

Department of Geology

Govt. College, Narnaul
Lesson Plan for May-22 1st Week

Assistant Professor- Sh. Jaipal Singh

M.Sc. (Final) Paper Code: Geol-402 (Geohydrology)

Monday (2.5.2022)	Introduction and Scopes of Hydrology
Tuesday (3.5.2022)	EID Holiday
Wednesday (4.5.2022)	Types of water: meteoric, juvenile, magmatic and sea waters
Thursday (5.5.2022)	Continue....
Friday (6.5.2022)	hydrologic cycle
Saturday (7.5.2022)	Revision of Covered Topics

M.Sc. (Final) Paper Code: Geol-406 (Remote Sensing and GIS)

Monday (2.5.2022)	Introduction to Remote Sensing and GIS
Tuesday (3.5.2022)	EID Holiday
Wednesday (4.5.2022)	Historical development of remote sensing and GIS technology
Thursday (5.5.2022)	Applications and Advantages of Remote Sensing Technology
Friday (6.5.2022)	Applications and Advantages of Remote Sensing Technology continue...
Saturday (7.5.2022)	Revision & Discussion of doubts

M.Sc. (Final) Paper Code: 404 Geophysical Techniques & Instrumentation

Thursday (5.5.2022)	Introduction to Geophysics
Friday (6.5.2022)	Scopes of Geophysics for Geologists
Saturday (7.5.2022)	Revision and Discussion of Doubts

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Department of Geology
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Lesson Plan for Session May 2nd week

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M.Sc. (Final) Paper Code: Geol-402 (Geohydrology)

Monday (9.5.2022)	Vertical Distribution of water
Tuesday (10.5.2022)	Zone of aeration
Wednesday (11.5.2022)	Zone of saturation
Thursday (12.5.2022)	Classification of rock formations according to water bearing capacity
Friday (13.5.2022)	Revision & discussion on doubt
Saturday (14.5.2022)	Class Test

M.Sc. (Final) Paper Code: Geol-406 (Remote Sensing and GIS)

Monday (9.5.2022)	Aquifer and their types. Electromagnetic radiation & Em Spectrum
Tuesday (10.5.2022)	Interaction of radiation with atmosphere
Wednesday (11.5.2022)	Interaction of radiation with objects and Atmospheric windows
Thursday (12.5.2022)	Continue previous topic
Friday (13.5.2022)	Revision and discussion on doubts of students
Saturday (14.5.2022)	class test

M.Sc. (Final) Paper Code: 404 Geophysical Techniques & Instrumentation

Thursday (12.5.2022)	Gravity Survey: Basic concepts and instrumentation
Friday (13.5.2022)	Continue above topic
Saturday (14.5.2022)	Revision and Discussion on doubts of students

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Lesson Plan for Session May 3rd week

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M.Sc. (Final) Paper Code: Geol-402 (Geohydrology)

Monday (16.5.2022)	Aquifer and their types
Tuesday (17.5.2022)	Water table & Piezometric Surface
Wednesday (18.5.2022)	Water bearing properties of rocks and aquifers
Thursday (19.5.2022)	Porosity, Permeability, Specific Yield, Specific retention
Friday (20.5.2022)	Revision and Discussion on doubts by students
Saturday (21.5.2022)	Class test of covered topics.

M.Sc. (Final) Paper Code: Geol-406 (Remote Sensing and GIS)

Monday (16.5.2022)	Types and of Platform & Sensors
Tuesday (17.5.2022)	Aerial photographs - Types and their characteristics.
Wednesday (18.5.2022)	Photogrammetry - scale, height and relief displacement
Thursday (19.5.2022)	Fundamentals of stereoscopic studies
Friday (20.5.2022)	Revision and Discussion on doubts of students
Saturday (21.5.2022)	class test on covered topics.

