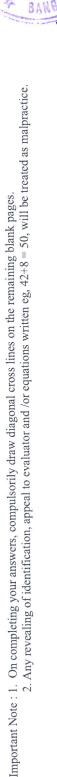
(10 Marks)





## Eighth Semester B.E. Degree Examination, June/July 2019 **Nano Technology**

Time: 3 hrs.

Max. Marks: 100

Note: Answer FIVE full questions, selecting atleast TWO questions from each part.

## PART – A

		PARI – A	
4			
1	a.	Discuss the scope of nano technology.	(10 Marks)
	b.	Explain the societal implications of nano technology.	(10 Marks)
2		Explain the principal, working and applications of:	
2	a.	Scanning probe microscope	(10 Marks)
	b.	X –ray diffraction.	(10 Marks)
	0.	71 Tuy difficulti.	(10 1111115)
3	a.	Explain the synthesis and purification of fullerenes.	(10 Marks)
	b.	Write a short note an "Carban nano tubes".	(10 Marks)
4	a.	Explain the growth process and phase transitions of nanolayers on gold.	(10 Marks)
	b.	Give the type and properties of gas phase clusters.	(10 Marks)
		PART – B	
		I AKI - B	
5	a.	Explain the synthesis of semi conductor quantum dots.	(10 Marks)
	b.	Give the properties of semi conductor quantum dots and mention its uses.	(10 Marks)
			,
6	a.	Discuss the concepts in core shell nanopurticels. Give the properties and	
		applications.	(10 Marks)
	b.	Explain the synthesis and characteristics of monolayer protected metal nanoparti	
			(10 Marks)
7	a.	Define nanosensors. Discuss the type of nanosensors. Give the applicators.	(10 Marks)
	b.	Write a short note on "nanomedicines".	(10 Marks)
8	a.	Explain the covalent and noncovalent approaches of molecular nanomachines.	(10 Marks)

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Describe the applications of nanotribology.