

Sample Test Graduate Programs

MS & Ph.D

Passage

Our Galaxy, The Milky Way

Have you ever looked up at the night sky and noticed a band of stars that have a whitish “cloud” around them? If you have, you were looking at a portion of our own galaxy, the Milky Way. It is called “milky” because of this whitish cloud that the stars live in. This cloud is actually light that the stars give off.

People who lived many centuries ago didn’t know what they were seeing when they looked at the Milky Way in the sky. Some thought it was a bridge, some thought it was a river, and others thought it was a pathway for spirits of the dead. Today, the Milky Way is much less mysterious. We know more about our galaxy now than ever before. Scientists and astronomers continue to study it and learn more about it.

What is a galaxy? It is a system of millions to hundreds of billions of stars. Our galaxy, the Milky Way, contains about one trillion, or 1,000,000,000,000, stars. It is hard to imagine a “trillion” stars, isn’t it?

There are hundreds of billions of galaxies in the universe. How does a galaxy relate to the universe? A galaxy is part of the universe. The universe includes all galaxies.

When you look at the Milky Way at night, the stars you can see are the brightest stars. Some people use a telescope to see more stars, or the stars that are not as bright. It is easiest to see the Milky Way if you live in the country. That is because the light from cities can make it harder to see the light from the stars in a dark sky.

The Milky Way has a pancake shape, and the Earth is located somewhere near the center of this “pancake”. When you look at the Milky Way at night, you are seeing just a portion of the galaxy. This portion appears in a different place in the sky depending on the time of year. It is higher in the sky during the summer and winter. But during the spring and fall, it is lower, and closer to the horizon.

So the next time you look up at the sky at night and see that whitish cloud of stars, remember that you are looking from the inside-out at your own galaxy!

Questions

Now answer questions 1 through 4. Base your answers on the article, “Our Galaxy, The Milky Way”.

1. According to the article, how many stars are in the Milky Way?

- a. 1 million
- b. 1 billion
- c. 2 trillion
- d. 1 trillion

2. Read this sentence from the story:

Today, the Milky Way is much less mysterious.

What is a synonym for the word *mysterious*?

- a. strange
- b. ordinary
- c. common
- d. serious

3. If you live in a city, why would you want to, or need to, use a telescope to see the Milky Way?

Use details from the article to support your answer.

Which of the following statements is NOT a fact?

- a. There are hundreds of billions of galaxies in the universe.
- b. The Milky Way contains about one trillion stars.
- c. The Universe contains only our galaxy.
- d. The Milky Way has a pancake shape.

Quantitative

Last year Mrs. Lodhi received 160 in dividends on her shares of Company X stock, all of which she had held for the entire year. If she had had 12 more shares of the stock last year, she would have received 15 more in total annual dividends. How many shares of the stock did she have last year?

a. 128

b. 140

c. 172

d. 175

e. 200

Analytical

Questions 1 to 5 are based on the following:

Five persons are sitting in a line. One of the two persons, at the farthest ends, is sharp, the other one is fair.

An overweight person is sitting to the right of a feeble person. A tall person is to the left of the fair person and the feeble person is sitting between the sharp and overweight persons.

Question 1

Tall person is at which place counting from right?

(a) First

(b) Second

(c) Third

(d) Fourth

(e) Cannot be determined

Question 2

Which of the following depicts the person to the left of feeble person?

(a) Sharp

(b) Overweight

(c) Fair

(d) Tall

(e) Cannot be determined

Question 3

Which of the following persons is sitting in the middle?

(a) Fair

(b) feeble

- (c) sharp
- (d) Tall
- (e) Overweight

Question 4

To whose left is the overweight person sitting?

- (a) Fair
- (b) Sharp
- (c) Tall
- (d) feeble
- (e) Cannot be determined

Question 5

If the fair person and overweight person swap their position, so also tall and feeble, then who will be sitting to the left of the feeble person?

- (a) Tall
- (b) Fair
- (c) Overweight
- (d) Sharp
- (e) Cannot be determined

Marketing Portion

Marketing is best understood as the process of _____.

- a. promoting products and services
- b. making a sale
- c. creating customer needs
- d. satisfying customer needs and wants

When backed by buying power, wants become _____.

- a. products

- b. demands
- c. needs
- d. purchases

HRM Portion

Job analysis information should be verified by:

- a. The CEO.
- b. An HR manager.
- c. An incumbent.
- d. The EEOC.

The following are involved in collecting job analysis data except:

- a. Employee.
- b. EEOC field investigator.
- c. Supervisor.
- d. Human Resource specialist.

Finance Portion

The cost of equity capital is all of the following EXCEPT:

- a. the minimum rate that a firm should earn on the equity-financed part of an investment.
- b. a return on the equity-financed portion of an investment that, at worst, leaves the market price of the stock unchanged.
- c. by far the most difficult component cost to estimate.
- d. generally lower than the before-tax cost of debt.

To compute the required rate of return for equity in a company using the CAPM, it is necessary to know all of the following EXCEPT:

- a. the risk-free rate.

- b. the beta for the firm.
- c. the earnings for the next time period.
- d. the market return expected for the time period.