



University of Kashmir

NAAC Accredited Grade "A++"

University Campus, Hazratbal, Srinagar 190006, Kashmir.

NOTICE

It is hereby notified for the information of all the eligible candidates who have applied for the posts of Cartographer, Surveying Assistant and Photographer advertised vide Advertisement Notice No. 03 of 2025, dated 02.04.2025 that the syllabus for the aforementioned posts is given in Annexure I, II and III respectively to this notice. However, scheme of examination and short-listing criteria will be notified separately.

By order,

**Sd/-
Deputy Registrar
Recruitment**

No. F/NT-Syllabus-03-2025/KU/25

Dated: 17.10.2025

ANNEXURE-I

SYLLABUS FOR THE POST OF CARTOGRAPHER

- **Cartography and GIS:** Fundamentals of Cartography, working with GIS softwares; data Input, projections, digitization of maps and creation of thematic maps; graded symbolization: choropleth and isopleth; data conversion; raster and vector data analysis; adding attribute data; generating graphs and charts from the tabular data; generating Digital Elevation Model (DEM) from point data. Specific applications of GIS: site suitability analysis, topographic analysis, drainage morphometry analysis; and map designing in ArcGIS.
- **Remote Sensing and Image Processing:** Use of satellites data products; elements of image interpretation, image enhancement: radiometric, spectral, and spatial image enhancements.
- Image classification, accuracy assessment and change detection using ERDAS Imagine or ArcGIS software.
- **Application of Global Positioning System (GPS) in mapping:** Handheld GPS Survey; collecting waypoints (Points, Lines, and Polygons),
- GPS traversing, entering attribute data, transferring data and map generation.
- **Application of Total Station in Land Surveying:** Setting tripod, instrument height, and coordinate systems; levelling, centering, orienting, focusing and collimation
- Horizontal angle, vertical angle, and distance measurements; area calculation; Remote Elevation Measurement (REM); Missing Line Measurement (MLM); back sighting and resection.

ANNEXURE-II
SYLLABUS FOR THE POST OF SURVEYING ASSISTANT

- Basics of Surveying: Surveying tools and techniques
- Plane Table, Dumpy Level, Theodolite and Total Station surveying.
- Setting and handling the instruments and their accessories.
- Field data collection.
- Plane Table Surveying: intersection, traversing, and resection.
- Dumpy Level Surveying: Levelling, focusing, reading, and elevation calculation.
- Theodolite Surveying: measurement of horizontal and vertical angles, traversing with theodolite, error adjustment and corrections.
- Total Station Surveying: Setting tripod, instrument height, and coordinate systems; levelling, centering, orienting, focusing and collimation.
- Horizontal angle, vertical angle, and distance measurements; area calculation; Remote Elevation Measurement (REM); Missing Line Measurement (MLM); back sighting and resection.
- Handheld GPS Survey; collecting waypoints (Points, Lines, and Polygons).
- GPS traversing, entering attribute data, transferring data and map generation.

ANNEXURE-III
SYLLABUS FOR THE POST OF PHOTOGRAPHER

Aerial photography

- Basics of Aerial photography
- Aerial photography platforms
- Flight planning and photo acquisition
- Aerial cameras and sensors
- Flight, height, path and direction
- Types of aerial photographs (vertical, oblique)
- Parallax and height measurement
- Ground control points (GCPs)
- Photo interpretation keys
- Determination of scale, height, and distance
- Stereoscopy and 3D viewing
- Stereoscope types and their applications
- Use of aerial photographs and stereo-pairs

Satellite Remote Sensing

- Platforms and sensors
- Active and passive instruments
- Data products, sources, downloading and use
- Remote sensing image interpretation keys
- Characteristics of satellite data (IRS, Landsat, and Sentinel)
- Image Resolutions: Spectral, Spatial, Temporal and Radiometric
- Quantitative Analysis
- Basic operation skills in Remote and GIS Softwares (e.g., ERDAS Imagine, ArcGIS, and QGIS)