Test Booklet No This booklet consists of 100 questions and 15 printed pages.	
RGUCET/2024//_ Series	NIL

## RGUCET 2024 Common Entrance Test, 2024

## MASTER OF TECHNOLOGY (AGRICULTURAL ENGINEERING)

Full Marks: 100	Time: 2 Hours	
Roll No.		
Day and Date of Examination	on:	
Signature of Invigilator(s) _		
Signature of Candidate		
General Instructions:		

## 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 100 Multiple Choice Questions (MCQs) from the concerned subject. Each question carries 1 mark. There shall be negative marking of 0.25 against each wrong attempt.
- 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 one hour thirty minutes.
- 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.

1	Which of the following sentences correctly demonstrates indirect speech?					
	a) She said, "I am going to the store."	b) He asked if they had finished the project.	· ·	d) "I'll be there 5," she promise		b
2	Identify the sentence		ech			Answer option (a,b,c or d)
	a) She told him to be quiet	b) "I'll be there in five minutes," he said	c) He asked if they had finished the project	d) "Please turn the lights,"	off	b
3	Pick the simple sente  He is too soft for the			e given:	(	Answer option (a,b,c or d)
	a) He is soft but army man cannot be soft	b) He is so soft that he is not suitable for the job of an army man	c) He cannot be an army man if he is so soft	d) He cannot an army m since he is vo	nan	b
4	A: Assertion: The Ea  B: Justification: This verified through astro	rth orbits the Sun.		netary motion a		Answer option (a,b,c or d)
	a) True, and the Earth is the largest planet in the solar system.	b) False, and the Sun revolves around the Earth.		d) False, and Moon is center of the so system.	the	С
5	Match the following  A) Isaac Newton	i) Theory of	General Relativity			Answer option
	B ) Albert Einstein C) Marie Curie D) Charles Darwin	iii) Discovery	niversal Gravitation of Radioactivity Evolution by Natura	l Selection		(a,b,c or d)
	a) iii-ii-iv-i	b) ii-i-iii-iv	c) i-ii-iii-iv	d) i-ii-iv-iii		b
6	Read the following group of sentences. The first and the last sentences are numbered 1 and 6, and the rest are numbered P, Q, R, and S. Arrange these four sentences in proper order to form a meaningful paragraph/sentence.  P. Former President Donald Trump sharply attacked the U.S. Q. infectious disease expert Anthony Fauci over his R. handling of the coronavirus pandemic, demanded reparations S. from China and denounced an investigation T. into his finances in a speech in North Carolina					
	a) STQRP	b) PRSQT	c) TRPSQ	d) replacement required	No is	d
7	Which of the followi	ng sentences is gram	matically correct?			Answer option

							(a,b,c or d)
	a) S orry, I spilled some juice in the floor.	b) Sorry spilled s juice upor floor.	some	c) Sorry, I spilled some juice on the floor.		y, I spilled juice into r.	С
8	Match the country w	ith its capital:		l			
			l · m ·			7	Answer
	A France		i Tol	<u> </u>			option
	B Japan C Brazil		ii Pa	ırıs rasília			(a,b,c or
	D Australia			anberra			d)
	a) ii-i-iii-iv	b) i-ii-iv-iii	IV C	c) iii-ii-iv-i	d) i-ii-ii	i iv	a
9	Synonyms for FOST			<i>C)</i>	u) I-II-II	1-1 V	Answer option (a,b,c or d)
	a) Safeguarding	b) Neglecting		c) Ignoring	d) Nurtı	ıring	d
10	The 2020 Summer O	lympics was he	eld in				Answer option (a,b,c or d)
	a) United States	b) Japan		c) China	d) Aust		b
11	Which state of No. Mountains"?	rth East India	is k	nown as the "Land	d of the	Dawn-Lit	Answer option (a,b,c or d)
	a) Manipur	b) Nagaland		c) Mizoram	d) Pradesh	Arunachal	d
12	The famous Kaziran located in which state				orned rhir	noceros, is	Answer option (a,b,c or d)
	a) Assam	b) Manipur		c) Mizoram	d) Megł	nalaya	a
13	Which of the followi		posed				Answer option (a,b,c or d)
4.4	a) Estate duty	b) Sales tax		c) Land revenue	d) All	the above	d
14	Who can remove the		trom				Answer option (a,b,c or d)
	a) President	b) Prime minister		c) Parliament	asse the	islative emblies of state	С
15	SMART (Supersonic in the news, was deve	eloped by whic		anization		•	Answer option (a,b,c or d)
	a) DRDO	b) ISRO		c) CSIR	d) BAl		a
16	Recently, which cou men's recurve event	ntry won the g	gold n	nedal in the Archery	World (	Cup in the	Answer option (a,b,c or d)
	<del></del>	-					

