Uka Tarsadia University (Diwaliba Polytechnic)
Diploma in Environmental Engineering
Objective Type Questions (Cleaner Production Engineering- 020060604)

UNIT :- 1

1	What is the full form of CP			
	A.	Cleaner Production	B.	Clean Profit
	C.	Clean Production	D.	None of the above

2	What is the shape of CP hierarchy			
	A.	Circular	B.	Square
	C.	Triangular	D.	None of the above

3	What is the full form of GCPC?			
	A.	Gujarat Clear production Centre	B.	Gujarat Cleaner Production Centre
	C.	Gujarat Clean Profit Centre	D.	All of the above

4	MOEF means_____			
	A.	istry of Education Facility	B.	Ministry Of Ecology Facility
	C.	Ministry Of Environmental Forest	D.	None of the

5	Which ‘R’ is including in CP?			
	A.	Reduce	B.	Reuse
	C.	A&B	D.	None of the

6	Which ‘R’ is not including in CP?			
	A.	Reduce	B.	Redesign
	C.	Reuse	D.	Recycle

7	What is the first ‘R’ of CP?			
	A.	Reduce	B.	Recycle
	C.	Reuse	D.	Recover

8	What is the Seconded ‘R’ of CP?			
	A.	Reduce	B.	Recycle
	C.	Reuse	D.	Recover

9	What is the Third ‘R’ of CP?			
	A.	Reduce	B.	Recycle

	C.	Reuse	D.	Recover

10	What is the full form of ENVIS			
	A.	Energy Information System	B.	Environmental Information System
	C.	Environment Information System	D.	None of the above

11	How many R include in CP hierarchy			
	A.	2	B.	4
	C.	5	D.	3

12	CP hierarchy applied on			
	A.	Air	B.	Solid
	C.	Water	D.	All of the above

13	Waste minimization it is the _____ step of CP hierarchy			
	A.	First	B.	Seconded
	C.	Third	D.	Fourth

14	Treat and Disposal it is the _____ step of CP hierarchy			
	A.	First	B.	Seconded
	C.	Third	D.	Fourth

15	Waste management meaning in CP			
	A.	Reduce	B.	Recycle
	C.	Reuse	D.	B&C

16	Which ‘R’ is not including in CP?			
	A.	Redesign	B.	Retake
	C.	Rearrange	D.	All of the above

17	CP is similar to the			
	A.	Green chemistry	B.	Sustainable Development
	C.	A&B	D.	None of the above

18	What is the Fourth ‘R’ of CP?

	A.	Reduce	B.	Recycle
	C.	Reuse	D.	Recover

19	What is End Of Pipe Treatment			
	A.	Reduce waste	B.	Reuse waste
	C.	Implementing techniques	D.	None of the above

20	How many CP barriers?			
	A.	1	B.	2
	C.	3	D.	4

21	Now a day meaning of CP is			
	A.	Ecological innovation	B.	Renewable energy
	C.	Green technology	D.	All of the above

22	What is cleaner production?			
	A.	G.H.K	B.	Better process control
	C.	Input substitution	D.	All of the above

23	What is not including in CP?			
	A.	Good housekeeping	B.	Good housekeeping
	C.	Product modification	D.	EMP

24	Which is not a proactive environmental strategy of CP?			
	A.	EIA	B.	G.H.K
	C.	Technology change	D.	Input substitution

25	What include in CP definition?			
	A.	Principle Substitution	B.	Energy Conservation
	C.	Design for Environment	D.	All of the above

26	Which is usually benefit of CP			
	A.	increases profitability	B.	lowers production costs
	C.	enhances productivity	D.	All of the above

27	Which is often benefit of CP

	A.	leads to insurance savings	B.	fast and easy to implement
	C.	A&B	D.	Reduction of risk

28	Less toxic material used in industries it is the example of _____CP practice			
	A.	Technology change	B.	G.H.K
	C.	Product Modification	D.	Input substitution
29	If I am modify the operational procedure it is example of			
	A.	G.H.K	B.	Better process control
	C.	Input substitution	D.	Input substitution

30	Why we using energy from renewable sources?			
	A.	For better process control	B.	For good house keeping
	C.	For energy efficiency	D.	All of the above

31	How could CP applied in practice?			
	A.	Good Housekeeping	B.	Input Substitution
	C.	A&B	D.	None of the above

32	What include in CP definition?			
	A.	Reduction of risk	B.	Competitive advantages
	C.	A&B	D.	Only A

33	What are the benefits of cleaner production?			
	A.	Improving environmental situation	B.	Increasing economical benefits
	C.	Increasing productivity	D.	All of the above

34	Which is not a benefit of CP?			
	A.	Mitigation measures	B.	Continues environmental improvement
	C.	Only A	D.	A&B both

35	Repair leakage and spills it is the example of			
	A.	Good Housekeeping	B.	Input Substitution
	C.	Input Substitution	D.	None of the above

36	What is not CP?

	A.	Off-site recycling	B.	Waste treatment
	C.	A&B	D.	None of the above

37	Who give the definition of CP?			
	A.	ENVIS	B.	MOEF
	C.	GCPC	D.	UNEP

38	Which are the often benefit of CP			
	A.	avoids regulatory compliance costs	B.	leads to insurance savings
	C.	requires little capital investment	D.	All of the above

39	Full form of UNEP			
	A.	United National Environment plan	B.	United National environmental Programme
	C.	United Nations Environment Programme	D.	None of the above

40	_____is the usually benefit of CP			
	A.	enhances productivity	B.	increases product yield
	C.	A&B	D.	None of the above

41	How CP apply in practice?			
	A.	Better Process Control	B.	Equipment Modification
	C.	Technology Change	D.	All of the above

42	Which is not a End Of Pipe Treatment?			
	A.	ETP	B.	CETP
	C.	Biological process	D.	All of the above

43	Reuse the material for the meaning full application it is example of			
	A.	Better Process Control	B.	On-site Recovery/Reuse
	C.	Technology Change	D.	All of the above

44	Environment Friendly packing include in			
	A.	Technology Change	B.	On site reuse
	C.	Product modification	D.	All of the above

