

Sample Question for APC Part I Written Examination

1. *Sample question of Cadastral Surveying:*

At what scale(s) was/were the original DD Sheet prepared?

- A. 1 : 1200 and 1 : 600
- B. 1 : 1980 and 1 : 3960
- C. 1 : 1980
- D. 1 : 3960

The answer is B

2. *Sample question of Engineering Surveying:*

When a steel tape is used for measurement at a temperature in excess of its standard temperature, what is the true length of the measurement?

- A. True length equals to the measured length.
- B. True length equals to the measured length plus a temperature correction of “positive” value. The true length is therefore “longer” than the measured length.
- C. True length equals to the measured length plus a temperature correction of “negative” value. The true length is therefore “shorter” than the measured length.
- D. None of the above.

The answer is B

3. *Sample question of Topographical Surveying:*

The Helmert transformation is a transformation method within a three-dimensional space. It is frequently used to produce distortion-free transformations from one datum to another. Which one of the below is not the parameter for Helmert transformation:

- A. C — translation vector. Contains the three translations along the coordinate axes.
- B. a, b and $1/f$ — primary ellipsoid parameters.
- C. μ — scale factor.
- D. R — rotation matrix. Consists of three axes r_x, r_y, r_z . The rotation matrix is an orthogonal matrix.

The answer is B

4. *Sample question of Geodetic Surveying:*

Where can we find the GPS Calibration Baseline in Hong Kong?

- A. Plover Cove Reservoir
- B. Hong Kong Science Museum
- C. Ap Lei Chau
- D. High Island Reservoir

The answer is C

5. *Sample question of Hydrographic Surveying:*

Before echo-sounding survey, bar check should be performed to measure:

- A. Water current
- B. Water temperature
- C. Nominal water depth
- D. Velocity of sound

The answer is D

6. *Sample question of Photogrammetry and Remote Sensing:*

Which of the following sensors can be classified as an active remote sensing system?

- I. Digital aerial camera
- II. Airborne Light Detection and Image Ranging (LiDAR)
- III. Landsat 7 satellite
- IV. Radarsat-2 satellite
- V. GeoEye-1 satellite

- A. I and III only
- B. II and IV only
- C. I, III and V only
- D. II, IV and V only

The answer is B

7. *Sample question of Mapping and Cartography:*

Process Colour is a method of achieving colour by varying mixtures of

- A. red, green, blue
- B. any colour
- C. subtractive primaries and black
- D. all of the above

The answer is C

8. *Sample question of Geographic Information System:*

If you are a GIS consultant, what kind of solution would you suggest to a student who wishes to map his classmates' hiking tracks and to share them amongst all the classmates at home?

- A. AutoCAD Map
- B. ArcGIS
- C. Google Map
- D. Geomedia

The answer is C

9. *Sample question of Utility Surveying:*

In the Joint Utilities Policy Group (JUPG) Practice Guideline for As-built Records of Underground Utilities, a section shall be specified as "shallow cover" on the as-built drawing if the cover of that section is less than

- A. 200mm
- B. 300mm
- C. 450mm
- D. 500mm

The answer is C