	Reg. No.:	anism valida	ow box a na	oidounteinos	Describe the	12. a
(82) Ohano ut mutini	Question Pa	per Co	de:	50484	type energy r meter.	
	Electrical and	rth Semes Electronic	ter s Engine INSTR	ering UMENTA	TION	
Time: Three Hou	ırs			Ma	ximum: 100 M	arks
	Answ	ver ALL que	stions			
	printeria	PART - A			(10×2=20 Ma	rks)
	r static characteristics	of a measur	ement sy	stem.		
0 D C	tion	- T				
3. What are th	e sources of errors in I	OC voltage r	neasurer	nent?		
4. Define creep						(a .6)
	ondition for an AC brid	lge to be bal	anced.			
	aults that occur in the					
7. List the con	nponents of a magnetic	tape record	ler.			
	issajous figures ?					
9. Give any tw	vo applications of smar	t sensors.				(a .8
	ansducers classified?				of Hall effect to	
		PART - I	3		(5×13=65 M	(arks)
11 a) i) Doggr	ribe the functional eler	nents of an i	nstrume	nt with its	block diagram.	(8)
ii) Evols	ain the dynamic chara	cteristics of	an instru	ment in de	etail.	(5)
п) дарк	(OR)					
b) i) What	t is a standard? Expla	in the differ	ent types	of standar	ds.	(8)
ii) Expl	ain in detail the differ	ent calibrati	ion techn	iques.		(5)

50	40	4 sold ass	
12.	a)	Describe the construction and working principle of single phase induction type energy meter. Write a short note on any adjustment required in energy meter.	
		(OR)	(13)
	b)	i) How do you determine the B-H curve using 'step by step' method?	(0)
		ii) Explain with neat sketch any one type of instrumentation transformer.	(8)
13.	a)	<ul> <li>i) Draw a neat sketch of a modern slide-wire D.C. potentiometer and discuss how the potentiometer is standardized.</li> </ul>	(5)
		ii) Describe the operation of A.C. potentiometer.	(8)
		(OR)	(5)
	b)	Explain in detail about the interference and screening in measurements.	(13)
14.	a)	i) Explain the features of digital plotters and printers.	(8)
	1	<ul> <li>Explain the construction and working principle of Magnetic tape recorder (OR)</li> </ul>	. (5)
1	b)	Describe the LED and LCD display devices.	A Del
	a)	What are the selection criteria for a transducer? Explain the working princip of LVDT with neat sketch. Mention the advantages and applications of LVDT.  (OR)	(13) ole (13)
ŀ	b) '	What are the performance parameters of analog to digital converter? Expla any two basic A/D conversion techniques in detail.	
		PART – C (1×15=15 M	
16. a	a) ]	Explain in detail about Hall effect transducer and mention some application of Hall effect transducer.	s
		(OR)	(15)
b	) I	Explain in detail the elements of Data Acquisition System.	
		Describe the functional staments of an instrument with its block diagram	(15)
		it) Explain the dynamic dynamic dynamic dynamic for the fermion of the determination of the dynamic forms.	
		(RO)	