45	Cleaner Production is the _____type of tool

	A.	Management	B.	Environment
	C.	Economic	D.	All of the above

46	What is not including in CP?			
	A.	Concentrating hazardous or toxic constituents to reduce volume	B.	Diluting constituents to reduce hazard or toxicity
	C.	reduce hazard or toxicity	D.	All of the above

47	Transforming waste into an useful by-product include in			
	A.	Technology Change	B.	On site reuse/recycle
	C.	Product modification	D.	All of the above

48	Decreased water pollution _____benefit of CP			
	A.	Environmental	B.	Production
	C.	Economic	D.	All of the above

49	Using renewable material it is the example of _____CP practice			
	A.	Technology Change	B.	G.H.K
	C.	On-site Recovery/Reuse	D.	Input substitution

50	Which is CP practice?			
	A.	Technology Change	B.	On-site Recovery/Reuse
	C.	A&B	D.	None of the above

QUESTION NO	ANSWER
1	**A**
2	**C**
3	**A**
4	**C**
5	**C**
6	**B**
7	**A**
8	**C**
9	**B**
10	**C**
11	**B**
12	**D**
13	**A**

25	**D**
26	**D**
27	**C**
28	**D**
29	**B**
30	**C**
31	**C**
32	**C**
33	**D**
34	**A**
35	**A**
36	**B**
37	**D**
38	**D**
39	**C**

14	**C**
15	**D**
16	**D**
17	**C**
18	**D**
19	**D**
20	**B**
21	**D**
22	**D**
23	**D**
24	**A**

40	**C**
41	**D**
42	**D**
43	**B**
44	**C**
45	**D**
46	**D**
47	**C**
48	**A**
49	**D**
50	**C**

UNIT :- 2

1	End of Pipe treatment is which part of CP?			
	A.	CP methodology	B.	CP tools
	C.	CP techniques	D.	None of the above

2	Aerobic treatment it is a example of_____			
	A.	CP methodology	B.	CP tools
	C.	End of pipe treatment	D.	None of the above

3	Catalyst exchange/purifier it is a example of_____			
	A.	End of pipe treatment	B.	Integrated technologies
	C.	CP methodology	D.	All of the above

4	How many internal barriers?			
	A.	7	B.	8
	C.	9	D.	10

5	Noise reducing Measurement is _____ solution			
	A.	End of pipe treatment	B.	Integrated technologies
	C.	CP methodology	D.	All of the above

6	Full form of EMS			
	A.	Environmental Management system	B.	Environment Management System
	C.	Ecology Management System	D.	None of the above

7	Heat exchanger it is a example of_____

	A.	End of pipe treatment	B.	Integrated technologies
	C.	CP methodology	D.	All of the above

8	Which is the benefit of EMS?			
	A.	minimize environmental liabilities	B.	reduce waste
	C.	improves environmental performance	D.	All of the above

9	How many External barriers?			
	A.	6	B.	7
	C.	8	D.	9

10	Bag House Filter it is a example of_____			
	A.	CP methodology	B.	CP tools
	C.	End of pipe treatment	D.	None of the above

11	Which ISO series under EMS defined			
	A.	ISO 14000	B.	ISO 14001
	C.	ISO 14002	D.	ISO 14003

12	Sludge Handling is a example of_____			
	A.	End of Pipe treatment	B.	Chemical process
	C.	A&B	D.	None of the above

13	Which is a not a part of EMS stages			
	A.	Environmental Policy	B.	Planning
	C.	Implementation	D.	All are in EMS stages

14	Cooling facility in air treatment it is a example of_____			
	A.	End of pipe treatment	B.	Integrated technologies
	C.	CP methodology	D.	All of the above

15	How many internal motivators?			
	A.	5	B.	6
	C.	7	D.	8

16	Which are the environmental benefits of CP?			
	A.	reduction of the amount of waste produced	B.	reduction in the use and production of toxic materials

	C.	a more efficient use of energy and resources	D.	the prevention of pollution at its source

17	Maintained water purifying plant _____treatment			
	A.	End of pipe treatment	B.	Integrated technologies
	C.	CP methodology	D.	All of the above

18	Which are the industrial benefits of CP?			
	A.	improvements in productivity	B.	savings on energy and raw materials
	C.	decreased liability	D.	All of the above

19	Which one are the internal berriers?			
	A.	Economic cycles	B.	Labour force obstacles
	C.	A&B	D.	None of the above

20	Electro filter it is a example of_____			
	A.	CP methodology	B.	CP tools
	C.	End of pipe treatment	D.	None of the above

21	How many stages include in EMS as per ISO 14001?			
	A.	2	B.	3
	C.	4	D.	5

22	Catalytic NO_x purifier i8t is a example of_____			
	A.	End of pipe treatment	B.	Integrated technologies
	C.	CP methodology	D.	All of the above

23	Evolution is _____ stage of EMS			
	A.	First	B.	Seconded
	C.	Third	D.	Fourth

24	Which are the industrial benefits of CP?			
	A.	savings on energy and raw materials	B.	savings on pollution control expenditure
	C.	A&B	D.	None of the above

25	How many external barriers?			
	A.	10	B.	11
	C.	12	D.	13

26	Which is a fifth stage of EMS?			
	A.	Review	B.	Planning
	C.	Evaluation	D.	None of the above

27	Biological cleaning system for air purification it is a example of_____			
	A.	End of pipe treatment	B.	Integrated technologies
	C.	CP methodology	D.	All of the above

28	Which are the internal barriers of CP?			
	A.	A lack of information and expertise	B.	A low awareness of environmental issues
	C.	Financial obstacles	D.	All of the above
29	Which are the external barriers of CP?			
	A.	Financial obstacles	B.	Difficulty in accessing cleaner technology
	C.	Middle management inertia	D.	Labour force obstacles

30	Oil separator it is a example of_____			
	A.	CP methodology	B.	CP tools
	C.	End of pipe treatment	D.	None of the above

31	Who are the internal motivators for CP?			
	A.	Voluntary initiatives	B.	Environmental leadership
	C.	Environmental accounting	D.	All of the above

32	Who are the external motivators for CP?			
	A.	Economic incentives	B.	Buyer supplier relations
	C.	A&B	D.	None of the above

33	Enclosed cooling system is a example of_____			
	A.	End of pipe treatment	B.	Integrated technologies
	C.	CP methodology	D.	All of the above

