SRI LANKA SURVEY DEPARTMENT

Promotion Examination from Class II 'B' to Class II 'A' of Sri Lanka Technological Service Officers – 2017

Elementary Photogrammetry

(For Map Technological Officers)

2017.06.23 Time: Three (03) hours 0900 – 1200 hours

Answer all Questions.

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1. (i) Show the following terms of a tilted aerial photograph on a clear diagram and define them.

   (a) Principal point
   (b) Nadir point
   (c) Projection center
   (d) Iso Center
   (e) Principal distance

   (20 marks)

2. (i) What is meant by relief displacement?

   (05 marks)

   (ii) A line 1250m long lying at an elevation of 325m above mean sea level (MSL) measures 8.30cm on a vertical photograph. The focal length of the camera used is 15cm. Determine the scale of the photograph for an area having an elevation of 750m above MSL.

   (15 marks)

3. (i) What do you mean by photo interpretation?

   (05 marks)

   (ii) Name the basic properties of a photograph that are used for photo interpretation.

   (05 marks)

   (ii) Give example for each property mentioned in (ii) above.

   (10 marks)

4. Write short notes on following.
   (i) Binocular vision and monocular vision
   (ii) Effect of Tilt distortion on an aerial photograph
   (iii) Main features of an aerial camera
   (iv) Orientation procedure of stereo pair for parallax bar measurements

   (20 marks)

5. Briefly explain the following features of vertical, low oblique and high oblique aerial photographs.
   (i) Orientation of camera axis
   (ii) Shape of the ground coverage by single photograph
   (iii) Size of the ground coverage by single photograph
   (iv) Suitability for measurements on the photograph
   (v) Usefulness

   (20 marks)