compound is a	n antil	piotics?			
	A)	Ibrufen	B)	Chloromycetine			
	C)	Sulphonamide	D)	None of the above			

13)	Indo	placetic acid is a		
	A)	Plant growth regulator	B)	Insecticide
	C)	Herbicide	D)	Fungicide
14)	Hae	moglobin contains which of the following	owin	g element in its structure,
	A)	Mg	B)	Fe
	C)	Na	D)	Zn
15)		compound which shows M+2 peak nass spectrum. This indicates that it		•
	A)	Chlorine	B)	Bromine
	C)	Fluorine	D)	Phosphorus
16)	Met	hyl orange is a		
	A)	Triphenyl methane dye	B)	Azo dye
	C)	Quinone dye	D)	Nitro dye
17)	pН	of 0.1M HCl is,		
	A)	1	B)	10
	C)	13	D)	6
18)	Pyre	ethroids are used in agriculture beca	use	
	A)	They are less toxic to mammals		
	B)	Their quick knock-down action or	inse	ct
	C)	Small quantity is required for action	on on	insects
	D)	All of the above		

19)	Tobacco contains which of the following chemicals			
	A)	Citral	B)	Alpha-terpeneol
	C)	Rotenone	D)	Nicotine
20)	End	osulfan is used as a,		
	A)	Insecticide	B)	Plant growth regulator
	C)	Herbicide	D)	Fumigant
21)	Wha	at benefit is served by using subheac	lings	?
	A)	They keep the material related to the	ne ma	jor theme of the report
	B)	They keep the material in a meaning	gful c	order
	C)	They keep the material in a logical	order	
	D)	All of these		
22)	In th	ne process of conducting research 'Fo	rmul	ation of Hypothesis" is followed
	A)	Statement of Objectives	B)	Analysis of Data
	C)	Selection of Research Tools	D)	Collection of Data
23)	A co	ommon test in research demands mu	ich pi	riority on
	A)	Reliability	B)	Useability
	C)	Objectivity	D)	All of the above

24)) What is deemed a good measure of the quality of a journal?			y of a journal?
	A)	The OPAC factor	B)	The influence factor
	C)	The intake factor	D)	The impact factor
25)	The	ideal model for a research report is:		
	A)	What other students do	B)	The essay format
	C)	The journal article standard format	D)	A magazine article
26)	Whe	en would you write an abstract?		
-,	A)	Once you are aware of the results		
	B)	After the introduction and method	sectio	ons are completed
	C)	After the main body of the report h	as be	een drafted
	D)	Before the introduction and after th	e title	
27)		at is the typical time period between reg	esearo	ch being conducted and research
	A)	2-3 years	B)	6-12 months
	C)	1-2 years	D)	2-6 months
28)	Nori	mally, where in a research report are t	he hy	potheses justified to the reader?
	A)	In the introduction		
	B)	In the discussion		
	C)	In the conclusions		
	D)	None of these		

29)	Res	earch is				
	A)	Searching again and again				
	B)	Finding solution to any problem				
	C)	Working in a scientific way to sea	rch fo	or truth of any problem		
	D)	None of the above				
30)	Con	ntent analysis uses which of the belo	ow me	ethods?		
	A)	Classifying	B)	Counting		
	C)	Recording	D)	All of these		
31)	Wel	bbing, mines and brown patches	on l	eaves of groundnut is due to		
	A)	Stomopteryxnertaria	B)	Sphenopteraperotetti		
	C)	Athalialugens	D)	Euproctislunata		
32)	Che	emicals that can't kill insects				
	A)	Stomach insecticides	B)	Contact insecticides		
	C)	Systemic insecticides	D)	Attractants		
33)	Syst	temic insecticide is:				
	A)	Diffuses in to air				
	B)	Absorbed through skin of the inse	ect			
	C)	First absorbed by plant and then plant juice	enter	rs into insect while feeding the		
	D)	Absorbed into soil				

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34)	The	Pramier research Institute in India the	at ic A	velucivaly anguard in Riological
34)		Premier research Institute in India that rol research is	at 18 C	actusively eligaged ili biological
	A)	National Bureau of Agricultural Ins	sect F	Resources
	B)	National Center for Integrated Pest	Man	agement
	C)	Indian Agricultural Research Institu	ite	
	D)	Department of Plant Protection & C	Quara	antine
35)		ne the pest, the larva of which on hanch, stem, and finally reaches to the		
	A)	Cabbage caterpillar		
	B)	Diamondback moth		
	C)	Potato tuber moth		
	D)	Brinjal fruit & stem borer		
36)	Whi	ch one of the following complete its	s life (cycle inside the soil?
	A)	Haddabeetle	B)	Red pumpkin beetle
	C)	Tea mosquito	D)	Hespirid caterpillar
37)	Plou	ighing and Irrigation will kill the pup	al sta	ages of
	A)	Bemisiatabaci		
	B)	Diacrisiaobliqua		
	C)	Saissetianigra		
	D)	M. hirsutus		

38)		<i>apoletischloridae</i> is aedgram crop.	_ par	asitoid of <i>Helicoverpaarmigera</i>
	A)	Egg	B)	Larval
	C)	Pupal	D)	All
39)	"Но	oking" process dislodge the adults	of _	from coconut tree.
	A)	Oryctes rhinoceros		
	B)	Xylosandruscompactus		
	C)	Plocoederusferrugineus		
	D)	Xylotrechusquadripes		
40)	Cast	tor as border crop in cotton will pre	vent 1	the infestation of
	A)	Bemisiatabaci		
	B)	Pectinophoragossypiella		
	C)	Spodopteraliturai		
	D)	Helicoverpaarmigera		
41)		imparts flavour of vegetab	oles.	
	A)	Chlorine	B)	Boron
	C)	Sulphur	D)	Nitrogen
42)	Defi	iciency of causes brittl	e and	d thick leaves.
	A)	Iron	B)	Boron
	C)	Calcium	D)	Sulphur

43)		classified diseases on the	basis	s of disease progress curve.
	A)	Daxtron (1981)	B)	Muller and Borger (1940)
	C)	Shannerand Finney (1977)	D)	Vandwe Plank (1963)
44)		Virus contain DNA.		
	A)	Cauliflower mosaic	B)	Yellow vein mosaic
	C)	Soybean mosaic	D)	Mung bean yellow mosaic
45)		first isolated microorganism	from	root of legumes in 1888.
	A)	Beijerinck	B)	Dobereiner
	C)	Day	D)	Dobereiner and Day
46)	Pou	ch like development of green parts	of le	aves is known as
	A)	Witches broom	B)	Puckering
	C)	Albinism	D)	Blight
47)	Die	back of cashew nut is also known	as	
	A)	Pink disease of cashew nut	B)	Blue disease of cashew nut
	C)	Yellow disease of cashew nut	D)	Red disease of cashew nut

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48)		produce mushrooms are	ound t	the base of trees.
	A)	Hemeillia vastatric		
	B)	Armillaria mellea		
	C)	Aspergillus niger		
	D)	Puccinia arachidis		
49)	Blis	ter blight of tea was first recorded	from	(1868)
	A)	Tamilnadu	B)	Assam
	C)	Kerala	D)	Madhya Pradesh
50)	<u>Boti</u>	ryosphaeria rot is also called as		rot of apple.
	A)	White	B)	Red
	C)	Pink	D)	Blue

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Rough Work