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

**SDS-Polyacrylamide Gel Electrophoresis**

-Determine the molecular weight for the protein sample in (lane 1), use the following information to draw the standard curve of known proteins molecular weights:

****

Note that:

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

 [2] Protein sample with unknown molecular weight.

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

|  |  |  |
| --- | --- | --- |
| ? | ? | MW (………unit) |
|  |  | 97,400 |
|  |  | 66,200 |
|  |  | 45,000 |
|  |  | 31,000 |
|  |  | 21,500 |

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

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

**PRINCIPLE:**

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

**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.