34	Having a high resistance to change method it is _____.			
	A.	A low awareness of environmental issues	B.	A lack of information and expertise
	C.	Middle management inertia	D.	Financial obstacles

35	Cyclone separator is a example of _____

	A.	CP methodology	B.	CP tools
	C.	End of pipe treatment	D.	None of the above

36	Which are the external barriers of CP?			
	A.	Difficulty in accessing cleaner technology	B.	Difficulty in accessing external finance
	C.	Economic cycles	D.	All of the above

37	Unproven technologies is _____barriers			
	A.	Difficulty in accessing cleaner technology	B.	Economic cycles
	C.	Difficulty in accessing external finance	D.	None of the above

38	Flow measuring device it is a example of _____			
	A.	End of pipe treatment	B.	Integrated technologies
	C.	CP methodology	D.	All of the above

39	Which one not an external motivators of CP?			
	A.	Negotiated self-regulation	B.	Codes of practice
	C.	Improvements in productivity	D.	Industry networking

40	Anaerobic treatment it is a example of_____			
	A.	CP methodology	B.	CP tools
	C.	End of pipe treatment	D.	None of the above

41	Recycling of food is a example of_____			
	A.	CP tools	B.	Pollution Prevention
	C.	Green Technology	D.	All of the above

42	Which one is not an internal barrier of CP?			
	A.	Voluntary initiatives	B.	Green consumers
	C.	Environmental accounting	D.	Improvements in productivity

43	The complexity of new technology adopted for industries is a			
	A.	Difficulty in accessing cleaner technology	B.	Environmental accounting
	C.	Voluntary initiatives	D.	Improvements in productivity

44	Use of green product for waste water treatment it is _____ type of solution.			
	A.	Renewable uses	B.	Integrated technologies
	C.	A&B	D.	All of the above

45	Fermentation process is a example of_____			
	A.	CP methodology	B.	CP tools
	C.	End of pipe treatment	D.	None of the above

46	firm financially tied up due to other investments is the _____ Barrier			
	A.	Difficulty in accessing cleaner technology	B.	Green consumers
	C.	Economic cycles	D.	Financial obstacles

47	Which is the ideal goal of CP?			
	A.	Zero defects	B.	Zero emissions
	C.	A&B	D.	None the above

48	Which are the external barriers of CP?			
	A.	Perverse economic incentives	B.	An absence of markets for recycled goods
	C.	Economic cycles	D.	All of the above

49	Reduce nitrogen in discharge waste water it is a example of_____			
	A.	End of pipe treatment	B.	CP methodology
	C.	Physical method	D.	All of the above

50	Which are the Competitiveness benefits of industries in CP?			
	A.	more motivated workforce	B.	focus on continuous improvement
	C.	better health and safety provisions	D.	All of the above

QUESTION NO	ANSWER
1	D
2	C
3	B
4	C
5	B
6	B
7	B
8	D
9	A
10	C
11	B
12	C
13	D
14	B
15	B
16	D
17	B
18	D
19	B
20	C
21	D
22	B
23	C
24	C
25	C
26	A
27	B
28	D
29	B
30	C
31	D
32	C
33	B
34	A
35	C
36	D
37	A
38	B
39	C
40	C
41	D
42	B
43	A
44	C
45	C
46	D
47	B
48	D
49	A
50	D

UNIT :- 3

1	Cleaner Production applied on			
	A.	Process	B.	Product
	C.	None of the above	D.	All of the above

2	Which are the key elements of CP			
	A.	Cleaner production entails a continuous process	B.	Cleaner production is not limited to industries
	C.	Cleaner production moves ecologically sustainable	D.	All of the above

3	How many step involved in CP methodology?			
	A.	5	B.	6
	C.	7	D.	8

4	PDCA cycle fall under _____steps			
	A.	1	B.	2
	C.	3	D.	4

5	Full form of TQM			
	A.	Total Quality Management	B.	Total Quantity Management
	C.	A&B	D.	None of above

6	Which is a CP indicator?			
	A.	Fresh Water Consumption	B.	Energy Use
	C.	Global Warming Potential	D.	All of the aboves

7	How many task under the CP methodology?			
	A.	16	B.	6
	C.	18	D.	7

8	Which step involved in CP methodology?			
	A.	Getting started	B.	Analyzing process step
	C.	Sustaining cleaner production	D.	All of the above

9	Which is not a step of CP methodology?			
	A.	Selecting cleaner production solution	B.	Sustaining cleaner production
	C.	Environmental impact assessment	D.	All of the above

10	Total Quality Management focus on_____			
	A.	long-term success	B.	Short term Success
	C.	None of the above	D.	All of the above

11	Who describe connect of TQM?			
	A.	WHO	B.	MOEF
	C.	ISO	D.	GCPC

12	How many task involved in first step of CP?

	A.	2	B.	3
	C.	4	D.	5

13	In PDCA cycle the meaning of P is_____			
	A.	Plan	B.	Prepare
	C.	Predict	D.	All of the above

14	Which is a first step of CP?			
	A.	Analyzing process step	B.	Getting started
	C.	Sustaining cleaner production	D.	None of the above

15	How many principles involved in TQM?			
	A.	7	B.	8
	C.	9	D.	10

16	In which step list of process prepare?			
	A.	Analyzing process step	B.	Getting started
	C.	Sustaining cleaner production	D.	None of the above

17	In which step material and energy diagram prepare?			
	A.	Analyzing process step	B.	Getting started
	C.	Sustaining cleaner production	D.	None of the above

18	In which step workable opportunities are identified?			
	A.	Analyzing process step	B.	Getting started
	C.	Sustaining cleaner production	D.	Generating cleaner production opportunity

19	In PDCA cycle the meaning of D is_____			
	A.	Doing	B.	Don’t
	C.	DO	D.	Did

20	Which is the principle of TQM?			
	A.	Customer Focus	B.	Employee Involvement
	C.	Process-Centered	D.	All of the above

21	In which step results are monitored?			
	A.	Plan	B.	Check

	C.	Do	D.	Act

22	How many Cp indicators?			
	A.	19	B.	20
	C.	21	D.	22

23	How many task involved in seconded step of CP?			
	A.	2	B.	3
	C.	4	D.	5

24	Which solutions are selected under CP solution?			
	A.	Financial	B.	Technical
	C.	Environmental	D.	All of the above

25	In PDCA cycle the meaning of C is_____			
	A.	Correct	B.	Check
	C.	Communicate	D.	None of the above

26	Which is a seconded step of CP?			
	A.	Analyzing process step	B.	Getting started
	C.	Sustaining cleaner production	D.	None of the above

