

- 1 Prepare a sample from a reach of Zayandehroud river. Choose a section upstream of Sio-She-Pol bridge or Khojo bridge. Define the standard you have used for sampling and give a brief description of the step required. Show several pictures from the selected section, and the sample. Fill out the form below. Draw the sediment distribution curve and determine  $d_{90}$ ,  $d_{65}$ ,  $d_{50}$ ,  $d_g$ ,  $\sigma_g$ .

Class No.	Class Range (mm)	$d_i$ (mm)	$i_b$

- 2 Select a research paper on incipient motion for canals with movable beds, excluding the ones described in the class. Write a summary and critical review on the paper. Your summary should include details of the research project, assumption and findings. Specifically, you are supposed to stick to following steps as
- Summarize (not translate) the whole paper in 3 or 4 pages. List the main assumptions and show in details, how to calculate the incipient motion parameter.
  - Having the sediment distribution obtained in problem #1, calculate the incipient motion parameter by using the method presented in the paper and other methods presented in the class. Explain the reasons behind the differences.