University of Mumbai
Engineering Examinations
Guidelines regarding conduct of IA-II and Practical Examination of Engineering Graphics FE Semester II (C Scheme)
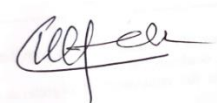
Dear Principals/Directors

Please take a note referring to conduct of IA-II and practical examination of Engineering Graphics. As per the syllabus of C Scheme, one of the internal assessment test has to be conducted based on AutoCAD. Usually, IA-II is conducted based on AutoCAD.

Considering the pandemic situation all over, the examination has to be conducted in online mode. As such the practical sessions throughout the semester have been conducted in online mode and this is indicative that the many students are equipped with either desktop or laptop or Tab or Mobile and might have completed the term work part as mentioned in the syllabus. In order to assess their understanding about the subject and evaluate their performance in AutoCAD, following are a few guidelines which have to be followed during the conduct of IA-II and end semester practical examination of Engineering Graphics Laboratory.

1. The examination has to be conducted in online mode
2. Students can appear the examination either on desktop or laptop or tab or mobile phone. The student version of the software AutoCAD as well as an android mobile app (details of the same are also given as an annexure) is available for free. If the student want to use the mobile app for the examination, he/she need to do required practice and need to be familiar with the interface of the app to gain the comfort during the examination.
3. Examiner/supervisor/faculty member shall ask each and every student to share his/her screen multiple times during the examination and make sure the fairness in the examination/evaluation.
4. Examination meeting has to recorded and preserved.
5. External examiner as usual has to be appointed for the end semester practical examination.
6. The soft copy of the practical answer sheet (pdf/screenshot of the work done by the student) has to be submitted by each student and the same need to preserved by the college
7. In case any student has any problem like non availability of any of the gadgets, he/she has to bring this to the notice of his faculty member/college well in advance. The genuineness of the case has to be verified by the college authorities and following options can be suggested to such student
   a. Borrow the gadget from friend/family member/relative and appear for the examination
   b. If student stays nearby the college or if student is willing to come to college allow the student to appear the examination from college facilities
   c. If a and b above both are not possible then as the last option, the student can appear the examination offline at his place and submit the scanned copy of the same via email. (Option c shall be avoided as far as possible)

You are requested to facilitate the students with the best possible way for Engineering Graphics practical sessions, IA-II based on AutoCAD and the end semester practical examination. Enough practice before the examination may be offered by arranging mock test and make them aware about the pattern and the platform on which the online examination is conducted.
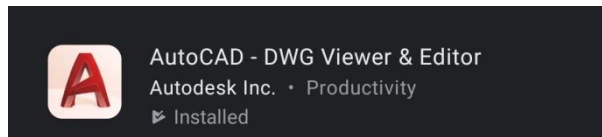
Dr. S. K. Ukarande
Associate Dean, Faculty of Science and Technology
University of Mumbai

Mobile App for AutoCAD practical:

AutoCAD- DWG Viewer & Editor- by Autodesk Inc.

- It is official AutoCAD app available on mobile appstore.
- It can be used to create, edit and view CAD files. This app is available on iOS, Android and Windows 10 mobile devices, both for smartphone or tablet.
- For iOS devices, iOS 11.0 or later is required.
- It can be used without internet in offline mode.
- It is available free for Student Autodesk accounts. To avail free Student Autodesk account students should register on Autodesk website by using their official email ID provided by college. As a document for proof they can use scan copy of their college ID or allotment letter or Fee receipt (It should have date of admission or year of admission on it).

Features

- View and edit DWG files from device storage, email, or external cloud storage like Google Drive, Drop box and One Drive
- Create new CAD drawings
- CAD editor - Modify and mark-up AutoCAD drawings
- Draw and edit shapes using object snap and keypad input
- Advanced technical drawing and editing tools such as line, circle, rectangle, arc, offset and more!
- Select, move, rotate, mirror and scale objects. View coordinates and properties
- Work offline and sync your changes once back online
- Manage layers- create new layers, lock, rename or delete layers
- Blocks- Move and duplicate existing blocks

Limitation of App:

- No option to draw hatch line.
- Dimensions are appearing larger than drawing and there is no option to reduce the size.
- There is no option to give dimension to arc or circle.
- Hidden lines are fixed. There is no option to reduce or increase the scale of hidden line.
- No option to convert the file into pdf. But they can take screen shot of the drawing.