27	Sustain Cleaner Production solutions taken under which step?			
	A.	Step 4	B.	Step 5
	C.	Step 6	D.	None of the above

28	Make a cleaner production team is a _____			
	A.	Task 1	B.	Task 2
	C.	Task 3	D.	Task 4
29	Prepare a process flow chart is a_____			
	A.	Task 1	B.	Task 2
	C.	Task 3	D.	Task 4

30	Which is the principle of TQM?			
	A.	Integrated System	B.	A Strategic and Systematic Plan
	C.	Continuous Improvement	D.	All of the above

31	How many task involved in third step of CP?			
	A.	2	B.	3
	C.	4	D.	5

32	In which step phase involves the implementation and realization of the plan			
	A.	Plan	B.	Check
	C.	Do	D.	Act

33	Which is a third step of CP?			
	A.	Analyzing process step	B.	Getting started
	C.	Sustaining cleaner production	D.	Generating cleaner production opportunity

34	Assign costs to waste streams is a _____			
	A.	Task 5	B.	Task 6
	C.	Task 7	D.	Task 8

35	In PDCA cycle the meaning of A is_____			
	A.	Analysis	B.	Assume
	C.	Act	D.	Audit

36	Assess financial viability is _____			
	A.	Task 11	B.	Task 12
	C.	Task 13	D.	Task 14

37	Which involved in cleaner production?			
	A.	Reuse of waste	B.	low waste processes and technologies
	C.	A&B	D.	None of the above

38	How many task involved in six step of CP?			
	A.	1	B.	2
	C.	3	D.	4

39	Which is a fourth step of CP?			
	A.	Analyzing process step	B.	Getting started
	C.	Selecting cleaner production solution	D.	Generating cleaner production opportunity

40	Which is the principle of TQM?			
	A.	Fact-Based Decision Making	B.	Communication

	C.	A&B	D.	None of the above

41	How many task involved in fourth step of CP?			
	A.	1	B.	2
	C.	3	D.	4

42	Evaluate environmental aspects is _____			
	A.	Task 11	B.	Task 12
	C.	Task 13	D.	Task 14

43	In which step check the availability of the resources?			
	A.	Plan	B.	check
	C.	Do	D.	None of the above

44	Which is a fifth step of CP?			
	A.	Analyzing process step	B.	Implementing cleaner production solution
	C.	Selecting cleaner production solution	D.	Generating cleaner production opportunity

45	Which are the benefits of TQM?			
	A.	Increase in productivity	B.	Increase in the skills of employees
	C.	Improvement in the communication amongst employees	D.	All of the above

46	Who involved in CP team?			
	A.	Managers	B.	Engineers
	C.	Government Officers	D.	All of the above

47	Monitor and evaluate results is a_____			
	A.	Task 15	B.	Task 16
	C.	Task 17	D.	Task 18

48	How many task involved in fifth step of CP?			
	A.	1	B.	2
	C.	3	D.	4

49	Which is a six step of CP?			
	A.	Analyzing process step	B.	Getting started

	C.	Sustaining cleaner production	D.	None of the above

50	Identify and select wasteful process are revised in _____ step			
	A.	First	B.	seconded
	C.	Third	D.	Fourth

QUESTION NO	ANSWER
1	**D**
2	**D**
3	**B**
4	**D**
5	**A**
6	**D**
7	**C**
8	**D**
9	**C**
10	**A**
11	**C**
12	**B**
13	**A**
14	**B**
15	**B**
16	**B**
17	**A**
18	**D**
19	**C**
20	**D**
21	**B**
22	**D**
23	**C**
24	**D**
25	**B**
26	**A**
27	**C**
28	**A**
29	**D**
30	**D**
31	**A**
32	**C**
33	**D**
34	**B**
35	**C**
36	**A**
37	**C**
38	**B**
39	**C**
40	**C**
41	**D**
42	**B**
43	**A**
44	**B**
45	**D**
46	**D**
47	**B**
48	**C**
49	**C**
50	**B**

UNIT :-4

1	Full form of G.H.K			
	A.	Go House Keeping	B.	General House Keeping
	C.	Good House Keeping	D.	None of the above

2	What is needed to implement Good Housekeeping?			
	A.	Common Sense	B.	Simple Actions
	C.	Problem Awareness	D.	All of the above

3	A check list contain series of a _____in a G.H.K			
	A.	Question	B.	Answer
	C.	Method	D.	Objective

4	How many S is including in G.H.K?			
	A.	2	B.	3
	C.	4	D.	5

5	Which S is including in G.H.K?			
	A.	Sort	B.	Set in order
	C.	Shine	D.	All of the above

6	Which include in check list of G.H.K?			
	A.	Materials	B.	Waste
	C.	Storage and Handling of Materials	D.	All of the above

7	Monitoring material consumption is include in _____ check list of G.H.K.			
	A.	Materials	B.	Waste
	C.	Storage and Handling of Materials	D.	All of the above

8	Which is a CP tool?			
	A.	Waste reduction at source	B.	Recycling
	C.	Product Modification	D.	All of the above

9	Good house Keeping is a part of _____CP tool

	A.	Waste reduction at source	B.	Recycling
	C.	Product Modification	D.	All of the above

10	Which is the benefit of Good Housekeeping?			
	A.	Decreased fire hazards	B.	Better control of tools & materials
	C.	More effective use of space	D.	All of the above

11	What is needed to implement Good Housekeeping?			
	A.	Information Gathering	B.	Organizational Culture
	C.	A&B	D.	None of the above

12	Reuse and recycle waste is include in _____ check list of G.H.K.			
	A.	Waste	B.	Materials
	C.	Energy	D.	None of the above

13	Which are the various initiatives for Good Housekeeping?			
	A.	Waste segregation	B.	Preventive maintain programmed
	C.	Workplace safety	D.	All of the above

