

Name:	
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2019

Programme Name: B. Tech. FSE	Semester : VI
Course Name : Environment Management in Power Industry	Time : 03 Hrs
Course Code : FSEG 333	Max. Marks : 100 Marks
Nos. of page(s) : 2	

Instructions: Please attempt all questions from Section “A”, Section “B” and Section “C”

SECTION A – 20 Marks (5 x 4 = 20 Mark)
(Attempt all questions from section “A”)

SN		Marks	CO
Q.1.	Define the followings: a) Clean Development Mechanism (2 Marks) b) Earth Summit (2 Marks)	4	CO1
Q.2.	What are the environmental impact of air pollutant generated by thermal power plant?	4	CO2
Q.3.	What are the various measures which are used for promoting sustainable development?	4	CO5
Q.4.	What are the salient features of Atomic Energy Act , 1962?	4	CO1
Q.5.	Write the difference between Rapid EIA and Comprehensive EIA.	4	CO4

SECTION B (10 x 4 = 40 Marks)


(Attempt all question from this section however internal choice is given among Q.9 and Q.10, student may attempt any one question i.e Q.9.or Q.10

Q.6	Explain various Environmental Components of EIA which you will consider for taking environmental clearance from MoEF & Climate change for Hydel power projects.	10	CO4
Q.7 W	According to EIA notification 1994 under the Environmental Protection Act 1986, the EIA process is mandatory for various development project for implementing sustainable development. Explain the various methodologies of EIA which you shall considered for conducting EIA process for thermal power plant.	10	CO4
Q.8.	What are the objectives of Environmental Management Plan? Explain the various component of Environment management plan which you will follow for conducting EIA process of Nuclear Power Plant.	10	CO2
Q.9.	Explain the classification of Preventive Environmental Management Tools which you will apply in power industry for controlling environmental pollution and managing environmental resources.	10	CO2

Or

Q.10.	Explain briefly pre-combustion, combustion and post-combustion technologies for controlling gaseous and particulate matter in thermal power plant with schematic diagram.	10	CO2
SECTION-C SECTION-C (40 Marks) Attempt any two questions (Q.11. is compulsory however internal choice is given among Q.12 or Q.13			
Q.11.	What is EIA? What are the objectives of EIA? Describe the Prior Environmental Clearance Process for activities falling under category A and Category B Projects, as per the revised EIA Notification issued on 14 th September , 2006 for thermal power plant with schematic diagram . (2 + 4+ 14 = 20 Marks)	20	CO4
Q.12.	What do you mean by TOR (Terms of Reference). Explain all components of TOR (Term of Reference) which you shall consider for conducting EIA process of Thermal Power Plant. Or	20	CO4
Q.13.	Explain PDCA Cycle . Describe all the elements of EMS clauses which you shall considered for taking ISO 14001 : 2015 certification for the industries or organization.	20	CO3

Note: - Pl. start your question paper from next page

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Course Code : FSEG 333		Max. Marks : 100 Marks	
Nos. of page(s) : 3			
Instructions: Please attempt all questions from Section “A”, Section “B” and Section “C”			
SECTION A – 20 Marks (5 x 4 = 20 Mark) (Attempt all questions from section “A”)			
SN		Marks	CO
Q.1.	Define the followings: a) LCA (2 Marks) b) Environmental Audit (2 Marks)	4	CO1
Q.2.	What do you mean by Category A and Category B project as per EIA notification of 2006?	4	CO4
Q.3.	Write any eight Goals of sustainable development set by the United Nations General Assembly in 2015?	4	CO5
Q.4.	What are the various sources of waste water generated from Thermal Power Plant?	4	CO2
Q.5.	What do mean by Sectorial EIA and Regional EIA?	4	CO4
SECTION B (10 x 4 = 40 Marks) (Attempt all question from this section however internal choice is given among Q.9 and Q.10 student may attempt any one question i.e Q.9.or Q.10			
		10	CO1
Q.6. W	What are the objectives and scope of (Air Prevention & Control of Pollution) Act, 1981? Explain the function of State Pollution Control Board and Central Pollution Control board in order to prevention, control and abatement of air pollution given by (Air Prevention & Control of Pollution) Act, 1981.	10	CO1
Q.7.	Explain any five methodologies of EIA process which you shall considered for Taking Environmental Clearance from MoEF & Climate Change for Hydel Power Plant.	10	CO4
Q.8.	Write the various information which you will provided in Form IA for taking Environmental Clearance from MoEF & Climate change for Thermal Power Plant.	10	CO4
Q.9	Describe the Prior Environmental Clearance Process for activities falling under category A and Category B Projects, as per the revised Notification issued on 14 th	10	CO4

	September , 2006 for thermal power plant with schematic diagram.		
	Or		
Q.10	What are the objectives of EMP (Environmental Management Plan). Explain the various component of Environment management plan which you will follow for conducting EIA process of Nuclear Power Plant.	10	CO2
SECTION-C SECTION -C (40Marks)			
Q.11. is compulsory, however internal choice is given among question Q.12. or Q.13, student may attempt any one question either Q.12 or Q.13			
			CO5
Q.11.	Explain PDCA Cycle . Describe all the elements of EMS clauses which you shall considered for taking ISO 14001 : 2015 certification for the industries or organization.	20	CO3
Q.12.	There are two types of environmental impacts considered for nuclear plants. The first one are those which occur under normal operation of plants and second are those which can occur under accident conditions. Describe the anticipated environmental impact and mitigation measures for nuclear power plant. (15 Marks) b) Describe various environmental parameters which are considered during EIA process of Nuclear Power Plant. (5 Marks)	20	CO2
	Or		
Q.13.	According to EIA notification 1994 under the environmental protection act 1986, the EIA process is mandatory for various development project for sustainable development . Explain the various environmental components of EIA which are considered for conducting EIA process for thermal power plant. Explain the EIA process for category B project for Thermal Power Plant with supporting it with a block diagram. (10 + 10 = 20 Marks)	20	CO4