Speech Signal Processing

Assignment 5   Course Code **ECE448**

Max. points **20**

Note:

- Always cite your sources (be it images, papers or existing libraries). Follow proper citation guidelines

- Unless specifically permitted, collaborations are not allowed.

- Do not copy or plagiarise, if you're caught for plagiarism or copying, penalties are much higher (including an **F** grade in the course) than simply omitting that question.

- Need to mention clearly if any assumptions are being considered.

- No late submissions are accepted.

Syntax to be followed for submission

- A single zip folder has to be uploaded in the moodle, which should contain the snapshots of your Numericals as $ECE448\_A5\_ < RollNo. > .pdf$ and computer based questions (code) should be placed in a folder and named it as $ECE448\_A5\_cbq$

- For computer based questions you are expected to submit Codes (**Matlab**)

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1. Consider a vowel region in a speech waveform and extract the prosody features in a MATLAB. **Computer based Question [7.5 pts]**

2. Implement the ZFF algorithm in MATLAB and plot the output for one voiced segment **Computer based Question [7.5 pts]**

3. Consider a voiced segment and plot its GVV waveform in MATLAB. **Computer based Question [5 pts]**