14	Process Change is a part of _____CP tool			
	A.	Waste reduction at source	B.	Recycling
	C.	Product Modification	D.	All of the above

15	Which is including in process change?			
	A.	Change of Raw Material	B.	Better process control
	C.	Equipment Modification	D.	All of the above

16	Avoiding spillage & leakages C			
	A.	Water & Waste Water	B.	Energy
	C.	A&B	D.	None of the above

17	Which is the benefit of Good Housekeeping?			
	A.	Improved productivity	B.	Lower worker exposure to hazardous substances
	C.	A&B	D.	None of the above

18	Reducing Energy consumption Reducing Energy consumption			
	A.	Water & Waste Water	B.	Energy
	C.	A&B	D.	None of the above

19	Which include in check list of G.H.K?			
	A.	Water & Waste Water	B.	Energy
	C.	A&B	D.	None of the above

20	Separate waste is include in _____ check list of G.H.K.			
	A.	Waste	B.	Materials
	C.	Energy	D.	None of the above

21	Which is an element of Good Housekeeping?			
	A.	Aisles	B.	Space
	C.	Storage	D.	All of the above

22	On-site Reuse and Recovery is a part of _____CP tool			
	A.	Waste reduction at source	B.	Recycling
	C.	Product Modification	D.	All of the above

23	What is needed to implement Good Housekeeping?			
	A.	Internal communication	B.	Motivating employers
	C.	A&B	D.	None of the above

24	Creation of Useful By-Products is a part of _____CP tool			
	A.	Waste reduction at source	B.	Recycling
	C.	Product Modification	D.	All of the above

25	Which S is including in G.H.K?			
	A.	Standardized	B.	Sustain
	C.	A&B	D.	None of the above

26	Benefits of G.H.K			
	A.	Improved production efficiency	B.	More efficient utilization of raw materials
	C.	More efficient utilization of water and energy	D.	All of the above

27	Avoid losses of raw materials include in _____ check list of G.H.K.			
	A.	Materials	B.	Waste
	C.	Storage and Handling of Materials	D.	All of the above

28	Which is an element of Good Housekeeping?			
	A.	Ventilation	B.	Floors and Walls
	C.	Lighting	D.	All of the above
29	The cleaner production assessment focuses on_____			
	A.	Where waste and emissions are generated	B.	Why waste and emissions are generated
	C.	How waste and emissions can be minimized in your company	D.	All of the above

30	Avoiding/Reducing waste is include in _____ check list of G.H.K.			
	A.	Materials	B.	Waste
	C.	Storage and Handling of Materials	D.	All of the above

31	Which include in check list of G.H.K?			
	A.	Workplace Safety	B.	Health protection
	C.	A&B	D.	None of the above

32	Benefits of G.H.K			
	A.	Recovery of valuable by-products	B.	Less pollution
	C.	Lower costs of waste disposal and waste water treatment	D.	All of the above

33	Reducing waste water pollution is include in _____ check list of G.H.K.			
	A.	Water and waste water	B.	Workplace Safety
	C.	Health protection	D.	Materials

34	How many main CP Tools?			
	A.	1	B.	2
	C.	3	D.	4

35	Which S is not including in G.H.K?			
	A.	Shine	B.	Short
	C.	Sort	D.	Set in order

36	Reduce health risks for workers is include in _____ check list of G.H.K.			
	A.	Work place safety and health protection	B.	Storage and Handling of Materials
	C.	Energy	D.	Materials

37	Waste reduction at source is classified in _____ category			
	A.	1	B.	2
	C.	3	D.	4

38	Substitute harmful substances is include in _____ check list of G.H.K.			
	A.	Workplace Safety	B.	Health protection
	C.	Environmental Assessment	D.	Materials

39	Which is an element of Good Housekeeping?			
	A.	Amenities	B.	Waste Removal
	C.	A&B	D.	None of the above

40	Benefits of G.H.K			
	A.	Improved image of work place	B.	Improved occupational health and safety
	C.	A&B	D.	None of the above

41	Which include in check list of G.H.K?			
	A.	Workplace Safety	B.	Health protection
	C.	Environmental Assessment	D.	All of the above

42	Applying the first-in-first-out principle is include in _____ check list of G.H.K.			
	A.	Storage and Handling of Materials	B.	Workplace Safety
	C.	Health protection	D.	Environmental Assessment

43	Recycling is classified in _____ category			
	A.	1	B.	2
	C.	3	D.	4

44	Adjust energy consumption to actual requirements is include in _____ check list of G.H.K.			
	A.	Storage and Handling of Materials	B.	Workplace Safety
	C.	Energy	D.	None of the above

45	Process change is classified in _____ category			
	A.	1	B.	2
	C.	3	D.	4

46	Properly cleaning & disposing of packaging materials is include in _____ check list of G.H.K.			
	A.	Storage and Handling of Materials	B.	Workplace Safety
	C.	Health protection	D.	Environmental Assessment

47	Which is including in process change?			
	A.	Raw material change	B.	Better process control
	C.	Equipment modification	D.	All of the above

48	Which is not including in process change?			
	A.	Raw material change	B.	Material change
	C.	Equipment modification	D.	All of the above

49	Provide Personal protection equipment is include in _____ check list of G.H.K.			
	A.	Work place safety and health protection	B.	Storage and Handling of Materials
	C.	Energy	D.	Materials

50	Good housekeeping helps to create			
	A.	Better working conditions	B.	Safer workplaces
	C.	Greater efficiency	D.	All of the above

QUESTION NO	ANSWER
1	**C**
2	**D**
3	**A**
4	**B**
5	**D**
6	**D**
7	**A**
8	**D**
9	**A**

25	**C**
26	**D**
27	**A**
28	**D**
29	**D**
30	**B**
31	**C**
32	**D**
33	**A**
34	**C**
35	**B**

10	**D**
11	**C**
12	**A**
13	**D**
14	**A**
15	**D**
16	**A**
17	**C**
18	**B**
19	**C**
20	**A**
21	**D**
22	**B**
23	**C**
24	**B**

36	**A**
37	**B**
38	**D**
39	**C**
40	**C**
41	**C**
42	**A**
43	**B**
44	**C**
45	**D**
46	**A**
47	**D**
48	**B**
49	**A**
50	**D**

