1.Explain in your own words, what did u understand by ‘model’?

Model is a method used to calculate the total value of Goods and services produced within a country’s border or within a state or may be considered for a small zone – like a factory, during a given time period. It may include different economic sectors.

The classical model provides various ways to calculate GDP such as the product approach, the income approach and the expenditure approach. Each of these approach produces same answer though every approach is not efficient in every situation.

Models are used to predict future economic behavior based on earlier trend.

2.Set up a hypothetical economy with some sellers and buyers. Trade some hypothetical good with your chosen price level and explain how the three approaches to calculating GDP are equivalent. Example that was explained in class will be very helpful for this question.

Assume there are three sellers and buyers of clothes.

SELLERS: BUYERS:

* Ram \*Ayush
* Shyam \*Aditya
* Hanuman \*Pawan

Let’s assume price of each cloth Rs. 50.

Transaction Part: (Let)

– Ayush buys 3 cloths from Ram: Total Rs. 150

– Aditya buys 5 cloths from Shyam: Total Rs. 250

– Pawan buys 2 cloths from Hanuman: Total Rs. 100

Now use different approaches to calculate GDP:

**1.Expenditure Approach**-

To calculate GDP using the expenditure approach, we add up the total spending on final goods and services in the economy. In this case, the total expenditure on clothing is Rs. 500, which is the sum of the amounts spent by Ayush, Aditya, Hanuman. Therefore, GDP using the expenditure approach is:

**GDP = C + I + G + NX**

where C = Consumption, I = Investment, G = Government Spending, and NX =Net Exports.

Since there is no government spending or net exports involved in this economy, the equation simplifies to:

**GDP = C + I**

where C = Rs.500 (total consumption expenditure) and I = Rs.0 (no investment spending).

Therefore, GDP using the expenditure approach is Rs.500

**2.Income Approach**-

To calculate GDP using the income approach, we add up all the income generated by production. In this case, the total income earned by the clothing sellers is Rs.500, which is the sum of the amounts earned by Ram, Shyam, and Hanuman from selling clothing. Therefore, GDP using the income approach is:

**GDP = Employee Compensation + Rents + Interest + Profits**

where Employee Compensation = Rs.400 (total wages and salaries earned by the sellers), Rents = Rs.0, Interest = Rs.0, and Profits = Rs.100 (total profits earned by the sellers).

Therefore, GDP using the income approach is also Rs.500.

**3.Product Approach**

To calculate GDP using the product approach, we measure the total value of all goods and services produced in the economy. In this case, the value of clothing produced is Rs.500, which is the sum of the revenue earned by Ram, Shyam, Hanuman from selling clothing. Therefore, GDP using the production approach is also Rs.500.

It is visible that from all approaches be get same GDP, thus any approach can be used according to the situation.

3.Differences between nominal and real GDP.

**Nominal GDP-** it is the total value of a country’s economic output measured at current market prices. It is not affected by inflation, which means that nominal GDP can increase simply by price increase of the product, even when economy is not growing.

Some factors that are considered:

* Takes into account the money value transactions in the area.
* Money transaction has two aspects.
* The quantity of goods and services as well as the price level.

**Real GDP-** it is measure of country’s economic output but in this case, inflation plays a important role. It is not affected by changes in prices of the goods, real GDP provides a accurate visualization of country’s economy.

Some important learnings:

* Real GDP changes only with quantity and not price
* We set a base year.
* To calculate real GDP we take into account the prices of the base year and the quantity of the current year.
* Real GDP provides a better overview of growth in a country.