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Index of Competencies

As per the latest NMC Guidelines | Competency Based Medical Education (CBME) Curriculum under Graduate Medical Education Regulation

Code	Competency	Chapter	Page number
BC 14.1	Describe commonly used laboratory apparatus, equipments, good/safe laboratory practice, biomedical hazards, and waste management	1	1–13
BC 14.2	Describe estimation of pH by pH meter or arterial blood gas (ABG) analyser and interpretation of results with proper case scenarios	2, 29	23–25, 233–234
BC 14.3	Describe the physical properties, chemical constituents of normal urine and abnormal constituents of urine and perform urine analysis to determine normal and abnormal constituents (including dipsticks method demonstration)	12	117–132
BC 14.4	Identify abnormal constituents in urine, interpret the findings and correlate these with pathological states and prepare a urine report	12	125–132
BC 14.5	Describe screening of urine for inborn errors and describe the use of paper chromatography	29	239–241
BC 14.6	Describe the principles of colorimetry and spectrophotometry	16	141–152
BC 14.7	Perform estimation of glucose by manual/ semi-automated analyzer method and demonstrate glucometer usage, and interpretation of results with clinical scenarios	17	153–163
BC 14.8	Perform estimation of urea and calculate BUN, and interpretation of results in clinical scenarios	18	166–172
BC 14.9	Perform the estimation of serum creatinine and calculate creatinine clearance	19	174–177
BC 14.10	Perform estimation of uric acid in serum and interpretation of results with clinical scenarios	20	178–180

Code	Competency	Chapter	Page number
BC 14.11	Perform estimation of serum proteins, albumin and A:G ratio	21	181–185
BC 14.12	Perform the estimation of serum total cholesterol	22	186–190
BC 14.13	Perform the estimation of serum bilirubin by manual/semi-automated analyzer method	23	195–199
BC 14.14	Describe estimation of calcium and phosphorus and interpretation of results	24	200–206
BC 14.15	Describe the estimation triglycerides, HDL and calculation of LDL and interpretation of results with clinical scenarios	22	190–194
BC 14.16	Describe the estimation of SGOT (AST)/SGPT (ALT)/alkaline phosphatase and interpretation of results with clinical scenarios	25	207–213
BC 14.17	Describe briefly various body fluids and discuss the composition of CSF	28	220–225
BC 14.18	Observe use of commonly used equipments/techniques in biochemistry laboratory including pH meter, paper chromatography of amino acid, protein electrophoresis, TLC, PAGE, electrolyte analysis by ISE, ABG analyzer, ELISA, immunodiffusion, autoanalyser, DNA isolation from blood/tissue	1, 29	1–13, 230–249
BC 14.20	Describe and identify pre-analytical (especially order of draw, tourniquet technique), analytical, post-analytical errors	30	252–253
BC 14.21	Describe quality control and identify basic LJ charts in clinical biochemistry lab.	30	250–252
BC 14.22	Describe performance of OGTT, glucose challenge test and HbA1c and interpretation of results with clinical scenarios.	17	161–165
BC 14.23	Calculate energy content of different food items, identify food items with high and low glycemic index and explain the importance of these in the diet.	7	92–94