



EXAMINATION CONTENT OUTLINES

CERTIFIED LABORATORY ANALYST (CLA)

| KSAs Code | Test Content Area(s) | Number of Questions (100) |
|------------------|--|----------------------------------|
| 1. | Basic physical, chemical and microbiological properties of samples analyzed in an analytical laboratory. | 7 |
| 2. | 1) Methods and techniques used in qualitative and quantitative laboratory analysis of samples; 2) Perform qualitative and quantitative laboratory analyses; 3) Perform physico-chemical and biological analyses on laboratory samples. | 40 |
| 3. | 1) Sampling methods, sample preparation and preservation techniques; 2) Perform proper sampling, sample preparations and preservations. | 8 |
| 4. | The operation and maintenance of basic laboratory equipment including conducting routine calibration of externally-calibrated laboratory equipment to ensure their continuous accuracy and traceability. | 10 |
| 5. | 1) Laboratory hazards, safety precautions and procedures; chemical hygiene and laboratory protective equipment; 2) Adhere to established safe working practices, including oral and written instructions. | 5 |
| 6. | 1) Laboratory chemicals and media, methods for preparation of standardized reagents and media; 2) Read, comprehend and comply with approved procedures in preparing standard reagents and media. | 5 |
| 7. | 1) Methods of cleaning and storing laboratory glassware; 2) Clean and prepare laboratory equipment, glassware and ensure observance of good laboratory practices (GLP). | 5 |
| 8. | 1) Basic laboratory calculations with regard to results of laboratory analysis; 2) Perform routine and basic laboratory calculations and statistical analysis. | 10 |
| 9. | 1) Communicate clearly and concisely in oral and written English language; 2) Maintain accurate, reliable and necessary/required information with regard to all laboratory analysis and records. | 5 |
| 10. | Establish and maintain good interpersonal and effective working relationships within a team and with clients. | 5 |