CAREER CLUSTER
Finance

CAREER PATHWAY
Corporate Finance

INSTRUCTIONAL AREA
Financial Analysis

BUSINESS FINANCE SERIES EVENT

PARTICIPANT INSTRUCTIONS

- The event will be presented to you through your reading of the 21st Century Skills, Performance Indicators and Event Situation. You will have up to 10 minutes to review this information and prepare your presentation. You may make notes to use during your presentation.
- You will have up to 10 minutes to make your presentation to the judge (you may have more than one judge).
- You will be evaluated on how well you demonstrate the 21st Century Skills and meet the performance indicators of this event.
- Turn in all of your notes and event materials when you have completed the event.

21st CENTURY SKILLS

- Critical Thinking – Reason effectively and use systems thinking.
- Problem Solving – Make judgments and decisions and solve problems.
- Communication – Communicate clearly.
- Creativity and Innovation – Show evidence of creativity.

PERFORMANCE INDICATORS

- Discuss the nature of corporate bonds.
- Discuss the cost of corporate bonds.
- Calculate bond-related values.
- Discuss the relationship between economic conditions and financial markets.
- Organize information.

EVENT SITUATION

You are to assume the role of the financial manager for GIANT INDUSTRIES, a Fortune 500 company. The chief financial officer (judge) wants you to determine issue price, interest and factors affecting the price of corporate bonds.

GIANT INDUSTRIES is considering issuing bonds to raise capital in order to purchase a new manufacturing facility. The rate of return in the market is 12% but the chief financial officer (judge) does not want to pay the investor more than 10% interest. The chief financial officer (judge) needs your help to determine the total issue price of the bond and the amount of interest paid to the investor each year. In addition, the chief financial officer (judge) needs an explanation as to how the coupon rate of 10% and the market rate of 12% impacts the price of the bond.

Below is information about the bonds and present value tables:

- 10,000 bonds of $1,000 par value each
- Interest is paid annually
- The bonds will be issued January 1, 2025, and mature December 31, 2029

Present value of a single sum at 10% at N=5	.62092
Present value of a single sum at 12% at N=5	.56743
Present value of an ordinary annuity at 10% at N=5	3.79079
Present value of an ordinary annuity at 12% at N=5	3.60478

In the meeting with the chief financial officer (judge) be prepared to discuss the following:
- The nature and purpose of corporate bonds.
- Any costs associated with bond issuance, including the interest paid to investors.
- The results of calculations.
- A discussion on how the coupon rate and market rates influence the issue price.

You will provide the information to the chief financial officer (judge) in a role-play to take place in the chief financial officer's (judge's) office. The chief financial officer (judge) will begin the role-play by greeting you and asking to hear the information. After you have presented the information and have answered the chief financial officer's (judge's) questions, the chief financial officer (judge) will conclude the role-play by thanking you for your work.

JUDGE INSTRUCTIONS

DIRECTIONS, PROCEDURES AND JUDGE ROLE

In preparation for this event, you should review the following information with your event manager and other judges:

1. Participant Instructions, 21st Century Skills and Performance Indicators
2. Event Situation
3. Judge Role-Play Characterization
   Allow the participants to present their ideas without interruption, unless you are asked to respond. Participants may conduct a slightly different type of meeting and/or discussion with you each time; however, it is important that the information you provide and the questions you ask be uniform for every participant.
4. Judge Evaluation Instructions and Judge Evaluation Form
   Please use a critical and consistent eye in rating each participant.

JUDGE ROLE-PLAY CHARACTERIZATION

You are to assume the role of the chief financial officer for GIANT INDUSTRIES, a Fortune 500 company. You want the financial manager (participant) to determine issue price, interest and factors affecting the price of corporate bonds.

GIANT INDUSTRIES is considering issuing bonds to raise capital in order to purchase a new manufacturing facility. The rate of return in the market is 12% but you do not want to pay the investor more than 10% interest. You need the financial manager's (participant's) help to determine the total issue price of the bond and the amount of interest paid to the investor each year. In addition, you need an explanation as to how the coupon rate of 10% and the market rate of 12% impacts the price of the bond.

Below is information about the bonds and present value tables:

- 10,000 bonds of $1,000 par value each
- Interest is paid annually
- The bonds will be issued January 1, 2025, and mature December 31, 2029

Present value of a single sum at 10% at N=5	.62092
Present value of a single sum at 12% at N=5	.56743
Present value of an ordinary annuity at 10% at N=5	3.79079
Present value of an ordinary annuity at 12% at N=5	3.60478

The financial manager (participant) will be prepared to discuss the following:

- The nature and purpose of corporate bonds.
- Any costs associated with bond issuance, including the interest paid to investors.
- The results of calculations.
- A discussion on how the coupon rate and market rates influence the issue price.

The participant will provide information to you in a role-play to take place in your office. You will begin the role-play by greeting the participant and asking to hear the information.

During the course of the role-play, you are to ask the following questions of each participant:

1. Based on the information you presented, do you think issuing a bond instead of issuing stock is a good decision for the company?
2. Who do we notify first of the decision?

Once the financial manager (participant) has presented the information and has answered your questions, you will conclude the role-play by thanking the financial manager (participant) for the work.

You are not to make any comments after the event is over except to thank the participant.

