AnDCon Problem Statements

The contestants need to excecute any one of the following antenna design problems-----

1. Design a microstrip patch antenna such that under any weather condition or under any electromagnetic interference (solar storms or magnetic storms) it should be able to receive the gps signal with minimum error. The GPS antenna needs to be designed at L1, L2 or L5 band with a return loss of at least 20 dB and a gain of at least 6 dBi . Desired HPBW>45^0

2. Design an aperture coupled triangular microstrip patch antenna which will be suitable for Wi-fi Applications. The antenna needs to be designed at 5.2 GHz with a gain of at least 5 dBi and return loss of at least 20 dB.

3. Design a circularly polarized antenna suitable for use in GPR at 1 GHz so that it can detect a target at a distance of 1 m. The antenna needs to be designed such that it has a return loss of at least 20dB and desired gain of 3 dBi. Desired bandwidth>2 GHz.

SUBMISSION DEADLINE: **January 31, 2020**

SUBMISSION GUIDELINES:

•All design materials must be sent to **uemk.andcon@gmail.com** with the subject line, "UEM AND-Con 2019 antenna design competition".

•A detailed description of the design proposal (limited to 2 pages) needs to be submitted.

•Teams need to submit .hfss files along with associated folders in a single zip file.

REVIEW PROCESS:
A panel of reviewers will assess each design based on likelihood of achieving the design goal and specifications, creativity, and quality of written materials.