Hello everyone, welcome to my presentation on the topic, Long run equilibrium of the firm under perfect competition.

This is the subject of microeconomics-II that is for Semester 2.

And I am your to explain to you all the topic from the first chapter, that is Unit 1 perfect competition module #5 equilibrium of the firm in the long run under perfect competition.

Outline. First, we shall be discussing about the meaning of equilibrium of a firm in the long run under perfect competition. And then we shall see the diagram and its explanation.

Learning outcomes: At the end of the E module, students will be able to understand the concept of equilibrium of a firm in the long run under perfect competition and to relate the concepts of equilibrium in real life situations.

First, let us try to understand what is perfect competition.

Perfect competition is a market situation in which there are a large number of buyers and sellers selling a homogeneous product. In such a market structure, there is free entry and exit of firms. That is perfect mobility of factors of production. Forms have perfect knowledge about the market situation and there is no transportation cost involved. Does perfect competition can be defined as a market situation in which there is a single price followed by forms which is determined by the total market demand and the total market supply?

Now, let us proceed to analyze the meaning of the equilibrium of the firm in the long run under perfect competition. So first we need to know what is the long run time period. The long run is a period of time in which the firm can change its plant and scale of operations. Does in the long run all cost are variable and there are no fixed cost involved. That is to say that a firm in the long run can change and adjust its various cost, like for example, a firm can change its production technology. A firm can employ more labour. A firm can also decide about expanding its business. So in this way all cost in the long run become variable. The firm is in the long run equilibrium under perfect competition when it does not want to change its equilibrium output. The two conditions for long run equilibrium of the firm are. Falsely, in equilibrium, the short run marginal cost that is SMC equals the long run marginal cost. That is, LMC equals the marginal revenue i.s MR, which equals to the average revenue AR, which equals to the price B which equals to the short run average cost SAC which equals to the long run average cost that is LAC at its minimum point and the second important condition is the LMC curve must cut the marginal revenue curve from below.

Now. Coming to the diagram, this diagram represents the long run equilibrium of the firm under perfect competition.

As we can see in the diagram, we measure the output on the X axis and the price on the Y axis. OP is the equilibrium price. That is, any price that is above OP1 indicates supernormal profits and this will bring in new forms into the market. Any price below OP indicates losses and thus it is only at OP1 Price where the firm is at equilibrium in the long run. The long run equilibrium of the firm under perfect competition is established at the minimum point of the long run average cost curve, which signifies that the firm is of optimum size. That is, the firm is able to produce its output at the lowest minimum possible cost.

Now let us see the summary of the condition for long run equilibrium of a competitive firm. Firstly, the long run marginal cost equals the long run marginal revenue that is LMC equals LMR which indicates that the profit is maximized. Second condition price, that is, the average revenue equals to the long run average cost, LAC, indicating that the firm enjoys only normal profits. The Third Point, the long run marginal revenue equals the long run average revenue that is LMR is equal to LAR, implying that the form is a price taker or the output of the individual form cannot influence price. And the 4th condition, the long run marginal cost equals the long run average cost. That is, LMC is equal to LAC, which indicates that the firm is operating at a minimum average cost.

Now, this last condition indicates that under perfect competition, all firms in the long period must operate at their most efficient level of output so that the average cost is at the minimum. If this is so, the resources are utilized in an optimum way.

And finally to conclude, the existence of long run equilibrium condition of a firm means that short run equilibrium also exist simultaneously, because the long run is composed of a series of short run phases.
Does when a form isn't long run equilibrium, it must be in short run equilibrium as well as but not vice versa. To be able to produce its equilibrium output at the lowest point of the long run average cost curve, a firm has to build a plant associated with short run average cost SAC, which has the same lowest point as that of the long run average cost. Thus, when a form is in long run equilibrium, the following condition must be fulfilled, that is, price is equal to LMC = LMR = LAR = SAC= SMC.

Now this is the Glossary of terms which you can refer, which you can read up on and try to understand and try to get a better understanding on the topic. So we have equilibrium, long run, firm, output, price and cost.
These are the references so you can refer to these books.

Thank you so much.