

QUALITY ASSURANCE IN DAIRY INDUSTRY

Short Question:

- 1) What is quality control?
- 2) What is quality assurance?
- 3) What is withdrawal period of antibiotics?
- 4) Sources of pesticide residue in milk.
- 5) What is meant by a reagent and standard solution?
- 6) What is critical control point?
- 7) What is the full form of DDT and BHC?
- 8) What is primary standard solution?
- 9) Define normality and molarity?
- 10) What do you mean by Agmark grading and Agmark standards?

Long Question:

1. What is milk adulteration? Name some adulterants in milk. Why adulteration is generally done in milk? Categorize different type of milk adulterants.
2. Why there should be a focus on Quality?
3. Pre- requisite programmes in HACCP. What are the 7 principle of HACCP?
4. Give the guidelines for setting up quality control laboratory. Briefly explain about mobile testing laboratory.
5. What is the difference amongst quality control, quality assurance and total quality management?
6. Write down the basic principle of TQM and the benefits of TQM.
7. What is Deming's philosophy? Briefly explain.
8. What is quality control? What is the purpose and limitation of quality control? Write down the responsibilities of a quality control department.
9. Why do we need quality and legal standards? What are the national and international food regulatory systems?
10. How the Agmark scheme operates in case of butter and ghee?
11. Explain in detail about the steps associated with risk assessment in Dairy industry?
12. What is Biosafety, classify biosafety levels and principles in detail?
13. Write short notes on any **Two**:- [2x2.5]
 - a) Neutralizer
 - b) Sources of food contamination
 - c) Physical and biological hazard
 - d) According to BIS, types of dairy laboratory
 - e) Quality Management System
 - f) Risk Profiling

Multiple Choice Questions:

S. NO	MCQ	Instructions	
1.		Full form of ISO is	
	a.	Indian Standard Organization	
	b.	Indian Organization for Standardization	
	c.	International Standard Organization	
	d.	International Organization for Standardization	Yes
2.		PDCA cycle full form is	
	a.	Plan, Do, Change, Act	
	b.	Plan, Do, Check, Act	Yes
	c.	Play, Do, Change Act	
	d.	Problem, Do, Change, Act	
3.		PDCA cycle is	
	a.	Deming's theory	Yes
	b.	Crosby's theory	
	c.	Joseph Juran's theory	
	d.	None	
4.		Quality Control is a	
	a.	Product oriented	Yes
	b.	Process oriented	
	c.	Place oriented	
	d.	Planning oriented	
5.		TQC is related with	
	a.	Only QC	
	b.	Only QA	
	c.	All the functional area	Yes
	d.	It's a standalone management process	
6.		In our country, legal standards are given under	
	a.	PFA Rules	Yes

	b.	BIS	
	c.	ISI	
	d.	None of this	
7.		The PFA Act was passed in ----- and PFA Rules were framed in -----	
	a.	1955, 1954	
	b.	1954, 1955	Yes
	c.	1854, 1855	
	d.	1785, 1784	
8.		Head quarter of AgMark is	
	a.	Faridabad	Yes
	b.	Pusa	
	c.	Delhi	
	d.	Mumbai	
9.		Percentage of formalin added in liquid milk as preservative	
	a.	0.4%	Yes
	b.	0.3%	
	c.	0.5%	
	d.	1%	
10.		FSSA Act was passed on	
	a.	23 rd August, 2006	Yes
	b.	23 rd August, 2006	
	c.	23 rd August, 2011	
	d.	None	
11.		According to FSSAI, punishment of unsafe food which does not result in injury is	
	a.	Imprisonment up to six month	Yes
	b.	Imprisonment up to twelve month	
	c.	Imprisonment up to two month	
	d.	No punishment	
12.		ISO 22000 is related to	
	a.	Food safety management system	Yes

	b.	Social Responsibility	
	c.	Testing and calibration laboratories	
	d.	Environmental management	
13.		HACCP has main ---- principles	
	a.	7	Yes
	b.	6	
	c.	8	
	d.	10	
14.		Third principle of HACCP is	
	a.	Identify critical control points	
	b.	Establish critical limits for each CCP	Yes
	c.	Establish corrective actions	
	d.	None	
15.		Location of quality control lab	
	a.	should not be at a remote (far-off) place from the dairy operations	
	b.	should preferably be away from boiler houses	
	c.	Both	Yes
	d.	None	
16.		Full form of NABL	
	a.	National accreditation board for testing and calibration laboratories	Yes
	b.	National accreditation board laboratories	
	c.	National academic board for testing and calibration laboratories	
	d.	National educational board for testing and calibration laboratories	
17.		To get accreditation of NABL total ----- stages are there	
	a.	2	
	b.	3	
	c.	4	
	d.	5	Yes

18.		Standard solution of Oxalic acid is a	
	a.	Primary standard	Yes
	b.	Secondary standard	
	c.	Tertiary standard	
	d.	Quaternary standard	
19.		Standard solution of H_2SO_4 is a	
	a.	Primary standard	
	b.	Secondary standard	Yes
	c.	Tertiary standard	
	d.	Quaternary standard	
20.		Generally HCl is having normality of	
	a.	12 N	Yes
	b.	14 N	
	c.	10 N	
	d.	32 N	
21.		For standardisation of HCl solution with standard sodium carbonate solution, which indicator is used	
	a.	Phenolphthalein	
	b.	Methyl orange	Yes
	c.	Methylene blue	
	d.	Mix indicator	
22.		Fehling's solution is generally used for estimation of	
	a.	Reducing sugar	Yes
	b.	Non – reducing sugar	
	c.	Fructose	
	d.	None	
23.		During standardization of Fehling's solution the end point colour is	
	a.	Brick Red	Yes
	b.	Yellow	
	c.	Blue	

	d.	White	
24.		Milk butyrometer is calibrated using	
	a.	Mercury	Yes
	b.	Distilled Water	
	c.	NaCl solution	
	d.	Na ₂ CO ₃ solution	
25.		Milk Pipette is calibrated using	
	a.	Mercury	
	b.	Distilled Water	Yes
	c.	NaCl solution	
	d.	Na ₂ CO ₃ solution	
26.		Glass burette is calibrated using	
	a.	Mercury	
	b.	Distilled Water	Yes
	c.	NaCl solution	
	d.	Na ₂ CO ₃ solution	
27.		Lactometer is calibrated using	
	a.	Mercury	
	b.	Distilled Water	
	c.	Na ₂ CO ₃ solution	Yes
	d.	None	
28.		Temperature of Quevenne lactometer is	
	a.	15.5°C	Yes
	b.	29°C	
	c.	20°C	
	d.	27°C	
29.		Graduation mark of milk butyrometer is	
	a.	1 – 10%	Yes
	b.	0 – 10%	
	c.	0.1 – 10%	
	d.	10 - 1%	

30.		Range of freezing point depression thermometer	
	a.	-0.5 to 0°C	Yes
	b.	-0.54 to - 0.55°C	
	c.	-0.5 to 1°C	
	d.	None	