#### Instruction Sheet for ChemCollective Virtual Labs Spoken Tutorial Team IIT Bombay



### 1 Online / Offline content

- 1. The online content of Spoken Tutorials can be accessed from :
  - https://spoken-tutorial.org/tutorial-search/
- 2. You can also download the Spoken Tutorials for offline learning from: https://spoken-tutorial.org/cdcontent/
- 3. From this link download the FOSS categories in the language you wish to learn.
- 4. The Spoken Tutorial content will be downloaded as a zip file on your machine.
- 5. Extract the contents of the zip file & access them.

#### 2 The procedure to practise

- 1. You have been given a set of spoken tutorials and files.
- 2. You will typically do one tutorial at a time.
- 3. You may listen to a spoken tutorial and reproduce all the commands shown in the video.
- 4. If you find it difficult to do the above, you may consider listening to the whole tutorial once and then practise during the second hearing.

#### 3 ChemCollective Virtual Labs

- 1. Click on "Select FOSS" or "All FOSS Categories" drop-down and choose "ChemCollective Virtual Labs".
- Click on "Select Language" or "All Languages" drop-down and choose the language (English, Hindi, Marathi ...) in which you wish to learn.
- 3. Click on "Submit" button.
- 4. You will see a list of tutorials based on your selection.
- 5. Start with the first tutorial in the displayed list.

### 4 First tutorial: Overview of ChemCollective Vlabs

1. Locate the topic Overview of ChemCollective Vlabs and click on it.

2. To view the tutorial, click on the Play icon which is located in the player.

### 5 Second tutorial: Preparation of Standard Solutions

- 1. Locate the topic "Preparation of Standard Solutions" and click on it.
- 2. To view the tutorial, click on the Play icon which is located in the player.
- 3. The Pre-requisite will be visible below the player (only for Online contents).
- 4. Outline, Assignments, Code Files are available below the player.
- 5. Adjust the size of the browser in such a way that you are able to practise in parallel.

### 6 Common Instructions to practise

- 1. You can save your work by taking screenshots of the interface and saving the images in a folder.
- 2. Write the values of concentration, temperature and pH in your observation notebook.
- 3. Play-pause-practise the whole tutorial.
- 4. Once the tutorial is complete, choose the next tutorial from the playlist which is located on the right side or below the player.
- 5. Follow all the above instructions, till you complete all the tutorials in the series.

## 7 Common instructions for Assignments

- 1. Attempt the Assignments as instructed in the tutorial.
- 2. Take the screenshots and save the images in a folder.
- 3. Write the values of concentration, temperature and pH in your observation notebook.

# 8 Eighth tutorial: Buffer Solutions

1. You will need internet connection to open the link given in the the Additional reading mate-

rial section of this tutorial.