

Enrollment No.....



Faculty of Science
End Sem (Even) Examination May-2022
FS3EL10 Quality Mangement & Accreditation in
Forensic Science

Programme: B.Sc. (FS)

Branch/Specialisation: Forensic
Science**Duration: 3 Hrs.****Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

- Q.1 i. Bureau of Indian Standards is involved in which of the following activities- 1
 (a) Hall Marking Scheme (b) Standards Formulation
 (c) Sale of Indian Standards (d) All of these
- ii.is the provision by an independent body of written assurance that the product, service or system in question meets specific requirements. 1
 (a) Validation (b) Certification
 (c) Accreditation (d) Standardization
- iii. International Organization for Standardization's headquarter is located at- 1
 (a) United States of America (b) Berkshire, Canada
 (c) Geneva, Switzerland (d) Rome, Italy
- iv. ASCLD stands for- 1
 (a) American Society for Crime Laboratory Directors
 (b) American Society of Crime Laboratory Directors
 (c) Asian Society of Crime Laboratory Directors
 (d) Directors of Australian Society of Crime Laboratory
- v. Which of the following is an example of quality assurance? 1
 (a) Documentation (b) Software testing
 (c) Verification (d) Validation
- vi. The documents that prescribe the requirements with which the product or service has to confirm is called- 1
 (a) Audit (b) Specification
 (c) Inspection (d) Certification

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- vii. A set of written instructions that describes the step-by-step process that must be taken to properly perform a routine activity is known as- **1**
 (a) SOP (b) Quality book
 (c) Data book (d) None of these
- viii. Management requirements are primarily related to the- **1**
 (a) Operation of the quality management system within the laboratory
 (b) Effectiveness of the quality management system within the laboratory
 (c) Both (a) and (b)
 (d) None of these
- ix. Which of the following lab instruments require calibration? **1**
 (a) Balances (b) Centrifuge
 (c) pH meters (d) All of these
- x. Which of the followings are the parameters of analytical method validation? **1**
 (a) Accuracy (b) Precision
 (c) Robustness (d) All of these
- Q.2 i. Define accreditation. **2**
 ii. Why a good quality management system is important for FSLs? **3**
 iii. Write down the benefits of accreditation. **5**
 OR iv. Write in brief about the certifying authorities. **5**
- Q.3 i. Write short note on NABL. **2**
 ii. Write down the role and functions of accreditation organization. **8**
 OR iii. Discuss in brief about ISO and BIS. **8**
- Q.4 i. Define quality in context of quality management system. **3**
 ii. Write in brief about quality control and quality assurance. **7**
 OR iii. What do you understand by a quality management system? **7**
- Q.5 i. What do you mean by SOP? Write its importance in laboratories. **3**
 ii. Write down the requirements of quality management system. **7**
 OR iii. Write down the significance of documentation in quality management system. **7**

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- Q.6 Attempt any two:
- i. What do you mean by calibration of instruments? **5**
- ii. Discuss about the method validation with some validation parameters. **5**
- iii. Write short notes on standards and reference material. **5**

Marking Scheme

FS3EL10 Quality Mangement & Accreditation in Forensic Science

Q.1	i.	Bureau of Indian Standards is involved in which of the following activities-	1
		(d) All of these	
	ii.is the provision by an independent body of written assurance that the product, service or system in question meets specific requirements.	1
		(b) Certification	
	iii.	International Organization for Standardization's headquarter is located at-	1
		(c) Geneva, Switzerland	
	iv.	ASCLD stands for-	1
		(b) American Society of Crime Laboratory Directors	
	v.	Which of the following is an example of quality assurance?	1
		(c) Verification	
	vi.	The documents that prescribe the requirements with which the product or service has to confirm is called-	1
		(b) Specification	
	vii.	A set of written instructions that describes the step-by-step process that must be taken to properly perform a routine activity is known as-	1
		(a) SOP	
	viii.	Management requirements are primarily related to the-	1
		(c)Both (a) and (b)	
	ix.	Which of the following lab instruments require calibration?	1
		(d) All of these	
	x.	Which of the followings are the parameters of analytical method validation?	1
		(d) All of these	
Q.2	i.	Accreditation	2 marks
	ii.	About quality management system	1 mark
		Need of quality management system	2 marks
	iii.	Write down the benefits of accreditation.	5
		Introduction of accreditation	2 mark
		Approx. 5-6 benefit of accreditation	3 marks
OR	iv.	Brief Information about the 3-5 national and international laboratory with their main functions	5

Q.3	i.	NABL	1 mark	2
		Main function of NABL	1 mark	
	ii.	Role and functions of accreditation organization		8
		As per explanation		
OR	iii.	Discuss in brief about ISO and BIS.		8
		Introduction of ISO and its function	4 marks	
		Introduction of BIS and its function	4 marks	
Q.4	i.	Quality in context of quality management system.		3
		As per explanation		
	ii.	Introduction of quality control & its significance		7
			3 marks	
		Introduction of quality assurance & its need	4 marks	
OR	iii.	Basic of quality management system	3 marks	7
		Significance of quality management system	4 marks	
Q.5	i.	SOP	1 mark	3
		Significance of SOP in laboratories	2 marks	
	ii.	Introduction of quality management system	2 marks	7
		Requirement of Basic of quality management system		
			5 marks	
OR	iii.	Significance of documentation in quality management system		7
		As per explanation		
Q.6		Attempt any two:		
	i.	Calibration	1 mark	5
		Calibration Instrumentation	1 mark	
		Types of instrumentation needed	3 marks	
	ii.	Method validation	2 marks	5
		Parameters of method validation	3 marks	
	iii.	Test material	2 marks	5
		Reference material with suitable example	3 marks	
