

SOFTWARE PRODUCTS				Gem3.0
Major Product Category - Cartography ( UNSPC Code: 81151600 )				
Product Name- 3D Surface and contour mapping Software(UNSPC CODES: 81151601 )				
BASIC INFORMATION				
S.NO	KEY	TYPE	RESTRICTIONS	PARAMETERS
1	Software Domain / Type	Enumerable	3D Modeling Software, GIS Based Contour Mapping	Golden (MultiSelect)
2	Type of Licence	Enumerable	Perpetual, Subscription, Renewal of Licence	Golden
3	Name of Software	Text		Mandataory
4	Name of the OEM	Text		Mandataory
5	OEM Model / Part No.	Text		Mandataory
6	Brief Description of the product	Text		Mandataory
7	Software Version	Text		Mandataory
8	Date of Launch of Version	Text		Mandataory
9	Number of Years upto which Support is available from OEM / Seller	Enumerable	1,2,3,5	Golden
Features & Functionality Parameters				
10	Types of Map in the offered product	Enumerable	1. Contour 2. Base 3. Post, 4. 3D Surface 5. Color Relief 6. Classed Post 7. 3D Wireframe 8. 1-Grid Vector 9. 2-Grid Vector 10. Shaded Relief 11. Watershed 12. Grid Value 13. Viewshed 14. Point Cloud 15. Software must achieve a 360 degree perspective 16. View point data in true 3D space 17. Rotate your map 18. Walk along the surface 19. Adjust the vertical exaggeration	Golden (MultiSelect)
11	Input Data	Boolean	1. Any data in XYZ File Format 2. GPS Survey Data 3. Excel File 4. CSV Files 5. ASCII text and Grid File 6. DEM Files 7. DAT File 8. .DBF File 9. Geotiff Data File 10. All GIS Software's file format	Golden (MultiSelect)
12	LIDAR Point Cloud Features	Enumerable	1. Create a point cloud from multiple LAS/LAZ files 2. Assign color by elevation 3.intensity 4. return number, 5. classification value 6. Select points interactively or by criteria7. Remove, reclassify or crop to selected points 8.Create a grid from the point cloud or export to LAS/LAZ, 9. Visualize all aspects of the data in the 3D view	Golden (MultiSelect)
13	Customization option in the offered product	Enumerable	1. Add legends, cross sections, magnifiers, scale bars, and multiple axes 2. Include headers and footers 3. Apply linear or logarithmic color scales 4. Adjust tilt, rotation, and field of view angle 5. Edit all axis parameters 6. Include graticule lines or another grid 7. Combine or stack multiple maps 8. Define custom line styles and colors 9. Edit text, line, fill and symbol properties 10. Add text, polylines, polygons, symbols, and spline polylines 11. Include range rings	Golden (MultiSelect)
14	Grid features in the offered product	Enumerable	1. Directly edit the underlying grid data 2. Calculate volume and area of grids 3. Add, subtract, multiply, and divide grids 4. Perform custom mathematical functions on grids 6. Calculate differential and integral operations or Fourier and spectral analysis 7. Calculate the area data within the assigned state 8. Project grids from one coordinate system to another 9. Mosaic multiple grids together seamlessly 10. Transform, offset, rescale, rotate, or mirror grids 11. Filter grids with high- and low-pass filters 12. Extract smaller areas from a grid 13. Subtract the Z in the grid from the original Z	Golden (MultiSelect)