M.Sc. (Final) Paper Code: 404 Geophysical Techniques & Instrumentation

Thursday (19.5.2022)	magnetic surveying methods - Concepts and Instrumentations
Friday (20.5.2022)	above topic continue.
Saturday (21.5.2022)	Revision and Discussion on doubts by students

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Department of Geology
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Lesson Plan for Session May 4th week

Assistant Professor- Sh. Jaipal Singh

M.Sc. (Final) Paper Code: Geol-402 (Geohydrology)

Monday (23.5.2022)	Hydraulic conductivity, transmissivity, and intrinsic permeability, storage coefficient & storativity Groundwater flow concepts Darcy law and its validity Revision and doubts clearing session class test on covered topics.
Tuesday (24.5.2022)	
Wednesday (25.5.2022)	
Thursday (26.5.2022)	
Friday (27.5.2022)	
Saturday (28.5.2022)	

M.Sc. (Final) Paper Code: Geol-406 (Remote Sensing and GIS)

Monday (23.5.2022)	Introduction to satellite RS Indian Space Programme Land observation Satellites & Sensors Basics of Microwave RS and its applications Revision & Discussion on doubts of students class test on covered topics.
Tuesday (24.5.2022)	
Wednesday (25.5.2022)	
Thursday (26.5.2022)	
Friday (27.5.2022)	
Saturday (28.5.2022)	

M.Sc. (Final) Paper Code: 404 Geophysical Techniques & Instrumentation

Thursday (26.5.2022)	Magnetotelluric Surveying : Theory & prospecting techniques. Above topic continue Revision and Discussion on doubts
Friday (27.5.2022)	
Saturday (28.5.2022)	

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Department of Geology
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Lesson Plan for Session June 1st week

Assistant Professor- Sh. Jaipal Singh

M.Sc. (Final) Paper Code: Geol-402 (Geohydrology)

Monday (30.5.2022)	Determination of hydraulic conductivity (field methods)
Tuesday (31.5.2022)	Continue and lab methods
Wednesday (1.6.2022)	Continue
Thursday (2.6.2022)	Maharaja Parshad Jayanti
Friday (3.6.2022)	Revision and Discussion on doubts
Saturday (04.6.2022)	Class test on covered topics.

M.Sc. (Final) Paper Code: Geol-406 (Remote Sensing and GIS)

Monday (30.5.2022)	Image Quality & controlling factors
Tuesday (31.5.2022)	Fundamentals of digital image processing
Wednesday (1.6.2022)	Continue...
Thursday (2.6.2022)	Maharaja Parshad Jayanti
Friday (3.6.2022)	Classification of image
Saturday (04.6.2022)	Principles of image interpretation and Analysis

M.Sc. (Final) Paper Code: 404 Geophysical Techniques & Instrumentation

Thursday (2.6.2022)	Seismic surveying : Basic Principle and Applications.
Friday (3.6.2022)	Above topic continue
Saturday (04.6.2022)	Revision and Discussion

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Lesson Plan for Session June 3rd week

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M.Sc. (Final) Paper Code: Geol-402 (Geohydrology)

Monday (13.6.2022)	Surface methods for GW investigations
Tuesday 14.6.2022)	Sant Kabir Jyoti
Wednesday (15.6.2022)	Geological methods, RS methods
Thursday (16.6.2022)	Electrical Resistivity and seismic methods
Friday (17.6.2022)	Gravity & magnetic methods
Saturday (18.6.2022)	Revision and Discussion on doubts by students

M.Sc. (Final) Paper Code: Geol-406 (Remote Sensing and GIS)

Monday (13.6.2022)	Image characteristics of geological structure, various rock types
Tuesday 14.6.2022)	Sant Kabir Jyoti
Wednesday (15.6.2022)	Interpretation of landform features & lineaments
Thursday (16.6.2022)	Photo interpretation to Geology
Friday (17.6.2022)	Revision and Discussion on doubts of students
Saturday (18.6.2022)	class Test on covered topics.

