Lesson plan

Name of the Faculty : Rajwanti Yadav Discipline : DMLT

Semester : 4th

Subject : Microbiology-IV

Lession Plan Duration : 15 weeks (from 6-3-2023 to 23-6-2023)

Work load (Lecture / practical ) per week ( n hours) = Lecture= 03, Practical=06

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| **Week** | **Theory** |  | **Practical** |  |
| **Lecture day** | **Topics (inculding assignment/test)** | **Practical Day** | **Topic** |
| 1 | 1 | Introduction to microbiology and mycology | 1 | prepration CMA |
| 2 | Different types of fungi |
| 3 | Characteristics and classification of fungi |
| 2 | 4 | Medically imp. Fungi | 2 | demonstration of BHI and SDA |
| 5 | Introduction to culture media |
| 6 | SDA with or without antibiotics |
| 3 | 7 | CMA and BHI | 3 | perform wet mount technique KOH |
| 8 | collection 2 prepration of fungal infection |
| 9 | KOH , LCB and india ink prepration |
| 4 | 10 | introduction to fungal cultivation | 4 | perform wet mount technique LCB |
| 11 | medically imp. Fungi |
| 12 | introduction to laboratary contaminants |
| 5 | 13 | introduction to immunology | 5 | DEmonstration of Common lab fungal contaminants |
| 14 | test 1st and 2nd unit |
| 15 | antigen defination |
| 6 | 16 | types of antigens | 6 | perform sample collection of infected skin, hair, nails |
| 17 | properties of antigens |
| 18 | test 3rd unit |
| 7 | 19 | assignment of 3rd unit | 7 | processing of infected skin, hair and nail |
| 20 | viva 1,2,3 unit |
| 21 | Defination of antibody |
| 8 | 22 | Type of antibody | 8 | Perform widal test by slide method |
| 23 | different Properties of antibody |
| 24 | Revision of 4th Unit |
| 9 | 25 | Introduction of Antigen Antibody reaction | 9 | perform widal test by tube method |
| 26 | Principle and application of agglutination |
| 27 | Precipitation |
| 10 | 28 | Flocculation | 10 | Perform ASO by kit |
| 29 | Introduction to Serological test widal |
| 30 | Widal tube and Slide method of estimation |
| 11 | 31 | ASO test Introduction and Procedure of estimation | 11 | Perform CRP |
| 32 | Revision 5th unit |
| 33 | Test 5th unit |

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| 12 | 34 | CRP Introduction & Procedure | 12 | Perform RF test |
| 35 | VDRL Introduction Procedure |
| 36 | RF estimation Procedure |
| 13 | 37 | Assignment on CRP, VDRL, RF | 13 | VDRL test |
| 38 | Test , CRP, VDRL, RF |
| 39 | Introduction of ELISA Direct and Indirect |
| 14 | 40 | Principle and estimation of ELISA | 14 | HIV screening |
| 41 | Application ELISA |
| 42 | Revision ELISA |
| 15 | 43 | Viva ELISA | 15 | HBs Ag screening |
| 44 | Assignment 9th unit |
| 45 | Test 9th unit |