Benha University – Benha Faculty of Engineering. Construction Eng. and Management Program.

Benha Faculty of Engineering
Construction Engineering and Management.

Benha Faculty of Engineering
Construction Engineering and Management.

Spring Semester 2019-2020
(Credit Hours System)

Third Level (CMC 306)

Final Exam (Date: 3/5/2020)

Subject: Surveying for Engineers II **Examiner**: *Dr. Rasha Mohey Al- Deen*

Sources allowed:

- 1. Textbooks.
- 2. Egyptian Knowledge Bank.
- 3. Internet.

General Notes:

- The report must divide into title and subtitle.
- The report must contain (introduction explain of subtitle conclusions list of references).
- The report must contain at least **three** solved examples.
- The report must format in the same way for all report Pages. (format will be considered in evaluation).
- Use justify mode in writing.
- Report must be about (8-10 papers excluding the cover).
- You should refer to each reference and make a list of references at the end of the report.

المصادر المسموح بها:

- الكتب.
- بنك المعرفة المصري.
 - . • الانترنت.

للحظات عامة:

- یجب تقسیم التقریر إلی عنوان و عنوان فر عی.
- يجب أن يحتوي التقرير على (مقدمة شرح العنوان الفرعي الاستنتاجات قائمة المراجع).
 - يجب أن يحتوي التقرير على ثلاثة امثلة تم حلهما على الأقل.
- يجب تنسيق التقرير بنفس الطريقة لكافة صفحات التقرير. (سيتم اخذ التنسيق في الاعتبار عند التقييم).
 - استخدام وضع justify في الكتابة.
 - يجب أن يكون التقرير في حدود 10(أوراق باستثناء الغلاف) PDF format.
 - يجب الأشارة الى الى كل مرجع و عمل قائمة مراجع بنهاية التقرير.

Write in one of these topics:

اكتب في أحد هذه الموضوعات:

Report Title:

Model 1:

Intersection and Resection

Subtitles:

- Steps Required for any Surveying Project
- Fundamental of the three methods of the survey (polar, intersection by angles or distances)
- Meaning of intersection
- Meaning of reresection
- Satellite station, reduction to center, and eccentricity of signal

Report Title:

Model 2:

Geodesy

Subtitles:

- Figure of The Earth
- Geoid
- Horizontal and vertical datum
- Coordinate systems in Surveying
- Spherical polygons

2 Good Luck.

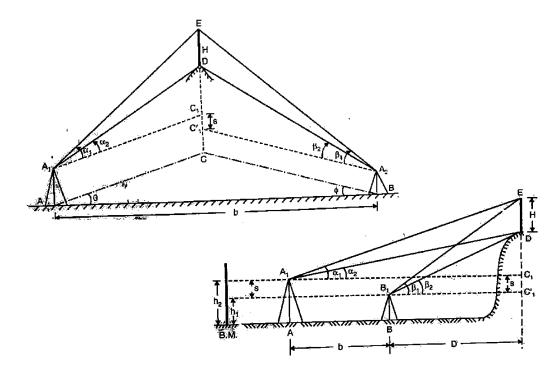
Report Title:

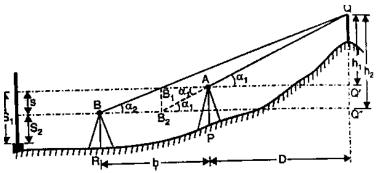
Model 3:

Trigonometric Levelling

Subtitles:

- Types of Leveling in Surveying
- The meaning of Trigonometric Leveling
- Trigonometric Leveling for long distance
- From the shown figures find the height of the top of the tower:





Report Title:

Model 4:

Theory of Errors

Subtitles:

- The difference between accuracy and precision
- Sources of errors
- Types of errors
- Indices of precision
- Direct and indirect observations
- Propagation of Error
- Ellipse error

₫ Good Luck.