	a) India	b) South Korea	c) Malaysia	d) Indonesia	a
17	,	ntry launched first A			Answer
	3,	J			option
					(a,b,c or
					d)
	a) Russia	b) India	c) Malaysia	d) Indonesia	a
18	Which of the follow	ing is not irrational?			Answer
					option
					(a,b,c or
	a) $(3 + \sqrt{7})$	b) $(3-\sqrt{7})$	c) $(3 + \sqrt{7})(3 -$	d) 3	d)
	a) (3 + \(\tau\))	$(3-\sqrt{7})$	$\sqrt{7}$	(a) 3	c
19	The addition of a rat	tional number and an	irrational number is	equal to	Answer
				1	option
					(a,b,c or
		_	1	1	d)
20	a) rational	b) Irrational	c) Both	d) Integer	b
	number	number			
	A circle has a number	er of tangents equal t	0		Answer
					option (a,b,c or
					(a,b,c or d)
	a) 0	b) 1	c) 2	d) Infinite	d
21	/	shing cylinder are g		10)	Answer
			onormity asom in		option
					(
					a,b,c or
					d)
	a) Paddy	b) Wheat	c) Maize	d) Mustard	_
	threshers	threshers	threshers	threshers	a
22	Match the following	ng pairs:	·		
	A) Cutting blade	i) The connect	ion point between	the plough and	A
		the tractor al	lows towing.		Answer option
	B) Frame	ii) This helps	control the depth	at which the	1 ()()()()
	11	1			option
		plough blade	es penetrate in to the	e soil.	(
	C) Depth wheel		es penetrate in to the ne individual discs		a,b,c or
		iii) These are the plough that c	ne individual discs but through the soil.	attached to the	(
	C) Depth wheel D) Hitch	iii) These are the plough that continued iv) The main str	ne individual discs but through the soil cructure of the plou	gh that supports	a,b,c or
	D) Hitch	iii) These are the plough that course iv) The main structuring by	ne individual discs but through the soil.	gh that supports to the tractor.	a,b,c or
		iii) These are the plough that continued iv) The main str	ne individual discs but through the soil cructure of the plou	gh that supports	a,b,c or
	D) Hitch a) i-ii-iii-iv	iii) These are the plough that of iv) The main street the cutting by by iii-iv-ii-i	ne individual discs cut through the soil. ructure of the plou lades and connects c) i-iii-iv-ii	gh that supports to the tractor.  d) iv-ii-iii-i	a,b,c or d)
23	D) Hitch a) i-ii-iii-iv As the pitman arm	iii) These are the plough that continued iv) The main structure the cutting by by iii-iv-ii-i	the individual discs out through the soil.  Tructure of the ploudlades and connects  C) i-iii-iv-ii  ack and forth, the contents	gh that supports to the tractor.  d) iv-ii-iii-i entre of the knife	(a,b,c or d)  b  Answer
23	D) Hitch a) i-ii-iii-iv As the pitman arm	iii) These are the plough that of iv) The main street the cutting by by iii-iv-ii-i	the individual discs out through the soil.  Tructure of the ploudlades and connects  C) i-iii-iv-ii  ack and forth, the contents	gh that supports to the tractor.  d) iv-ii-iii-i entre of the knife	a,b,c or d)
23	D) Hitch a) i-ii-iii-iv As the pitman arm	iii) These are the plough that continued iv) The main structure the cutting by by iii-iv-ii-i	the individual discs out through the soil.  Tructure of the ploudlades and connects  C) i-iii-iv-ii  ack and forth, the contents	gh that supports to the tractor.  d) iv-ii-iii-i entre of the knife	(a,b,c or d)  b  Answer
23	D) Hitch a) i-ii-iii-iv As the pitman arm	iii) These are the plough that continued iv) The main structure the cutting by by iii-iv-ii-i	the individual discs out through the soil.  Tructure of the ploudlades and connects  C) i-iii-iv-ii  ack and forth, the contents	gh that supports to the tractor.  d) iv-ii-iii-i entre of the knife	d)  b  Answer option (a,b,c or
23	D) Hitch  a) i-ii-iii-iv  As the pitman arm section must stop i	iii) These are the plough that continue iv) The main structure iv) the cutting by by iii-iv-ii-i moves the knife by the centre of the iiii).	ne individual discs but through the soil ructure of the plou lades and connects c) i-iii-iv-ii ack and forth, the conguard on each strok	gh that supports to the tractor.  d) iv-ii-iii-i entre of the knife te is called	a,b,c or d)  b  Answer option
	D) Hitch  a) i-ii-iii-iv  As the pitman arm section must stop i	iii) These are the plough that continue iv) The main structure the cutting by by iii-iv-ii-i moves the knife basen the centre of the by Adjustment	ructure of the plou lades and connects c) i-iii-iv-ii ack and forth, the coguard on each strok	gh that supports to the tractor.  d) iv-ii-iii-i entre of the knife te is called  d) Transmission	d)  b  Answer option (a,b,c or
23	D) Hitch  a) i-ii-iii-iv  As the pitman arm section must stop i  a) Alignment  Assertion: Puddlin	iii) These are the plough that course iv) The main structure the cutting by by iii-iv-ii-i moves the knife ban the centre of the by Adjustment g is done to reduce	ructure of the plou lades and connects c) i-iii-iv-ii ack and forth, the coguard on each strok	gh that supports to the tractor.  d) iv-ii-iii-i entre of the knife te is called  d) Transmission	d)  a,b,c or d)  b  Answer option (a,b,c or d) c
	D) Hitch  a) i-ii-iii-iv  As the pitman arm section must stop i	iii) These are the plough that course iv) The main structure the cutting by by iii-iv-ii-i moves the knife ban the centre of the by Adjustment g is done to reduce	ructure of the plou lades and connects c) i-iii-iv-ii ack and forth, the coguard on each strok	gh that supports to the tractor.  d) iv-ii-iii-i entre of the knife te is called  d) Transmission	d)  a,b,c or d)  b  Answer option (a,b,c or d) c  Answer
	D) Hitch  a) i-ii-iii-iv  As the pitman arm section must stop i  a) Alignment  Assertion: Puddlin water retention in	iii) These are the plough that course iv) The main structure the cutting by by iii-iv-ii-i moves the knife basen the centre of the by Adjustment ag is done to reduce paddy fields.	c) Registration water percolation a	attached to the gh that supports to the tractor.  d) iv-ii-iii-i entre of the knife te is called  d) Transmission and increase soil	d)  b  Answer option (a,b,c or d) c  Answer option
	D) Hitch  a) i-ii-iii-iv  As the pitman arm section must stop i  a) Alignment  Assertion: Puddling water retention in puddling sections.	iii) These are the plough that course iv) The main structure the cutting by by iii-iv-ii-i moves the knife ban the centre of the by Adjustment g is done to reduce	ructure of the ploudades and connects c) i-iii-iv-ii  ack and forth, the conguard on each strok  c) Registration water percolation and solutions and connects and forth, the congular content of the ploudades and connects and connects are ploudades and connects are ploudades and connects and connects are ploudades and connects are ploudated and conne	gh that supports to the tractor.  d) iv-ii-iii-i entre of the knife to is called  d) Transmission and increase soil	d)  a,b,c or d)  b  Answer option (a,b,c or d) c  Answer