15	<b>Editing Capabilities in the offered product</b>	Enumerable	1. Perform free-hand contour editing 2. Brush specific Z values across nodes 3. Smooth contours 4. Pull up or push down contours in specific areas 5. Warp contour lines 6. Erase parts of the contour map 7. Find the Z value at any XY point location	Golden (MultiSelect)
16	<b>Gridding method in the offered product</b>	Enumerable	1. Kriging 2. Inverse Distance 3. Minimum Curvature 4. Natural Neighbor 5. Triangulation with Linear Interpolation 6. Nearest Neighbor 7. Local Polynomial 8. Polynomial Regression 9. Data Metrics 10. Radial Basis Function 11. Modified Shepard's Method 12. Moving Average	Golden (MultiSelect)
17	<b>Interpolation features in the offered product</b>	Enumerable	1. Variogram models 2. Anisotropy 3. Kriging with external drift 4. Faults and breaklines 5. Control over search neighborhood size, shape, and constraints 6. Data filtering 7. Automatic data statistics 8. Create grid files directly from contour polylines 9. Grid to convex hull 10. Duplicate handling 11. Cross validation 12. Control over output geometry and resolution 13. Limit or clamp z-values	Golden (MultiSelect)
18	<b>Geoprocessing Tools in the offered product</b>	Enumerable	1. View, create, edit and delete object attributes using the convenient Attribute Table 2. Calculate attribute values 3. Query objects based on attribute values 4. Perform Delaunay triangulation 5. Reshape, simplify, smooth polylines, polygons, and grids 6. Create buffers around points, polylines, and polygons 7. Convert between polygons and polylines 8. Create polygons by combining existing polygons 9. Create points or polygons in intersecting areas 10. Connect or break polylines at specified locations 11. Combine and split islands 12. Georeference images	Golden (MultiSelect)
19	<b>Symbology in the offered product</b>	Enumerable	1. Apply line, fill, and symbol properties based on attribute values 2. Display symbology in the legend 3. Select symbology based on unique values, unclassed colors and symbols, and classed colors and symbols	Golden (MultiSelect)
20	<b>Types of connections</b>	Enumerable	1. Web mapping server (WMS) 2. Open Street Map server (OSM) 3. Web coverage server (WCS) 4. Web feature server (WFS)	Golden (MultiSelect)
21	<b>Coordinate System features</b>	Enumerable	1. Create custom coordinate systems 2. Search coordinate systems by name or EPSG number 3. Reproject coordinate systems 4. Create custom linear units 5. Add graticule or grid lines to view different coordinate systems on a map	Golden (MultiSelect)
22	<b>Image Format Supported</b>	Enumerable	1. TIFF 2. JPEG 3. BLN Golden Software Blanking, 4. BMP 5. BNA 6. CSV 7. DAT Data 8. DBF Database 9. DXF AutoCAD Drawing 10. EMF 11. GPX GPS Exchange Format 12. JPEG 13. KML/ KMZ Google Earth 14. LAS/LAZ LiDAR Data 15. MIF MapInfo Interchange 16. PDF 17. PNG 18. SHP ESRI Shapefile 19. TIF 20. TXT 21. XLS	Golden (MultiSelect)
23	<b>Offered Product capable to use no. of available Predefined coordinate system</b>	Numeric	1500 to 3000	Golden

24	Offered Product capable to use no. of ellipsoids	Numeric	1 to 100	Golden
25	Offered Product capable to use no. of Predefined Linear units	Numeric	1 to 60	Golden
<b>SUPPORTED HARDWARE REQUIREMENT FOR SOFTWARE</b>				
26	RAM Size required	Text		Mandatory
27	CPU required	Text		Mandatory
28	Graphic Size Required	Text		Mandatory
29	Operating System Supported	Text		Mandatory
30	Supported Devices	Text		Mandatory
31	Supported Servers	Text		Mandatory
32	Min Processor bench mark score required	Text		Mandatory
<b>GENERIC PARAMETERS</b>				
33	Free Upgradation to Higher Version within support period	Enumerable	Yes	Filter
34	Valid Licence copy to be provided	Enumerable	Yes	Filter
35	Software supplied through	Enumerable	Media,URL Link,Media & URL Link	Filter
36	Installation and Demonstration	Boolean	Yes, No	Golden
37	No. Of Days Training provided at Site	Enumerable	0, upto 5, 6 to 10, 11 to 20	Golden
38	List of items included in the package	Text		Mandatory
39	Hyper link to Data sheet	Text		Mandatory
40	Number of Softwares sold	Numeric	1-10000	Filter
41	Number of User Referance from Government Department where Software installed	Numeric	1-1000	Filter
42	Details of Government Department email, phone no. of concerned authority where Software installed for above	Text		Mandatory