## Syllabus and Schedule for Skill Test and Interview for regular posts at HarSAC

Venue: Haryana Space Applications Centre (HarSAC), HAU Campus, HISAR-125004 Schedule of Skill Test and Interview: 5<sup>th</sup> & 6<sup>th</sup> November, 2016. Total Marks:100 Skill Test: 10:00 AM to12:00 Noon on 5<sup>th</sup> November, 2016 Interview: On 5th November, 2016 from 2:00 PM onwards

Syllabus for practical exercises:

Remote Sensing & Digital Image Processing: Satellite image formats - Resolutions - Identification of features (using panchromatic, multi-spectral, hyper spectral data), Layer Stacking, Generating False Colour Composite (FCC), Extracting area of Interest (AOI). Image Pre-processing- Geometric and Radiometric corrections. Image Enhancement- Contrast Enhancement, Histogram Equalization, Density Slicing, Spatial Filtering and Edge Enhancement. Image Transformation- Band rationing, Principal Component Analysis. Image Classification- Supervised and Unsupervised classification - Accuracy assessment, Map composition.

GIS & GPS: Creation of Geodatabase, adding data into geodatabase, Managing Projection & Datum, Georeferencing, on screen digitization, Topology building and editing, Spatial and non-spatial data integration, Dissolving and Merging, Clipping, Intersection and Union, Converting XYZ Data to GIS formats, Query building. Data Conversion- Vector to Raster, Raster to Vector. Vector Analysis - Buffering, Overlay and Network analysis. Raster Analysis - Arithmetic and Logical overlaying. Generation of DEM, DTM and DSM, Drainage Network analysis and Map Composition

## NOTE

- 1. Candidates are requested to verify their eligibility strictly as per the essential & desirable qualifications as per advertisement. Post wise top 3 rank candidates will be called for skill test and interview. Example: If 1st rank candidate is not eligible for the post as per essential & desirable qualifications other 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> rank candidates will be called for skill test and interview if they are eligible. However post wise top 3 ranks eligible candidates list will be uploaded soon on the basis of filled applications submitted by the applicants with reference to the advertisement for regular appointments at HarSAC.
- 2. The HarSAC will provide standalone desktop computer system with Arc GIS, ERDAS Imagine, Microsoft office and Adobe Pdf reader.
- 3. If the candidates are wish to use any other software's for image processing and for GIS practical work, they can come with their software's 02 days before for installation (by the candidate's only) at HarSAC, Hisar, such software's will be removed from system immediately after the interview. They have to inform about details of licensed software's they wish to use other than above mentioned, atleast before 10 days to HarSAC.
- 4. Internet connection of any type will NOT be allowed. Any kind of electronic and digital storage devices are strictly prohibited during skill test and interview. Candidates must bring all original certificates and testimonials for skill test and interview. Verification of certificates starts from 9.00 AM on 5<sup>th</sup> November, 2016.

Sr. Scientist & Incharge- HarSAC affairs, Hdqrts. for DIRECTOR

Dept. of Science & Technology and Director, HarSAC

Contact details

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