	a) Both the	b) The assertion	c) Both the	d) Both the	
	assertion and	is true, but the	assertion and	assertion and	
	reason are true,	reason is false.	reason are true,	reason are true,	
	but the reason is	reason is raise.	but the reason is	and the reason is	a
	not the correct		not the correct	the correct	
	explanation of the		explanation of	explanation of	
	assertion.		the assertion.	the assertion.	
25	The type of bearing	generally used to			Answer
20	plough is	, generally asea to	support the disc on	u startaura arse	option
	P10 #811 12				(
					a,b,c or
					d)
	a) Ball bearing	b) Tapper roller	c) Plain roller	d) Can't be	1
		bearing	bearing	determine	b
26	The size of disk har				Answer
			•		option
					(
					a,b,c or
					d)
	a) Number of	b) Maximum	c) Maximum	d) Number of	b
	disks	width of cut	depth of cut	gangs	U
27	Equipment for place	ing seedlings in the	e soil is called		Answer
					option
					(
					a,b,c or
		<b>,</b>	T		d)
	a) Seed drill	b) Planter	c) Seed cum	d) Transplanter	d
			fertiliser drill		
28	The device used to	spray the liquid is	called		Answer
					option
					(
					a,b,c or
	\	l i s b	l v p	1) 0 1	d)
20	a) Sprayer	b) Duster	c) Pump	d) Crusher	a
29	A reaper is used for	ſ			Answer
					option
					( )
					a,b,c or
	a) Cutting crop	b) Cutting and	c) Cutting and	d) Windrowing	d)
	a) Cutting crop	windrowing	threshing	a) willulowing	b
30	Which of the follow		<u> </u>	ent?	Answer
50	Willen of the follow	ving is nand operat	ca sowing equipme	AIL:	option
					option (
					a,b,c or
					d)
	a) Broadcaster	b) Dibbler	c) Plain drill	d) Seed drill	b
31	Maximum noise le			/	Answer
J1	not exceed	, or morn a mactor in	car are operators of	DIIOMIG	option
	not choose				(
					a,b,c or
					d)
	I				· · · · · ·