UNIT :-5

1	Full form of LCA			
	A.	Life cycle analysis	B.	Life cycle assessment
	C.	A&B	D.	None of the above

2	LCA is described by ISO			
	A.	14040	B.	14041
	C.	14042	D.	14042

3	LCA is also known as_____			
	A.	Life cycle assessment	B.	Life cycle application
	C.	Life cycle arrangement	D.	All of the above

4	_____ is a methodology for assessment impact of a product, process or service.			
	A.	EIA	B.	GHK
	C.	LCA	D.	CP

5	LCA is a technique to assess the environmental aspects and potential impacts associated with a product, process, or service by

	A.	Compiling an inventory of relevant energy and material inputs and environmental releases	B.	Evaluating the potential environmental impacts associated with identified inputs and releases
	C.	Interpreting the results to help you make a more informed decision	D.	All of the above

6	How many phase in LCA phase?			
	A.	1	B.	2
	C.	3	D.	4

7	Which phase include in LCA?			
	A.	Goal and scope	B.	Inventory
	C.	A&B	D.	None of the above

8	Which are the uses of LCA?			
	A.	In business decision making	B.	In development sector
	C.	In waste management	D.	All of the above

9	Why conduct LCA?			
	A.	Improve product image	B.	Identify cost saving
	C.	Help to secure market	D.	All of the above

10	Which is including in LCA process?			
	A.	Raw materials	B.	Production
	C.	Distribution	D.	All of the above

11	Which step describes reason for LCA?			
	A.	Impact assessment	B.	Interpretation
	C.	Goal and scope	D.	Inventory

12	Which categories involved in LCA?			
	A.	Climate change	B.	Water resources depletion
	C.	Eco toxicity	D.	All of the above

13	Which are the types of LCA?			
	A.	Attributional	B.	Consequential
	C.	Social	D.	All of the above

14	In which stage determined boundaries of study?			
	A.	Impact assessment	B.	Interpretation
	C.	Goal and scope	D.	Inventory

15	Which phase include in LCA?			
	A.	Impact assessment	B.	Interpretation
	C.	A&B	D.	None of the above

16	Which are the uses of LCA?			
	A.	In building project guideline	B.	In waste management
	C.	A&B	D.	None of the above

17	In which stage data on input and output quantities of all relevant material are required?			
	A.	Impact assessment	B.	Interpretation
	C.	Goal and scope	D.	Inventory

18	Which is a first step of LCA phase?			
	A.	Impact assessment	B.	Interpretation
	C.	Goal and scope	D.	Inventory

19	Why conduct LCA?			
	A.	Identify opportunities for environmental impact	B.	Identify opportunities for waste reduction
	C.	A&B	D.	None of the above

20	Which is including in LCA process?			
	A.	Uses	B.	Disposal
	C.	A&B	D.	None of the above

21	Which is a part of life cycle inventory analysis?			
	A.	Material	B.	Energy
	C.	Air	D.	All of the above

22	In which step environmental input and output are identified?			
	A.	Impact assessment	B.	Interpretation
	C.	Goal and scope	D.	Inventory

23	Which are the advantages of LCA?			
	A.	Help to take responsible decisions	B.	Additional Sales Argument For Services
	C.	Save Money In A Long Run	D.	All of the above

24	Which are the disadvantages of LCA?			
	A.	Lack Of Social Effects	B.	Time-Consuming
	C.	A&B	D.	None of the above

25	Which is seconded phase of LCA?			
	A.	Impact assessment	B.	Interpretation
	C.	Goal and scope	D.	Inventory

26	In which stage contribution of an impact are identified?			
	A.	Impact assessment	B.	Interpretation
	C.	Goal and scope	D.	Inventory

27	_____ is carried out to assess the environmental impact of a product.			
	A.	Life cycle assessment	B.	Cleaner production
	C.	Good house keeping	D.	All of the above

28	A life cycle assessment should be done as a comparison of the_____in the different stage in a life of a product.			
	A.	Effect of pollution	B.	Objectives of a process
	C.	Impact on the environment	D.	All of the above
29	We can _____the uses of water, resources and production of some waste in LCA.			
	A.	Calculate	B.	Selective
	C.	Effect of pollution	D.	None of the above

30	In which step evaluate the environmental impact?			
	A.	Impact assessment	B.	Interpretation
	C.	Goal and scope	D.	Inventory

31	Which is a part of life cycle inventory analysis?			
	A.	Air	B.	Solid waste
	C.	Water effluent	D.	All of the above

32	Which are the advantages of LCA?

	A.	Handle Environmental Claims	B.	Time-Consuming
	C.	Lack Of Social Effects	D.	All of the above

33	Execrating of raw materials often involves____			
	A.	Pollution	B.	mining
	C.	Large amount of energy	D.	Use of the product

34	Which categories involved in LCA?			
	A.	Soil conservation	B.	Acidification
	C.	Fossil fuel depletion	D.	All of the above

35	Which is third phase of LCA?			
	A.	Impact assessment	B.	Interpretation
	C.	Goal and scope	D.	Inventory

36	Mining can cause_____			
	A.	Burning of fossil fuel	B.	pollution
	C.	Visual pollution	D.	All of the above

37	In which stage major contribution of sensitive analysis are identified?			
	A.	Impact assessment	B.	Interpretation
	C.	Goal and scope	D.	Inventory

38	Processing raw material also requires_____			
	A.	Pollution	B.	Large amount of energy
	C.	mining	D.	Uses of renewable

39	The second stage involves the _____of the product.			
	A.	Large amount of energy	B.	Waste materials
	C.	Manufacturing and packing	D.	None of the above

40	In which step conclusion are checks as per ISO?			
	A.	Impact assessment	B.	Interpretation
	C.	Goal and scope	D.	Inventory

41	Which categories involved in LCA?			
	A.	Eutrophication	B.	Biodiversity

	C.	A&B	D.	None of the above

42	A product may be_____			
	A.	Life cycle assessment	B.	Disposed in in landfill
	C.	Large amount of energy	D.	Disposed by burning

