2021

INDUSTRIAL WATER POLLUTION CONTROL

Full Marks: 100

Time: Three hours

The figures in the margin indicate full marks for the questions.

Answer any five questions out of six

Classify various water pollutants and also write their 10 characteristics b) Describe various types of water pollution. 10 20 Describe ETP and its treatment mechanism 10 How Industrial wastewater management is different 3. from municipal wastewater management, describe 10 b) Discuss Industrial wastewater management in detail. Write notes on: 5 Glass and ceramics

Nuclear power plant

	c) Polymer	5
	d) Leather and Tannery	5
5	Write notes on energy industry and drug industry	10+10
6	Describe liquid waste management in detail	20

2021

FOOD PRODUCT DEVELOPMENT AND ENTREPRENEURSHIP

Full Marks: 100

Time: Three hours

The figures in the margin indicate full marks for the questions.

Group A

Answer any five questions.

1.	a)	What is the difference between product recall and product withdrawal?	2
	b)	Elaborate on cause-and-effect diagram, and explain how it can be used while brainstorming a new food product development idea.	6
	c)	What are the major two changes that drive new food product development?	2
2.	a)	What is new food product development? Explain the two types of new food product development with example for each.	2 + 4
	a)	Define product traceability. What is its significance?	2+2 = 4
3.	a)	Draw a schematic flow-diagram of the stage-gate process of new food product development, and appropriately label it.	8
	b)	What is ergonomics? Explain with an example.	2
4.		Elaborate on idea generation, including screening of	10

the generated ideas, and their business feasibility.

		tile Benefater	
5.	Writ	e short notes on any two of the following Cost of new food product development	5x2=10
	b)	Market research	
	c)	Product launch	
6.		Describe in detail how a screened and finalized food product idea is commercialized, including testing for commercialization.	10
		Group B	
		Answer any five questions.	
7.	De	efine Project. What are the different characteristics of a oject? What is the role of a project manager?	10
8.	. W	hat is PLC? Explain the different phases of a project life //cle?	10
9	. W	/hat is the purpose of WBS? Explain WBS giving nitable example.	10
10	n	What is risk analysis? What is its significance in project nanagement? What are the different factors attributing to isk and uncertainties of a project?	10
1	1. \	Write short notes on any two of the following a) Project Appraisal	5x2=10
		b) PERT	
		c) Dummy Activity	

12. Draw the network diagram and determine the critical path for the following project.

Activity	Time estimate (Weeks)
1-2	5
1-3	6
1-4	3
2-5	5
3-6	7
3-7	10
4-7	4
5-8	2
6-8	5
7-9	6
8-9	4

