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Reg.	No.	

Question Paper Code: 95A03

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2023

Fifth Semester

Agricultural Engineering

19UAG503 - MICRO IRRIGATION SYSTEM

(Regulation 2019)

Dur	ation: Three hours			Maximum: 100 N	/larks
		Answer	ALL Questions		
		PART A - ($10 \times 1 = 10 \text{ Marks}$		
1.	Persion wheel is	a water liftii	ng device		CO1- R
	(a) Low head	(b)medium head	(c) high head	(d) manually op	perated
2.	An example of hi	gh head water turbine			CO1- R
	(a) pelton	(b) propeller	(c) Kaplan	(d) bar	nki
3.	water Prov	rided at the start of su	b main to control	the flow of	CO2- R
	(a) flush valve	(b)control valve	(c) non-return	valve (d) air-rel	ease valve
4.	valve is pump	always required for	the positive displace	cement	CO2- R
	(a) isolation	(b)butterfly	(c)gate valve	(d) pressure	e relief
5.	Treatment the drip system	nt is used to control th	ne salt accumulation	inside	CO3- R
	(a) chlorine	(b) acid	(c) chlorine dioxide	e (d) chlorine	e gas
6 is the heart of drip irrigation s			stem		CO3- R
	(a) emitter	(b) filter	(c) end cap	(d) filter	
7.	The type of filter	will depends upon			CO4- R
	(a) soil type (b) crop type (c)	Spacing (d)	source and quality o	of water

8.	is the process of application of water soluble through drip irrigation system				CO4- R	
	(a) (Chemigation	(b) Fertigation	(c) chlorination	(d) acidificat	tion
9.	The	largest crop area	covered by drip irrig	gation in India is under		CO5- R
	(a) p	plantation crops	(b) orchards	(c) vegetable crops	(d) fiber crops	5
10.	The	J-lock dripper of	f Jain make is of	type emitter		CO5 -R
	(a) s	self-flushing		(b) pressure compensa	ting	
	(c) c	clog resistant		(d) non-pressure comp	ensating	
			PART – B (S	5 x 2= 10Marks)		
11.	Wha	at is priming and	how to rectify the pr	oblems in pump?		CO1- U
12.						
13.	Differentiate between Traditional and Micro irrigation methods?					
14.	Draw a schematic diagram of media filter?					
15.	List	out the Compon	ents of Sprinkler irrig	gation?		CO5- R
			PART – C	(5 x 16= 80Marks)		
16.	(a)	What is the P sketch of and la		n centrifugal pump Draw	a CO1-U	(16)
			Or			
	(b)	Briefly explain	water lifting technolo	ogy traditional methods?	CO1- U	(16)
17.	(a)	Briefly explain valve?	& draw a sketch of P	Pressure relief valve- Gate	CO2 -U	(16)
			Or			
	(b)	Briefly explain valve?.	& draw a sketch o	of Isolated valve- Non retu	urn CO2 -U	(16)
18.	(a)	Define Micro Micro irrigation	= =	son between Traditional a	and CO3-U	(16)
			Or			

	(b)	Merits and demerits of micro-irrigation system?	CO3 -U	(16)		
19.	(a)	Hydraulic Design and Layout of Drip Irrigation System? Or	CO4- Ana	(16)		
	(b)	Considered the area of 1 ha square area planted with coconut with spacing of 7.5 m x 7.5 m.Design drip irrigation system?	CO4 -Ana	(16)		
20.	(a)	Explain about Operation and maintenance of Sprinkler irrigation system?	CO5- U	(16)		
Or						
	(b)	Layout-Components of sprinkler irrigation system, explain with neat sketches	CO5- U	(16)		