43	Which is a part of life cycle inventory analysis input?			
	A.	Material	B.	Energy
	C.	A&B	D.	None of the above

44	A product may be converting in to new is_____			
	A.	Lifespan	B.	Large amount of waste
	C.	Disposed of by recycling	D.	Pollution

45	Which is fourth phase of LCA?			
	A.	Impact assessment	B.	Interpretation
	C.	Goal and scope	D.	Inventory

46	LCA is similar to the_____			
	A.	Environmental impact assessment	B.	Cleaner production
	C.	Good house keeping	D.	None of the above

47	Which is not an advantage of LCA?			
	A.	Help to take responsible decisions	B.	Time consuming
	C.	Save Money In A Long Run	D.	All of the above

48	Which is a part of life cycle inventory analysis input?			
	A.	Water	B.	Air
	C.	A&B	D.	None of the above

49	Which is a part of life cycle inventory analysis output?			
	A.	Coproducts	B.	Water effluent
	C.	A&B	D.	None of the above

50	Which is a part of life cycle inventory analysis output?			
	A.	Principle product	B.	Solid waste
	C.	Airborne emissions	D.	All of the above

QUESTION NO	ANSWER
1	C
2	A
3	A
4	C
5	D
6	D
7	C
8	D
9	D
10	D
11	C
12	D
13	D
14	C
15	C
16	C
17	D
18	C
19	C
20	C
21	D
22	D
23	D
24	C
25	D
26	A
27	A

28	**C**
29	**A**
30	**A**
31	**D**
32	**A**
33	**B**
34	**D**
35	**B**
36	**C**
37	**B**
38	**B**
39	**C**
40	**B**
41	**C**
42	**B**
43	**C**
44	**C**
45	**D**
46	**A**
47	**B**
48	**C**
49	**C**
50	**D**

UNIT :-6

1	Cleaner production is need full in _____			
	A.	Sugar	B.	Pulp & paper
	C.	Textile	D.	All of the above

2	Which is the byproduct of sugar industry?			
	A.	Bagsses	B.	Filter mud
	C.	Molasses	D.	All of the above

3	Which are the various types of thermal power plant?			
	A.	Boilers (Steam Turbines)	B.	Spark Ignition (SG)
	C.	Combustion Turbines	D.	All of the above

4	Which are the environmental issues in thermal power plant?			
	A.	Air emissions	B.	Solid waste
	C.	A&B	D.	None of the above

5	Which is the various prevention of waste generation in thermal power plant?

	A.	Good house keeping	B.	Technological change
	C.	Product modification	D.	All of the above

6	Which are the environmental issues in chemical industry?			
	A.	Water pollution	B.	Low biodiversity
	C.	Acid rain	D.	All of the above

7	Which process steps are involved in paper industry?			
	A.	Raw material process	B.	Chemical Recovery
	C.	Bleaching	D.	All of the above

8	Cleaner production measure Raw Materials in pulp paper industry_____			
	A.	Maintaining moisture content of the raw materials constant all year around	B.	Keeping Chemical inventory to a minimum and buying small containers of infrequently used materials
	C.	Steam explosion can be applied as the raw material pre-treatment before the digester step to reduce the NaOH consumption	D.	All of the above

9	Cleaner production option are identified in textile industry _____			
	A.	Good House Keeping	B.	Operational Practices
	C.	Process Optimization	D.	All of the above

10	Which are the raw materials of sugar industry?			
	A.	Can sugar	B.	Beet sugar
	C.	Corn syrup	D.	All of the above

11	Which are the environmental issues in thermal power plant?			
	A.	Green house gas emissions	B.	Aquatic habitat alternation
	C.	A&B	D.	None of the above

12	In chemical industry cleaner production focus on_____			
	A.	waste minimization	B.	waste avoidance
	C.	pollution prevention	D.	All of the above

13	Scope of cleaner production in production process are			
	A.	Conservation of raw material and energy	B.	Elimination of the use of toxic raw material

	C.	A&B	D.	None of the above

14	Clean Technologies Concept for chemical industry is ____			
	A.	conservation of raw materials	B.	optimization of production processes
	C.	rational use of raw materials	D.	All of the above

15	Environmental issues in Sugar Industries are			
	A.	Soil erosion	B.	Air pollution
	C.	Waste water generation	D.	All of the above

16	Cleaner production measures for solid waste in sugar industry are_____			
	A.	Avoid burning of cane leaves	B.	Uses of molasses in distillery industries
	C.	A&B	D.	None of the above

17	Why CP is Needed in thermal power plant?			
	A.	Heat recovery	B.	Biomass recovery
	C.	A&B	D.	None of the above

18	Cleaner production measures for Emissions to air from the combustion of fossil fuels or biomass in thermal power plant is_____			
	A.	Considering beneficiation to reduce ash content, especially for high ash coal.	B.	When burning coal, giving preference to high-heat-content, low-ash, and low-sulfur coal
	C.	Use of the cleanest fuel economically	D.	All of the above

19	Clean Technologies Concept for chemical industry is ____			
	A.	rational use of energy	B.	rational use of water
	C.	disposal or recycling of unavoidable waste	D.	All of the above

20	Scope of cleaner production in product are_____			
	A.	Reduce negative impact along life cycle of a product	B.	Reducing quantity
	C.	Increase economy	D.	None of the above

21	Sludge from waste water treatment in sugar industry are_____			
	A.	Aerobic digestion	B.	Anaerobic digestion
	C.	Gravity thickening	D.	All of the above

22	Cleaner Production measure Wood-Yard in pulp paper industry_____			
	A.	Pulp mills integrated with lumbering facilities	B.	Avoiding hydraulic debarking- saving energy and water consumption, reducing wastewater amount
	C.	A&B	D.	None of the above

23	Which is the various prevention of waste generation in thermal power plant?			
	A.	input substitution	B.	Better process control
	C.	Equipment modification	D.	All of the above

24	Cleaner production measures pulp production in pulp and paper industry_____			
	A.	Increasing brown stock washing efficiency. Any remaining cooking liquor will increase the chemical consumption in subsequent stages	B.	The quality of bark must be consistent in one cook to obtain the homogeneity of the cooked pulp
	C.	Water used from evaporators	D.	All of the above

25	Environmental issues in Sugar Industries are			
	A.	Water generated soil erosion	B.	Wind generated soil erosion
	C.	A&B	D.	None of the above