	a) 75 dB	b) 90 dB		c) 100 dB	d) 110 dB	b
32	The lowest tempera	ture at which	the f	uel ceases to flow i	s known as	Answer
						option
						a,b,c or
						d)
	a) Flash point	b) Pour poin	t	c) Cloud point	d) Viscosity	,
	, ,	, 1		, ,	number	b
33	The function of a cl	hoke in an eng	gine i	s to		Answer
						option
						a,b,c or
						d)
	a) Heat the engine	b) cylinder		c) Remove the	d) Provide a rich	
		blockage		cylinder	fuel-air mixture	d
				blockage		
34	The name of the ins	strument for n	neasu	ring the valve clear	rance of an engine	Answer
	is					option
						a,b,c or
						d)
	a) Micrometer	b) Torque		c) Feeler gauge	d) Bore gauge	,
		wrench				С
35	The following state					Answer
	A differential in a tr	-			on the same axle	option
	to rotate at differen	ı speeds when	turni	ng.		a,b,c or
						d)
	a) True	b) False		c) Can't be	d) Partially true	,
				determined		a
36	If an earthen dam is		se of	"Sloughing of Dov	vnstream Side of	Answer
	Dam", it comes und	ler				option
						a,b,c or
						d)
	a) Hydraulic	b) Hydrolog	ic	c) Seepage	d) Structural	
	failure	failure		failure	failure	С
37	Match the followin	g pair:				
	A) Capillary Wate	<b>.</b>	i) V	Water is tightly bou	and to soil	
	A) Capillary Water	1		particles and is not		
			-	olant uptake.		Answer
	B) Hygroscopic w	ater		Water held in the so	oil against the	option
			f	force of gravity in t	he capillary	a,b,c or
				paces	1 .4 .43	d)
	C) Gravitational w	vater		Water that drains th	rough the soil	ĺ
	D) Available water	r		lue to gravity. Water that is readily	v available for	
	D) Available water	1		olant uptake	y available 101	
	a) ii-i-iii-iv	b) i-iv-iii-ii	1 1	c) iv-ii-iii-i	d) i-ii-iii-iv	a
<del></del>					, ·	
38	Which of the follow			true or false: d is at atmospheric		Answer

