



EXAMINATION CONTENT OUTLINES

CERTIFIED ENVIRONMENTAL ANALYST (CEA)

KSAs Code	Test Content Area(s)	Number of Questions (100)
1.	Physical, chemical, microbiological properties, parameters and basic processes regarding environmental samples.	5
2.	Methods and principles of qualitative, quantitative and microbiological analyses of environmental samples.	5
3.	1) Basic principles and uses of basic and high precision laboratory equipment for analysis of environmental samples, including the routine calibration and maintenance of these equipment; including conducting routine calibration of externally-calibrated laboratory equipment to ensure their continuous accuracy and traceability. 2) Recommend or implement corrective action for analytical/instrumentation procedures (i.e. troubleshoot as appropriate and necessary).	20
4.	1) Carry out analysis of environmental samples with little supervision; 2) Perform physical, chemical and microbiological analyses of environmental samples	40
5.	Relevant and applicable up-to-date International and national standards and regulations (Appendix 1) regarding environmental samples.	5
6.	Proper chemical/toxicological management within a laboratory including occupational hazards, standard safety practices and good laboratory practices.	5
7.	Evaluate, interpret, and apply the results of laboratory testing, including advanced laboratory calculations, use of statistical tools/computer packages.	15
8.	1) Establish and maintain good interpersonal and effective working relationships with superiors and supervision of subordinates; 2) Supervise, train and evaluate the activities/performance of subordinates.	5



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Appendix 1: NATIONAL ENVIRONMENTAL STANDARDS AND REGULATIONS FOR CEA

- 1) National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007.
- 2) National Environmental (Sanitation and Wastes Control) Regulations, 2009. S. I. No. 28.
- 3) National Environmental (Permitting and Licensing System) Regulations, 2009. S. I. No. 29.
- 4) National Environmental (Ozone Layer Protection) Regulations, 2009. S. I. No. 32.
- 5) National Environmental (Food, Beverages and Tobacco Sector) Regulations, 2009. S. I. No. 33.
- 6) National Environmental (Noise Standards and Control) Regulations, 2009. S. I. No. 35.
- 7) National Environmental (Chemicals, Pharmaceuticals, Soap and Detergent Manufacturing Industries) Regulations, 2009. S. I. No. 36.
- 8) National Environmental (Soil Erosion and Flood Control) Regulations, 2010. S. I. No. 12.
- 9) National Environmental (Control of Bush/Forest Fire and Open Burning) Regulations, 2010. S. I. No. 15.
- 10) National Environmental (Construction Sector) Regulations, 2010. S. I. No. 19.
- 11) National Environmental (Control of Vehicular Emissions from Petrol and Diesel Engines) Regulations, 2010. S. I. No. 20.
- 12) National Environmental (Surface and Groundwater Quality Control) Regulations, 2010. S. I. No. 22.