26	Cleaner production measure chemical recovery in pulp and Paper industry_____			
	A.	Using of new technologies (CHP,BLG,heat transfer, heat exchanger)	B.	Improvements technical parameters of recovery boiler or furnace
	C.	Using light gas strippers and gas collection system which will remove hazardous and foul smelling pollution from the air and increase workplace safety	D.	All of the above

27	Cleaner production measures for sulfur dioxide in thermal power plant_____			
	A.	Use of fuels with a lower content of sulfur where economically feasible	B.	Use of lime (CaO) or limestone (CaCO3) in coal-fired fluidized bed combustion boilers
	C.	A&B	D.	None of the above

28	Scope of cleaner production in service in chemical industry are_____			
	A.	Incorporation of environmental design and delivery of services	B.	Better process control
	C.	GHK	D.	None of the above

29	Cleaner production option are identified in textile industry _____			
	A.	Raw Material Substitution	B.	New Product Design
	C.	Equipment Modification	D.	All of the above

30	Which air pollution control equipment is used in sugar industry?			
	A.	Wet scrubber	B.	Bag house filter
	C.	ESP	D.	ASP

31	Scope of cleaner production in product are_____			
	A.	accident prevention	B.	risk management to prevent major pollution
	C.	restoring sites after cessation of activities	D.	All of the above

32	Cleaner Production measure Wood-Yard in pulp paper industry_____			
	A.	Reusing leachate water	B.	Co-production from bark: mulch, ground cover, charcoal
	C.	Burning bark from debarking and small chips from chipping for energy production.	D.	All of the above

33	If heat loss due to flue gas in textile industry _____ CP option applied			
	A.	Install air heater for recovery of waste heat	B.	Plug all the air leakages into boiler furnace
	C.	A&B	D.	All of the above

34	Which CP tool applied in sugar industries?			
	A.	GHK	B.	On site recycling
	C.	A&B	D.	None of the above

35	Sustainable Chemistry Concept is_____			
	A.	prevent waste, by design chemical syntheses to avoid waste to treat or clean up	B.	design safer chemicals and products to be fully effective, with no toxicity
	C.	design less hazardous chemical syntheses through use and generate no toxic substances to humans and the environment	D.	All of the above

36	Cleaner production measures pulp production in pulp and paper industry_____			
	A.	Repulping the reject from screening rather than putting them into landfill	B.	Using pulp centrifuging to remove any remaining impurities
	C.	A&B	D.	None of the above

37	Unburnt Ash is produced in textile industry _____CP option.			
	A.	Conversion of existing boiler to the FBC boiler	B.	Replacing existing boiler to FBC Boiler
	C.	A&B	D.	None of the above

38	Cleaner production measures for Effluent Liquid Discharges in thermal power plant is _____			
	A.	Recycling of wastewater in coal-fired plants for use as FGD makeup.	B.	Use of infiltration
	C.	Spraying of coal piles with anionic detergents to inhibit bacterial growth and minimize acidity of leachate	D.	All of the above

39	Cleaner production measures for waste water in sugar industries?			
	A.	Segregation of waste water	B.	Reduce organic load
	C.	A&B	D.	None of the above

40	Cleaner production measures Bleaching in pulp and paper industry_____			
	A.	Avoiding chlorine bleaching	B.	Continuing research on biotechnological bleaching and electrochemical bleaching
	C.	Oxygen and ozone with and without hydrogen peroxide can be utilized in the bleaching step	D.	All of the above

41	Unburnt Ash is produced in textile industry _____CP option.			
	A.	Optimize the coal sizing by proper crushing & sieving	B.	Modify the existing grate by reducing the gaps between the rods
	C.	Optimize the firing rate by use of stoker firing	D.	All of the above

42	Which are the environmental issues in textile industry?			
	A.	Wastewater Generation	B.	Energy Consumption
	C.	Odour	D.	All of the above

43	Which is the various prevention of waste generation in thermal power plant?			
	A.	Efficient use of energy resources	B.	On site recovery
	C.	A&B	D.	None of the above

44	Sustainable Chemistry Concept is_____

	A.	use catalysts rather than stoichiometric reagents, which are used in excess and work only once, to minimize waste	B.	use safer solvents and reaction conditions
	C.	A&B	D.	None of the above

45	Cleaner production measure paper production in pulp and paper industry _____			
	A.	Cleaning the roll in the paper machine to avoid broken paper line	B.	Adjustment of edge cutter to reduce side trimming loss
	C.	Use of soft water as a boiler feed water	D.	All of the above

46	Blow down loss in textile industry _____CP option suitable			
	A.	Install water treatment system (RO) plant	B.	Change the water used in the boiler from tanker water to Municipal - Supply Water
	C.	Install conductivity meter to check boiler drum water quality and therefore optimize the blow down rate	D.	All of the above

47	Radiation Loss in textile industry _____ CP option suitable			
	A.	Insulate all the bare and damaged portions	B.	Insulate the flanges
	C.	Installation of Steam Traps	D.	All of the above

48	Water and Energy Management achieved by _____			
	A.	Control and record keeping of water and energy consumption	B.	Use of perpetual low input processes.
	C.	Recovery of waste heat from waste gas and wastewater	D.	All of the above

49	Which are the general measures involved in textile industry _____			
	A.	Automatic dosage and dispensing systems for the dosage of chemicals	B.	When possible, manufacturing without chemical use
	C.	A&B	D.	None of the above

50	Cleaner production measure paper production in pulp and paper industry _____			
	A.	Recycling water evaporated from drying process by condensing	B.	Proving disk save-all for paper machine
	C.	Repulsing rejected paper in a closed loop manner	D.	All of the above

QUESTION NO	ANSWER
1	D
2	D
3	D
4	C
5	D
6	D
7	D
8	D
9	D
10	D
11	C
12	D
13	C
14	D
15	D
16	C
17	C
18	D
19	D
20	A
21	D
22	C
23	D
24	D
25	C
26	D
27	C
28	A
29	D
30	A
31	D
32	D
33	C
34	A
35	D
36	C
37	C
38	D
39	C
40	D
41	D
42	D
43	C
44	C
45	D
46	D
47	D
48	D
49	C
50	D