	II Water is und	der pressure hetwee	en two impervious s	 strata	(			
	II. Water is under pressure between two impervious strata Water table serves as the upper surface of the zone of saturation							
	a) II and I	b) III and I	c) Only II	d) Only III	<u>d)</u> c			
39	,	he largest crop area covered by drip irrigation in India is under						
		•			option			
					(			
					a,b,c or			
					d)			
	a) Plantation crop	b) Vegetable crops	c) Orchards	d) Fibre crops	c			
40	If the radius of rain	•	en its kinetic energy	y will be	Answer			
	increased by							
					(			
					a,b,c or			
					d)			
	a) 4 times	b) 5 times	c) 8 times	d) 16 times	d			
41	Which of the follow							
			where all the water		Answer			
	it drains to a comm	<del>-</del>			option			
			etermined by the t		(			
	land, with higher el		_		a,b,c or			
		• •	ses water infiltrat	ion into the soil	d)			
	within a watershed,	reducing the risk of	or mooding.					
	a) II	b) III	c) I	d) I and II	b			
42	Assertion: In chute	spillways, flow is u	isually subcritical.	,	Answer			
					option			
	_		ed to allow water to		(a,b,c or			
			in subcritical flow		d)			
	a) Both assertion	b) Both	· ·	′				
	and reason are		· · · · · · · · · · · · · · · · · · ·	l ´				
	· ·	reason are true,	reason is false.	reason is true.				
	reason is a correct				a			
	explanation of the	not a correct						
	assertion.	explanation of the assertion.						
43	Assertion: Wind e		in arid and semi-	arid regions with	Answer			
<del>1</del> 3	sparse vegetation co		m and and stilli-	and regions with	option			
	sparse vegetation of	O 1 OI.			option (			
	Reason: In such re	gions, the lack of v	regetation exposes t	the soil surface to	a,b,c or			
		•	nd, leading to erosic		d)			
	a) Both the	b) Both the		d) The assertion	/			
	assertion and	assertion and	· ·	is false, but the				
	reason are true,	reason are true,		reason is true.				
	but the reason is	and the reason is			b			
	not the correct	the correct						
	explanation of the	explanation of						
	1	the accertion						
	assertion. the assertion.  The real soil loss was denoted by the phenomenon of							
44			henomenon of		Answer			
44			henomenon of		Answer option			

					a,b,c or
					d)
	a) Detachment	b) Transportation	c) Deposition	d) Accumulation	a
45	Thermal vapour co	mpression is used in	n a/an		Answer option (a,b,c or d)
	a) Evaporator	b) Homogenizer	c) Pasteurizer	d) Condenser	a
46	Type of moisture th			_	Answer option (a,b,c or d)
	a) Equilibrium moisture	b) Total moisture	c) Free moisture	d) Bound moisture	С
47	Energy required to by				Answer option (a,b,c or d)
	a) Fick's law	b) Newton's law	·	d) Stoke's law	С
48	The efficiency of a	cyclone separator i	ncreases by		Answer option (a,b,c or d)
	a) Increasing the air inlet velocity	b) Decreasing the size of the particles	c) Reducing the size of the separator	d) Different methods	a
49	In steady state heat	transfer			Answer option (a,b,c or d)
	a) Rate of heat in > Rate of heat out	b) Rate of heat in < Rate of heat out	c) Rate of heat in = Rate of heat out	d) Varies with time	С
50	The term "Tons of	refrigeration" is use	ed in cold storage u	nit to measure	Answer option (a,b,c or d)
	a) Mass of the fruits held	b) Mass of refrigerant	c) Mass of compressor	d) Capacity of compressor	d
51	The specific gravity				Answer option (a,b,c or d)
	a) Lower than whole milk	b) Same as whole milk	c) Higher than whole milk	d) Same as water	c
52	Pasteurization of m	ilk is necessary for			Answer option (a,b,c or d)
	a) Long shelf life	b) Destruction	c) Long shelf	d) Destruction	d