M.Sc. (Final) Paper Code: 404 Geophysical Techniques & Instrumentation

Thursday (16.6.2022)	Electromagnetic method of surveying - Basic concepts.
Friday (17.6.2022)	Rock magnetism, Applications.
Saturday (18.6.2022)	Revision and Discussion on doubts by students.

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 Lesson Plan for Session June 4th week

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M.Sc. (Final) Paper Code: Geol-402 (Geohydrology)

Monday (20.6.2022)	Subsurface Investigation for GW Investigation - test drilling
Tuesday (21.6.2022)	Resistivity logging, SP logging, Radiation logging
Wednesday (22.6.2022)	Groundwater quality - physical & chemical properties.
Thursday (23.6.2022)	Quality criteria for different uses.
Friday (24.6.2022)	Revision and discussion on doubts of students
Saturday (25.6.2022)	Seasonal Test (based on selected important topics)

M.Sc. (Final) Paper Code: Geol-406 (Remote Sensing and GIS)

Monday (20.6.2022)	Overview of Applications of RS & GIS Technology
Tuesday (21.6.2022)	RS Applications in Natural Hazards and Disaster Management
Wednesday (22.6.2022)	Applications in mineral exploration & Environment
Thursday (23.6.2022)	GIS applications in Earth Science.
Friday (24.6.2022)	Revision and discussion on doubts of students
Saturday (25.6.2022)	Seasonal Test (based on selected important topics)

M.Sc. (Final) Paper Code: 404 Geophysical Techniques & Instrumentation

Thursday (23.6.2022)	Ground Penetrating Radar (GPR): Concepts & Applications.
Friday (24.6.2022)	Revision of whole syllabus & discussion on doubts
Saturday (25.6.2022)	Seasonal Test (based on selected important topics)

Jaipal

SYLLABUS PLAN

* Semester 2nd

FOR
M.Sc. (Previous)

Paper :- 205

Teacher Name - Dr. Sonu

- March → Nature and scope of climatology, climate elements - atmospheric temperature, pressure moisture. Forms of Condensation and Precipitation, general atmospheric Circulation and Processes; Earth's radiation balance structure, Composition and mechanism of formation of oceanic crust.
- April → Cloud formation and precipitation, water balance. Air masses, Jet streams, tropical cyclones. Clouds Classification, Condensation nuclei growth of cloud drops and ice-crystals, Precipitation mechanisms; Bergeron Findeisen Process. oceanic sediments: Factors controlling the deposition and distribution of oceanic sediments
- May → Coalescence process precipitation of warm and mixed clouds, artificial precipitation hail suppression Fog and cloud-dissipation. Global warming, Impact of global warming, Indian Summer monsoon and ENSO and Indian Ocean dipole. Opening and closing of ocean gateways and their effect on circulation and climate during the Cenozoic.
- June → Quaternary climates - glacial - interglacial cycles, eustatic changes, proxy indicators of paleoenvironmental / Paleoclimatic changes - Land, Ocean and cryosphere (Ice core studies) Ocean Circulation, Coriolis Effect and Ekman spiral, Convergence divergence and upwelling.

Sonu

* LESSION PLAN * Semester - 2nd
FOR
M.Sc. (Previous)

Paper - 201

Teacher Name - Dr. Suvu

March →

Basic Concepts and Significance of geomorphology. Cycle of erosion, Landforms produce by geomorphic agents: Fluvial, Coastal, Glacial and Aeolian Landforms.

April →

Desert type, Neotectonics geomorphological indicator, active fault, drainage changes, recurrent seismicity. An elementary idea about morphogenesis and morphography, Morphometric analysis, Morphochronology, Geomorphology of India - Peninsular, extra-peninsular and Indo-Gangetic Plains.

