[5561]-519 B.E. (Civil) Air Pollution and Control (Elective - III) (2015 Pattern) Time: 2½ Hours] [Max. Marks: 70 Instructions to the candidates: 1) Attempt Q.I or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8, and Q.9 or Q.10. 2) Figures to the right indicates full marks. 3) Draw neat figures wherever necessary. 4) Assume any missing data if necessary. 5) Use of scientific calculators is allowed. Q1) a) Write features of Gaussian plume model and give the limitations of Gaussian plume models. [5] b) Explain the plume rise and how it is estimated? Q2) a) What are the effects of stack height? Enlist various formulae used to calculate minimum stack height as per CPCB? [5] b) Write in a tabular form National Ambient Air Quality Standards (NAAQS) specified by Central Pollution Control Board (CPCB). Q3) a) Explain sick building syndrome. [5] OR Q4) a) Explain air cleaning systems for indoor air pollution control. [5] OR	Tota	l No.	of Questions : 10] SEAT No. :				
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b) Write a short note on High volume sampler. [5]	<i>Q4</i>)						
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Q5) a) Explain with sketches the mechanism, working principle, application of air pollution control by Floatrostatic procipitator.	Ų5)	a)					
of air pollution control by Electrostatic precipitator. [8] b) Write advantages, disadvantages and applications of following [8]	•	b)	T				
i) Settling Chamber		U)	_ ()	[մ]			
ii) Cyclones							

Q6)	a)	Explain in brief about :	[8]
		i) Control of air pollution by process modification.	
		ii) Control of air pollution by change of raw materials.	
	b)	Write methods to control of air pollution from automobiles and ex	kplain
		any one method.	[8]
07)	a)	Write note on economics of air pollution control.	[Q]
<i>Q7</i>)	a)	write note on economics of an political control.	[8]
	b)	Explain the important provisions made in Environment (Protection)	ction)
		Act 1986.	[8]
		OR	
(00)	۵)	Evaluin 2 years functions and manufacture and an Air Ast 1001	101
<i>Q8</i>)		Explain powers, functions and penalties under Air Act 1981.	[8]
	b)	Write note on Emission standards for stationary sources.	[8]
Q9)	a)	Write role of regulatory agencies and control boards in obta	ining
2)	α)	environmental clearance for project.	[6]
	b)		[6]
	c)	Explain Components of EIA.	[6]
	-)		[-]
		OR	
Q10)a) Write the environmental rules 1999 (sitting of industries) as per th			er the
		notification of Ministry of Environment and Forests.	[9]
	b)	Write and explain environmental impacts of sugar and cement ind	ustry.
		White and explain on the inflation of sugar and complete ind	[9]

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