	at room temperature	of all microorganism	life under refrigeration	of only pathogenic microorganism			
53	Correct statement is	s respect of rice par	boiling process is	and to organizate	Answer option (a,b,c or d)		
	a) Karnel structure becomes soft and it cooks easily	b) Heat treatment during parboiling preserves some antioxidants	c) Parboil rice retains more protein, vitamins and minerals	d) Shelling of parboiled rice becomes more difficult	c		
54	The most common				Answer option (a,b,c or d)		
	a) Ether	b) n-hexane	c) n-butane	d) alpha-methyl naphthalene	b		
55	What is the value o	f the determinant 3 5 7 4 1 2	2   5   3		Answer option (a,b,c or d)		
	a) – 56	b) – 58  1 2 3	c) – 54	d) – 66	c		
56	If a matrix is given	$by A = \begin{vmatrix} 1 & 2 & 3 \\ 0 & 4 & 5 \\ 0 & 0 & 1 \end{vmatrix}, t$	he determinant of A	\(\frac{1}{2}\) is	Answer option (a,b,c or d)		
	a) 3	$b)^{\frac{1}{2}}$	$c)\frac{1}{4}$	d) 2	С		
57	Which of the following equation $\frac{dy}{dx} + 2y =$		is the solution o	f the differential	Answer option (a,b,c or d)		
	$a)y = -2e^{-x}$	$b)y = 2e^x$	$c)y = e^{-2x}$	$d)y = e^{2x}$	c		
58	Laplace transform	of a constant value			Answer option (a,b,c or d)		
	a) s	b) $\frac{1}{s}$	c) s <sup>2</sup>	$d)\frac{1}{c^2}$	b		
59							
	$a)\frac{4}{11}$	$b)\frac{4}{13}$	$c)\frac{5}{11}$	$d)\frac{6}{11}$	a		
60	The displacement P(2,3,5) to Q(3,4,5)	vector of the partic	cle when it has tra		Answer option (a,b,c or d)		
	a) i+j+10k	b) i+j+5k	c)i+j	d) 2i+4j+6k	С		
61	Which of the follow	ving functions can	be represented by a	Fourier series?	Answer option (a,b,c or		

						d)
	a) Piecewise continuous functions	b) Functions		c) local extrema	d) Derivative	a
62	Simpson's Rule is following	used for the n	ume	rical approximation	n of which of the	Answer option (a,b,c or d)
	a) Definite integrals	b) Derivatives	S	c) Indefinite integrals	d) Differential equations	a
63	Match the followin	g pairs:				
	A) Moisture Conto	ent	i	) Mass per unit produce	volume of the	
	B) Density		i	i) Measure the ar		Answer option
	C) Porosity		i	ii) Fractional vo	lume of air	(a,b,c or d)
	D) Color		i	spaces in the provided vivial charact produce, often ripeness or materials.	eristic of the en indicating	
	a) i-ii-iii-iv	b) i-ii-iv-iii		c) iii-ii-iv-i	d) ii-i-iii-iv	d
64	In which industry commonly used apa			rew, and belt co	onveying systems	Answer option (a,b,c or d)
	a) Automotive	b) Dairy		c) Mining	d) Healthcare	c
65	Which of the followstate of a moist air-				ed to describe the	Answer option (a,b,c or d)
	a) Dry bulb	,	ulb	c) Dew point	d) Latent heat of vaporization	d
66	Which of the follow	temperature ving factors aff	Pects	temperature the efficiency of m		Answer option (a,b,c or d)
	a) Temperature of the milling equipment	b) Moist content of product		c) Humidity of the air	d) Color of the product	b
67	Question for assertion and justification: Assertion: Mulching is beneficial for soil water conservation.  Justification: Mulching helps to reduce soil moisture evaporation by providing a protective layer on the soil surface.					
	Choose the correct  a) Assertion is false, but the reason is true	b) B	oth and se	c) Assertion is true, but the reason is false.	d) Both assertion and reason are true, and the reason is	d