May →

Applications of geomorphology in mineral prospecting, Civil Engineering Military Purpose, Hydrogeology and Environmental studies. Introduction of geotectonics, Continental drift, sea floor spreading and Convection current hypotheses, Paleomagnetism, Polar wandering, and several of earth's Magnetic field.

June →

Geomagnetic time scale Mantle plume models of Plate movements. Principal tectonic feature of the Earth - Precambrian Shield Phanerozoic region, Feature of plate tectonics boundaries, nature and type of plate margins. Anatomy of orogenic belts, Orogeny and Epeirogeny and dynamic evolution of Himalaya.

LESSON PLAN

Name of Teacher - Dr. SAPNA TADAY

Class - B.Sc Ist (2nd Sem)

Paper - 201 & 202

MARCH - Soil formation, Soil Profile & Soil types. Mineral Definition & classification, Physical properties & chemical comp.

APRIL - Geological work of a River, Erosion, Transportation and deposition. Erosional & depositional features produced by River. Classification of silicate str. with suitable e.g. - Polymorphism & Pseudomorphism.

MAY - Wind Erosion & its types, transportation & deposition by wind. Study of important erosional & depositional features of wind. Study of Physical Properties, Che. Comp., systematic classification and mode of occurrence of (i) Feldspar (ii) Amphibole (iii) Garnet. Lake, Definition, formation & geological work of lakes, importance of lakes & imp. e.g. of Indian lakes.

JUNE - Geological work of glaciers erosion, transportation & deposition. Features of glaciers. Silica group, Pyroxene group, Mica. Volcanoes, Types, Origin & Distribution. Mountains Types & Origin, Indian mountains. Study of mineralogy of & Chemical occurrence of Fe, Cu, Al, Mn group.

Sapna

Sapna

LESSON PLAN

SESSION-2021-22

Name of Teacher - Dr. FARNA LADAY

Class - BSc III 6th sem.

Paper - G02

MARCH Geological setting, mineralogical characteristics and Indian distribution of important ore deposits like Fe,

APRIL Mn, Gold (Au) & Al Geological setting, mineralogical characteristics and India dist. of imp. ore deposits like, Copper, Lead-Zn, Chromite, Uranium and beach sand deposits.

MAY - Geological setting of Non-metallic mineral deposits and non-metals related to the Refractory, fertilizer and cement industries. Test & Topic Discuss.

JUNE Geological setting and Indian Distribution of important coal and lignite deposits of India. Elementary ideas about oil field of India. Environmental implication of exploitation of mineral resources. Revision & Test

Farina

Farina

LESSON PLAN

Session - 2021-22

Name of Teacher - Dr. SAPNA YADAV

Class - ~~M~~Sc Ist (2nd Sem)

Paper - 202

APRIL

Introduction to Palaeontology and its branches, Fossils and Types of Fossils, Mode of Preservation and Essential Conditions of fossilization.
Topic Discussion & Text

MAY

Geological Time Scale and Prehistoric life.
Major events in the evolution of Life. Bathymetric Distribution of Life.

JUNE

Palaeont and Types, Functional Morphology evolutionary Trends and geological History of Brachiopods, Trilobites, Corals Gondwana Flora and Fauna.

Sapna

Sapna

LESSON PLAN

SESSION-2021-22

Name of Teacher - Dr. SAPNA TADAY
Class - M.Sc 2nd (4th sem)
Paper - 403

APRIL - Stratigraphy: Principles and Classification of Stratigraphy - Litho, Bio, chrono, Magneto Stratigraphy. Geological Time Scale. Group Discussion & Test.

MAY - Basic Ideas of Sequence. Stratigraphy cyclo-stratigraphy, Pedostratigraphy, Seismic Stratigraphy. Correlation: Physical & Paleontology correlation method.

JUNE Geological Evolution of Archean nuclei (Dharwar, Bastar, Singhbhum, Aravalli and Bundelkhand sts. & economic importance. Eastern Ghats mobile Belt. Group Discussion and Test.

Sapna

Sapna