**Name:** ……………………………………………………….  **I.D:**………………………………..………………

**SDS-Polyacrylamide Gel Electrophoresis**

-Determine the molecular weight for the protein sample in (lane 1), using the following information and drawing the standard curve of known proteins molecular weights:

****

Note that:

[1] Protein sample with unknown molecular weight.

[2] Standard of known proteins molecular weights, see the following table:

Fill the following table with the information which will help you drawing the standard curve

|  |  |  |
| --- | --- | --- |
| ? | ? | MW (Da) |
|  |  | 78,000 |
|  |  | 50,000 |
|  |  | 40,000 |
|  |  | 25,000 |
|  |  | 10,000 |

The molecular weight of the protein sample in (Lane 1) is ?(details is required)

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

**What is the function of each material?**

1-Disruption buffer:

SDS, Glycerol, β-Mercaptoethanol and Bromophenol blue.

2- Acrylamide stock.

3- Stacking gel.

4-Separation gel.

5-Running buffer.

6-Staining buffer: Coomassie brilliant blue R- 250.

7-De-staining buffer.

8-Ammonium persulphate.

9-TEMED.