Lesson Plan Discipline:MLT

Semester: 3rd

Subject:CLINICAL BIOCHEMISTRY -III

Lesson Plan Duration: 15 WEEKS (from October, 2022 to January, 2023) Work Load (Lecture/Practical) per week (in hours): 3+4

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| **week** | **Theory** | | **Practical** | |
| **Lecture day** | **Topics (including assignment/test)** | **Practical day** | **Topics** |
| 1 | 1 | Serum Bilirubin-Formation and  excretion of bilirubin | 1 | Serum bilirubin estimation |
| 2 | Formation of bile pigments |
| 3 | Conjugated and unconjugated  bilirubin |
| 2 | 4 | Principle and procedure of direct  bilirubin estimation | 2 | Phosphorus estimation |
| 5 | Principle and procedure of indirect  bilirubin estimation |
| 6 | Reference values & Clinical  importance |
| 3 | 7 | Assignment -1 | 3 | Calcium estimation |
| 8 | SGOT and SGPT (AST and ALT)  introduction |
| 9 | Principle and procedure of estimation  SGOT |
| 4 | 10 | Principle and procedure of estimation  SGPT | 4 | Renal clearance tests |
| 11 | Reference values & Clinical  importance |
| 12 | Assignment-2 |
| 5 | 13 | ALP and ACP introduction | 5 | SGOT estimation |
| 14 | Principle and procedure of estimation  ALP |
| 15 | Principle and procedure of estimation  ACP |

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| 6 | 16 | Reference values & Clinical  importance | 6 | SGPT estimation |
| 17 | Assignment -3 |
| 18 | Test 1,2,3 unit |
| 7 | 19 | Serum Amylase introduction | 7 | ALP estimation |
| 20 | Principle and procedure of estimation |
| 21 | Reference values & Clinical  importance |
| 8 | 22 | Assignment - 4 | 8 | ACP estimation |
| 23 | Serum calcium and phosphorus  introduction |
| 24 | Principle and procedure of estimation  for Serum calcium |
| 9 | 25 | Principle and procedure of estimation  forSerumphosphorus | 9 | Total cholesterol estimation |
| 26 | Reference values & Clinical importance |
| 27 | Assignment - 5 |
| 10 | 28 | Lipid profile introduction, formation  of cholesterol | 10 | Triglyceride estimation |
| 29 | HD and LD cholesterol |
| 30 | Principle and procedure for cholesterol estimation |
| 11 | 31 | Ref. value and clinical importance | 11 | Estimation of HDL and calculation of VLDL and LDL |
|  | 32 | Triglycerides, principle and procedure  for estimation |
| 33 | Importance of various ratios of HDL,  LDL and VLDL |
| 12 | 34 | Test 4,5,6 | 12 | Urinary protein estimation |
| 35 | Urinary proteins and creatinine  introduction |
| 36 | 24hr. urinary proteins estimation |
| 13 | 37 | 24hr. urinary creatinine estimation | 13 | Urinary creatinine estimation |
| 38 | Ref. values and clinical significance |
| 39 | Assignment - 6 |
| 14 | 40 | Renal function test introduction | 14 | Estimation of serum amylase |
| 41 | Urea clearance test |
| 42 | Creatine clearance test |
| 15 | 43 | Clinical significance | 15 | LDL estimation |

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|  | 44 | Test 7,8 |  |  |
| 45 | Viva voice |