						the	correct	
						explana		
						the asse	rtion.	
68	What factor deter aquifer?	mines the	e direction	on of gro	undwater	flow w	vithin an	Answer option (a,b,c or d)
	a) Aquifer depth	b) H conducti	ydraulic vity	c) storage	Aquifer	d) Gro	undwater	b
69	Match the statistica	al measure	s with the	eir descript	ions			
	A) Mean		i. Averaş	ge of all va	lues in a	dataset		Answer
	B) Median			le value of				option
	C) Mode		iii. Mo	st freque	ently oc	ccurring		(a,b,c or d)
	D) Standard Devia		points	sure of the from the i	mean	of data		
	a)iv-iii-i-ii	b) iii - iv		c) i - ii - i		d) ii - i ·		c
70	Match the followin  A) Conduction  B) Convection	i) Heat tr without t	ansfer the	sfer proces rough a soluent of the arough the	lid mediu e medium	ım n itself	criptions	Answer option (a,b,c or
	C) Radiation	waves	transfer t	hrough ele				d)
	a) i - ii – iii	b) iii - i-		c) ii - iii -		d) iii - i		a
71	Which of the follow processing is true i) Heat exchangers ii) Heat exchangers mixing them. iii) Heat exchanger iv) Heat exchanger	are not co s allow hears rs are only	mmonly at to be tra	used in foc ansferred b heating pu	od proces between t rposes in	ssing. two fluids food pro	s without ocessing.	Answer option (a,b,c or d)
	a) i	b) ii		c) iii	<u> </u>	d) iv	,	b
72	Which of the follow seeds in rows?	wing is a p	opular fa	rm machin	ery used	for plant	ing	Answer option (a,b,c or d)
	a) Tillage	b) MB p		c) Cultiva		d) Seed		d
73	Which of the follow method is true			J		•		
	<ul> <li>i) Refrigerati</li> <li>ii) Refrigerati</li> <li>food.</li> <li>iii) Refrigerati</li> <li>microbial a</li> <li>iv) Refrigerati</li> </ul>	on is not e on is commentativity. on involve	ffective in monly use secooling	n slowing	down mi	crobial grood by inc	rowth in creasing	Answer option (a,b,c or d)
	microbial g	1	ood.	a) :::		4) :		d
74	a) i What is the pri	b) ii	nose of	c) iii	nlowing	d) iv	il water	Answer
/ -	conservation?	mary pur	pose or	Contour	Piowiii	5 111 50	m water	option

							(a,b,c or d)
	a) To increase soil compaction	· ·	duce soil e content	c) To minimize soil erosion	d) To water ru	promote	С
75	Which of the following is NOT a common method of drying agricultural produce?					Answer option (a,b,c or d)	
	a) Sun drying	b)Freeze	e drying	c) Fermentation drying	d) M drying	icrowave	c
76	Which of the following practices helps in reducing soil erosion and conserving soil water?					Answer option (a,b,c or d)	
	a) Overgrazing	b)Defor	estation	c)No-till farming	d)Exces	ssive	С
77	Water activity in food refers to:					Answer option (a,b,c or d)	
	a) The amount of water present in food	b) The availabi water for microbi growth a reaction	or al and	c) The total moisture content in food	d) The heat required to evaporate water from food		b
78	A) Normal Distrib B) Binomial Distrib C) Uniform Distri D) Exponential Distribution	stribution distribution			ibution nean	oution	
79	a) iv - iii -i- ii b) iii - ii - iv - i c) i - ii - iii - iv d) ii - i - iii - iv  The angle between the plane of the front wheel andvertical axis is known as					Answer option (a,b,c or d)	
	a) Camber angle	b) Caster angle		c) Kingpin inclination	d) Kingpin		a
80	Cooling system of tractor remove about % of heat of fuel combustion for satisfactory performance of engine					Answer option (a,b,c or d)	
0.1	a) 65 to 70	b) 33-35		c) 45 to 55	d) 55 to	65	b
81	Type of gear transmission has highest transmission efficiency					Answer option (a,b,c or d)	
	a) Synchromesh	mesh	Constant	c) Power shift	,	ng mesh	ď
82	The power developed by the engine and is available at the end of crankshaft is					Answer option	

