

GOVERNMENT OF NAGALAND
Office of the Society for Climate Resilient Agriculture in Nagaland (SoCRAN)
ELEMENT, NAGALAND PROJECT- WORLD BANK
NAGALAND: KOHIMA

ELE-WB/ESTT-1/49/26/494 **Dated Kohima, the 14th July, 2026**

NOTIFICATION

In pursuant to Advertisement No. ELE-WB/NRM-16/1/2025/377 dated 19th June 2025, the following candidates are shortlisted to appear for the written examination for engagement of one (1) GIS Associate.

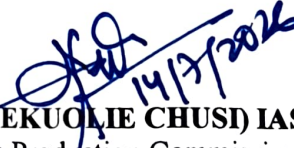
SPMU-21(GIS Associate)

1. Shri. Awiesie Kajiri
2. Dr. Paolenmang Haokip
3. Shri. Ruvito K P Chaya
4. Dr. Tintoli A. Kuho

Important Note:

1. The candidate must bring along with him/ her Admit Card from ELEMENT Project which will be sent through email.
2. The candidate must bring an Original Photo Identity Proof.
3. Detailed information of the examination schedule along with roll number will be provided in the Admit Card.
4. No TA/ DA and accommodation shall be provided to the candidates for attending the written
5. Candidate may note that failing to produce Admit Card and Photo identity Proof, he/she may not be permitted to sit for the written examination.

Enclosed: Syllabus


(Dr. ZASEKUOLIE CHUSI) IAS
Agriculture Production Commissioner
& MD, ELEMENT Nagaland Project

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SYLLABUS FOR THE RECRUITMENT EXAMINATION
SYLLABUS FOR THE POSITIONS OF GIS Associate

A. SUBJECT MATTER (75 Marks)

Ø All questions will be of Objective Type

Ø 15 questions of 1 mark each with lower difficulty level

Ø 20 questions of 3 marks each that require Higher Order Thinking (Application & Analysis)

B. GENERAL KNOWLEDGE (25 Marks Objective Type Questions)

Science and Technology, Current Affairs, Policy & Governance, Environment Studies, Nagaland History, Sports, General Science, Economy.

Total: 100 marks

Time Duration: 2 Hours

Position: GIS Associate (SPMU21)

1. GIS Fundamentals

- Principles and concepts of Geographic Information Systems (GIS), including spatial data models (vector and raster), coordinate reference systems, map projections, datums, spatial accuracy, data quality and applications of GIS in land resource management and environmental planning.

2. Remote Sensing and Geospatial Data

- Fundamentals of remote sensing, satellite imagery, aerial and UAV data, Digital Elevation Models (DEM), image interpretation, image enhancement and classification techniques, indices (e.g., NDVI), land use and land cover mapping and the application of remote sensing in natural resource assessment and monitoring.

3. Watershed and Springshed Management

- Concepts and principles of watershed and springshed management, watershed delineation using DEM, flow direction and flow accumulation analysis, stream network generation, drainage hierarchy, catchment and sub-catchment delineation, recharge zone identification, hydrogeomorphological assessment, spring inventory and mapping, and the application of GIS in watershed planning, spring rejuvenation and integrated landscape management.

4. Terrain Analysis and Hydrogeological Modelling

- Terrain analysis using DEM, including slope, aspect, contours, hillshade, elevation profiling, terrain derivatives, hydrological analysis, watershed characterization, runoff pathways, drainage pattern analysis and suitability of terrain for land and water resource planning.

5. Spatial Data Management and Spatial Analysis

- Collection, integration, management, quality assessment, and analysis of geospatial data obtained from satellite imagery, GPS, field surveys, and existing databases; spatial analysis techniques including buffering, overlay analysis, clipping, intersect, dissolve, spatial joins, proximity analysis, suitability modelling and decision-support applications.

6. Cartography and Geospatial Visualization

- Principles of cartographic design, thematic map preparation, map layouts, symbology, labelling, legends, scale representation, map composition, visualization techniques and preparation of professional-quality maps for planning, monitoring and reporting.

7. Field Survey and GPS Applications

- GPS and GNSS fundamentals, mobile GIS applications, field data collection methodologies, ground truthing, spatial data validation, accuracy assessment, village resource mapping and integration of field observations with GIS databases.

8. Emerging Geospatial Technologies

- Fundamentals of Artificial Intelligence (AI) and Machine Learning (ML) in GIS, GeoAI concepts, cloud-based GIS platforms, Decision Support Systems (DSS), UAV-based mapping, geospatial data analytics and emerging technologies supporting sustainable natural resource management.

9. Practical and Scenario-Based Applications

- Application-oriented questions involving interpretation of satellite imagery, topographic and thematic maps, watershed and springshed analysis, terrain interpretation, spatial problem-solving, decision-making using GIS outputs and case studies related to land resource management and environmental planning.

