# QUIZ ON MATCHING MODEL OF UNEMPLOYMENT

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In the United States, the average amount of time people spend unemployed is approximately:

- A) One month
- B) Between two and three months
- C) Between five and six months
- D) Between ten and eleven months
- E) Greater than twelve months

# Question 2

Which of these matching functions does not have constant returns to scale?

A)  $m(U,V) = a \times U + b \times V$ B)  $m(U,V) = U^a \times V^{1-a}$ C)  $m(U,V) = U \times V$ D)  $m(U,V) = [b \times U^a + (1-B) \times V^a]^{1/a}$ 

#### Question 3

What does the Beveridge curve say about the US labor market?

- A) When the unemployment rate is high, the vacancy rate is low.
- B) When the unemployment rate is high, the vacancy rate is high.
- C) Unemployed workers and vacant jobs cannot coexist.
- D) On average jobs last a long time.
- E) It takes a long time for unemployed workers to find a job.

#### **Question** 4

In the matching model, the labor supply is increasing in the labor market tightness because:

- A) A higher tightness makes it more expensive to hire producers.
- B) A higher tightness makes it easier to fill vacancies.
- C) A higher tightness makes it easier to find jobs.
- D) A higher tightness reduces the job-separation rate.

In the matching model, when we derive the labor supply, we assume that:

- A) Inflows into unemployment equal outflows from unemployment.
- B) Inflows into unemployment are larger than outflows from unemployment.
- C) Inflows into unemployment are smaller than outflows from unemployment.
- D) The matching function is constant.

# Question 6

If the labor-force participation rate suddenly increases, what necessarily happens in the matching model?

- A) The labor supply curve shifts right.
- B) The labor supply curve shifts left.
- C) The labor supply curve is not affected.

D) The matching function is more effective.

E) The matching functions is less effective.

# Question 7

In the matching model labor demand is decreasing in labor market tightness because:

- A) A higher tightness makes it less expensive to hire producers.
- B) A higher tightness lowers the recruiter-producer ratio.
- C) A higher tightness makes it more difficult to fill vacancies.
- D) A higher tightness makes it easier to find jobs.
- E) A higher tightness increases the job-separation rate.

# **Question 8**

In the matching model, which of the following parameters and variables are negatively influencing labor demand?

- A) Labor market tightness and technology
- B) Wage and technology
- C) Recruiting cost and labor market tightness
- D) Labor force and wage

In the matching model, which of the following parameters and variables are positively influencing labor demand?

- A) Labor market tightness
- B) Technology
- C) Size of the labor force
- D) Recruiting cost
- E) Wage

# Question 10

Imagine that firms set wages by bargaining with workers. We expect wages to be higher when:

- A) Labor market tightness is lower.
- B) Unemployment insurance is less generous.
- C) Workers have less bargaining power.
- D) Labor market tightness is higher.
- E) There is less unemployment insurance.

# Question 11

Henry Ford's experiment with efficiency wages resulted in:

- A) A dramatic drop in output per worker
- B) A dramatic reduction in unionization
- C) A dramatic increase in the layoff rate
- D) A dramatic reduction in the turnover rate
- E) No noticeable effects

Consider a matching model with a fixed wage. An increase in the wage leads to:

- A) A rightward shift of the labor-supply curve
- B) A rightward shift of the labor-demand curve
- C) A leftward shift of the labor-supply curve
- D) A leftward shift of the labor-demand curve
- E) No changes in labor supply and demand curves

## Question 13

What happens in the matching model when the unemployment rate is low?

- A) The probability of losing a job in a given month is high.
- B) The probability of losing a job in a given month is low.
- C) The probability an unemployed worker will find a job in a given month is low.
- D) The probability an unemployed worker will find a job in a given month is high.

## Question 14

What happens in the matching model when the unemployment rate is high?

- A) The probability of losing a job in a given month is high.
- B) The probability of losing a job in a given month is low.
- C) The probability of filling a vacancy in a given month is high.
- D) The probability of filling a vacancy in a given month is low.

#### Question 15

In US data, we see that when employment is high, labor market tightness is also high. In the matching model with fixed wage, which type of shocks can generate such correlation between employment and labor market tightness?

- A) Shocks to labor productivity
- B) Shocks to the size of the labor force
- C) Shocks to the disutility from unemployment
- D) No shocks can generate such correlation

Imagine that the government implements training programs to increase the skills and productivity of workers. In the matching model, this policy would:

A) Shift the labor demand curve rightward

B) Shift the labor demand curve leftward

C) Shift the labor supply curve leftward

D) Shift the labor supply curve rightward

E) Improve the matching function

# Question 17

Imagine that the government increases the minimum wage and that as a result everybody's wage in the economy goes up. Then, according to the matching model:

A) Unemployment and labor market tightness will go up.

B) Unemployment and labor market tightness will go down.

C) Unemployment will go up and labor market tightness will go down.

D) Unemployment will go down and labor market tightness will go up.

E) The matching function will improve.

# Question 18

Imagine that the government increases unemployment insurance and that as a result unemployed workers search less intensely for a job. Then, according to the matching model with a typical downward-sloping labor demand curve:

A) Unemployment and labor market tightness will go up.

B) Unemployment and labor market tightness will go down.

C) Unemployment will go up and labor market tightness will go down.

D) Unemployment will go down and labor market tightness will go up.

# Question 19

If the production function is  $Y = a \times N$  in the matching model, what is shape of the labor demand curve in the usual (employment, tightness) diagram?

A) Horizontal

B) Vertical

C) Downward sloping

D) Upward sloping

E) We need information on wages to be able to tell

Assume that the wage between a worker and a firm is determined using Nash Bargaining. Also assume that workers have bargaining power of 1/2. This means that the wage W maximizes  $(a-W)^{1/2} \times (W-z)^{1/2}$ , where a is firms' productivity and z is the utility from unemployment. Then:

- A) The wage is given by W = (a + z)/2.
- B) The wage is given by W = a/2.
- C) The wage is given by W = a + z.
- D) The wage is given by W = z/2.
- E) The wage is given by W = 1/2.

# Question 21

Consider a matching model with the linear production function is  $Y = a \times N$ . What is the composition of unemployment in that model?

- A) All unemployment is rationing unemployment.
- B) All unemployment is frictional unemployment.
- C) Half of unemployment is frictional, and half of unemployment is rationing.
- D) The composition of unemployment depends on economic conditions.
- E) There is no unemployment in equilibrium.