

SIRDA Polytechnic, Naulakha
Lesson Plan (even Semester)

Name of the Faculty : MR. NISHANT
 Discipline : DMLT
 Semester : 4th
 Subject : HISTOPATHOLGY & CYTOLOGY -II
 Lesson Plan Duration : 16 Week
 Work Load (Lectures/Practical) per week (in hours) : Lectures -04

| UNITS | Lecture Day | Proposed Date | Acutal Date | Topic | Remarks |
|---------|-------------|---------------|-------------|--|---------|
| unit 1 | 1 | 27.01.2026 | | Light Microscope | |
| | 2 | 28.01.2026 | | Principles of light microscope | |
| | 3 | 30.01.2026 | | Various parts of microscope | |
| | 4 | 31.01.2026 | | Uses of microscope | |
| | 5 | 03.02.2026 | | Cleaning and maintenance of microscope | |
| | 6 | 04.02.2026 | | Various attachments of compound microscope (principle only) Polarizing microscopy | |
| | 7 | 06.02.2026 | | Dark field microscopy | |
| | 8 | 07.02.2026 | | Phase contrast microscopy | |
| | 9 | 10.02.2026 | | Fluorescent microscopy | |
| | 10 | 11.02.2026 | | Electron microscopy | |
| unit 2 | 11 | 13.02.2026 | | Specialstains | |
| | 12 | 17.02.2026 | | Principle, significance and interpretation of different types of stains | |
| | 13 | 18.02.2026 | | PAS (Periodic Acid Schiff's Reagent) | |
| | 14 | 20.02.2026 | | Same | |
| | 15 | 21.02.2026 | | Silver impregnation stain – Reticulin fibre | |
| | 16 | 24.02.2026 | | Same | |
| | 17 | 25.02.2026 | | Ziehl Neelson's – for AFBand Leprae | |
| | 18 | 27.02.2026 | | Same | |
| | 19 | 03.03.2026 | | Masson's trichrome stain | |
| | 20 | 06.03.2026 | | Same | |
| | 21 | 07.03.2026 | | Oil Red O – fat | |
| | 22 | 10.03.2026 | | Class test 1 | |
| unit 3 | 23 | 11.03.2026 | | Gram's stain – Gram +ve and Gram –ve | |
| | 24 | 13.03.2026 | | Decalcification | |
| | 25 | 17.03.2026 | | process of decalcification | |
| | 26 | 18.03.2026 | | Various types of decalcifying methods | |
| | 27 | 20.03.2026 | | Same | |
| | 28 | 21.03.2026 | | Their mechanism, advantage, disadvantage and applications | |
| | 29 | 24.03.2026 | | Assessment of decalcification | |
| unit 4 | 30 | 25.03.2026 | | Handling of fresh histological tissues (Frozen Section) | |
| | 31 | 27.03.2026 | | Reception and processing of frozen tissue | |
| | 32 | 31.03.2026 | | Freezing microtome and cryostat | |
| | 33 | 04.04.2026 | | Advantages and dis-advantages of freezing microtome and cryostat | |
| | 34 | 07.04.2026 | | Working, care, maintenance of freezing microtome and cryostat Frozen section cutting | |
| | 35 | 08.04.2026 | | Staining - Rapid H&E - Fat stain | |
| | 36 | 10.04.2026 | | Mounting of frozen section | |
| | 37 | 14.04.2026 | | Class test 2 | |
| unit 5 | 38 | 17.04.2026 | | Museum Techniques | |
| | 39 | 18.04.2026 | | Introduction to museum with emphasis on importance of museum | |
| | 40 | 21.04.2026 | | Reception, fixation and processing of various museum specimens | |
| | 41 | 22.04.2026 | | Cataloging of museum specimen | |
| unit 6 | 42 | 24.04.2026 | | instruments, handling of dead bodies). | |
| | 43 | 28.04.2026 | | Use of autopsy | |
| unit7 | 44 | 29.04.2026 | | Malignant Cells Characteristics | |
| | 45 | 02.05.2026 | | Differences from normal cell | |
| unit 8 | 46 | 05.05.2026 | | Hormonal Assessment Importance of HCG | |
| | 47 | 06.05.2026 | | Use of Hormonal Assessment (Pregnancy Test) | |
| unit 9 | 48 | 08.05.2026 | | Aspiration Cytology Principle of FNAC (Fine Needle Aspiration Cytology) | |
| | 49 | 12.05.2026 | | Indications of FNAC Uses of FNAC | |
| | 50 | 13.05.2026 | | Staining Techniques - PAP Stain - MGG (May-Grunwald – Giemsa) - H&E (Haematoxylin & Eosin Stain) | |
| unit 10 | 51 | 15.05.2026 | | Cytologicalspecialstains Principle, Technique& Interpretation of : | |
| | 52 | 16.05.2026 | | PAS (Periodic Acid Schiffs reagent Stain) | |
| | 53 | 19.05.2026 | | Ziehl Neelson's(ZN) Stain (AFB) | |
| unit 11 | 54 | 20.05.2026 | | Advancements in Cytology Automation in Cytology | |
| | 55 | 22.05.2026 | | Use of Cytospin | |
| | 56 | 26.05.2026 | | Revision | |

Signature of Teacher
with date:

HOD
Signature

Principal
Signature

Principal,
SIRDA Polytechnic,
Naulakha, P. O. Kanak,
Sunder Nagar, Mandi