	a) Belt	b) IHP	c) BHP	d) FHP	d) c	
	power	<i>b)</i> IIII	C) BIII	d) I III	C	
83	Which of the following statements is/are true or false:  I. The cetane number measures the ignition quality of diesel fuel, with higher cetane numbers indicating easier ignition.  II. Diesel engines with higher compression ratios generally require diesel fuel with lower cetane numbers for optimal ignition.  III. Adding additives to diesel fuel can improve engine ignition quality					
	and performance. a) I and III	b) I only	c) III only	d) II and IIII only	a	
84	The disc angle of good plough varies between					
	a) 15-25 <sup>0</sup>	b) 25-35 <sup>0</sup>	c) 35-45 <sup>0</sup>	d) 42-45 <sup>0</sup>	d	
85	Match the following	g pairs:			Answer option	
	A) Seed Hopper		i Stores seeds before	ore distribution	(a,b,c or d)	
	B) Orifice Plate  ii Guides seeds from the hopper to the ground  C) Pitot Tube  iii Cuts through soil to create furrows  D) Electromagnetic Flow meter  iv Regulates the rate of seed distribution				u)	
	a) iv-i-iii-ii	b) i-ii-iii-iv	c) iii-ii-iv-i	d) ii-i-iii-iv	a	
86	The ratio of the ulti	The ratio of the ultimate stress to design stress is known as				
	a) Elastic limit	b) Strain	c) Factor of safety	d) Bulk modulus	d) c	
87	Assertion: The steam engine played a crucial role in the Industrial Revolution.  Reason: The steam engine allowed for the mechanization of various industries, leading to increased productivity and economic growth.				Answer option (a,b,c or d)	
	a) Both assertion			d) Both	a	
	and reason are	true, but the		assertion and		
	true, and the reason is the	reason is false.	reason is true.	reason are true, but the reason is		
	reason is the			not the correct		
	explanation of the assertion.			explanation of the assertion.		
88		The rising limb of a hydrograph also known				
	2				Answer option (a,b,c or	
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1 1 1		10	d)	
	a)Concentrating	b) depletion	c) inflection	d) crest segment	a	

	curve	curve	point					
89		What is the length of surveyor's chain?						
		,			option			
					(a,b,c or			
	a) 100 ft	b) 66 ft	c) 33 ft	d) 50 ft	С			
90	What is length or	f ranging rod?		<u>I</u>	Answer			
					option (a,b,c or			
	a) 4m	b) 2m	c) 3m	d) 2.4m	d) b			
	,		,	,	Answer			
91	_	The operation of establishing intermediates points on a straight line						
	between terminals points is known as							
					(a,b,c or d)			
	a) Ranging	b) Traversing	c) Triangulation	d) Back bearing	a			
			,	,	Answer			
92		Horton's mean curve for interception loss indicates that interception is						
	greater in case of							
	a) Light storm	b) Heavy storm	c) No storm	d) Intermediate	d) a			
	13, 23, 23, 23, 23, 23, 23, 23, 23, 23, 2	, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,	storm				
93	Thermostat valve	e is used to design sta	rt opening for diese	el engine at °C	Answer			
		C	1 0	<i>C</i> ==	option			
			T		d)			
0.4	a) 70-75	b) 82	c) 88-90	d) 60-70	c Answer			
94	The pre-cleaner removes % or more dust from incoming air in I.C.							
	engine							
	a) 60	b) 70	c) 80	d) 90	d) d			
95	nozzle are commonly used for spraying insecticides and							
	fungicides .							
	a) Flat fan b) Flood jet c) Solid cone d) Hollow cone							
96	a) Flat fan b) Flood jet c) Solid cone d) Hollow cone Steel containing up to 0.15% carbon is known							
70	Seed containing up to 0.13/0 curoon is known							
	a) Mild steel	b) Dead mild	c) Medium carbon steel	d) High carbon	b			
97	steel   carbon steel   steel   What is resolution of prismatic compass?							
	The second of promise company.							
					(a,b,c or d)			
	a) 15 <sup>0</sup>	b) 30 <sup>0</sup>	c) 1 <sup>0</sup>	d) 45 <sup>0</sup>	b			

98	The ratio of basin area to square of basin length is called				
	a) Ruggedness number	b) Geometric number	c) Relief ratio	d) Form factor	d
99	Saturated but relatively impermeable material that does not yield water to the wells is called				
	a) Aquiclude	b) Aquitard	c) Aquifer	d) Aquifuge	a
100	In two-dimensional flow, a grid of equipotential and streamlines is called as				
	a) Contour network	b) Seepage line	c) Flow net	d) Monogram	С