SOLUTION

Nature of Bonds
The nature of a corporate bond is that it represents a loan made by an investor to a corporation. The bondholder (aka investor) essentially acts as a lender, while the corporation issuing the bond is the borrower. The nature of this relationship is defined by several characteristics (note-competitors may only discuss a few of these):

1. Debt Obligation - A corporate bond is a form of debt for the issuing company. When a corporation issues bonds, it is borrowing money from investors and agreeing to repay that money, along with interest, over a specified period.
2. Fixed Income Security - Corporate bonds are typically considered fixed-income securities, as they provide predictable, periodic interest payments (called coupon payments) to bondholders.
3. Contractual Agreement - The bond is a contract between the issuer (corporation) and the bondholder, outlining terms such as interest payments, repayment of principal, and any covenants or conditions. The company is legally obligated to fulfill these terms.
4. Priority in Liquidation - Corporate bondholders have priority over shareholders in the event of liquidation or bankruptcy. This means that if the company goes bankrupt, bondholders are paid before equity shareholders (though after secured creditors).
5. Lower Risk, Lower Return (Compared to Equity) - While corporate bonds are generally less risky than investing in the company’s stock (because bondholders have a higher claim on assets and earnings), they also typically offer lower returns than stocks. However, the risk varies depending on the bond’s credit rating (investment-grade vs. high-yield or junk bonds).
6. Capital-Raising Tool - For companies, issuing bonds is an important method of raising capital for operations, expansion, or debt refinancing, without diluting shareholder equity (as would happen with issuing more stock).

Cost of Issuing Bonds
The cost of issuing a bond may include underwriting fees, legal costs, rating and regulation fees along with compliance. Below summarizes many of the potential costs of issuing bonds (note-competitors may only discuss a few of these):

1. Underwriting Fees - Companies often work with investment banks or underwriters to structure and sell the bond. These banks charge a fee, typically a percentage of the bond’s total issuance.

2. Legal Fees - Legal teams draft the bond prospectus and ensure compliance with securities regulations. Legal fees vary depending on the complexity of the issuance.
3. Rating Agency Fees - To issue a bond, most companies need a credit rating from agencies like Moody's or S&P. The fee for a rating can be a flat fee or a percentage of the issuance value.
4. Registration and Regulatory Fees - If the bond is publicly issued, companies must register the offering with the Securities and Exchange Commission (SEC) or relevant regulatory bodies, which charge filing fees based on the offering's size.
5. Compliance Costs – Involves fees to ensure that the bond complies with federal and state regulations, including Sarbanes-Oxley and other securities laws.
6. Marketing and Roadshow Expenses - Companies often organize roadshows or presentations to attract investors, incurring travel, presentation, and logistical expenses.
7. Interest Rate and Yield Considerations - Coupon payments are the interest rate or coupon that the company agrees to pay to bondholders is a major long-term cost. The better the company's credit rating, the lower the interest rate it can secure, reducing overall debt service costs.
8. Administrative and Miscellaneous Costs - Internal costs associated with managing the bond issuance, including project management, accounting, and any post-issuance reporting requirements.

Calculation solutions

- Interest rate paid to bondholder (investor) each period:
  - 10,000 bonds x $1,000 par = $10,000,000 total par value
  - $10,000,000 total par value x .10 = $1,000,000 interest paid to bondholder annually
- Issue price of bonds (use the market rate to determine the issue price (i.e., market price of the bond):
  - $10,000,000 x .56743 = 5,674,300
  - $1,000,000 x 3.60478 = <u>3,604,780</u>
  - Total issue price 9,279,080
- Coupon vs. market rate on price of bonds:
  - The coupon rate is 10% and investors could invest their money elsewhere and earn 12%. As such, the bonds are issued at a discount because investors are not willing to pay par value for the bond due to the difference between coupon and market rates. The "discount" makes up for the lower interest payments the bondholder is receiving over the life of the bond.
  - The discount is $10,000,000 – 9,279,080 = 720,920

EVALUATION INSTRUCTIONS

The participants are to be evaluated on their ability to perform the specific performance indicators stated on the cover sheet of this event and restated on the Judge's Evaluation Form. Although you may see other performance indicators demonstrated by the participants, those listed in the Performance Indicators section are the critical ones you are measuring for this particular event.

Evaluation Form Interpretation

The evaluation levels listed below and the evaluation rating procedures should be discussed thoroughly with your event director and the other judges to ensure complete and common understanding for judging consistency.

Level of Evaluation	Interpretation Level
Exceeds Expectations	Participant demonstrated the performance indicator in an extremely professional manner; greatly exceeds business standards; would rank in the top 10% of business personnel performing this performance indicator.
Meets Expectations	Participant demonstrated the performance indicator in an acceptable and effective manner; meets at least minimal business standards; there would be no need for additional formalized training at this time; would rank in the 70-89th percentile of business personnel performing this performance indicator.
Below Expectations	Participant demonstrated the performance indicator with limited effectiveness; performance generally fell below minimal business standards; additional training would be required to improve knowledge, attitude and/or skills; would rank in the 50-69th percentile of business personnel performing this performance indicator.
Little/No Value	Participant demonstrated the performance indicator with little or no effectiveness; a great deal of formal training would be needed immediately; perhaps this person should seek other employment; would rank in the 0-49th percentile of business personnel performing this performance indicator.

BUSINESS FINANCE SERIES
2025

JUDGE'S EVALUATION FORM
ASSOCIATION EVENT 2

Participant: ___________________________

ID Number: ___________________________

INSTRUCTIONAL AREA:
Financial Analysis

Did the participant:		Little/No Value	Below Expectations	Meets Expectations	Exceeds Expectations	Judged Score
PERFORMANCE INDICATORS						
1.	Discuss the nature of corporate bonds?	0-1-2-3-4	5-6-7-8	9-10-11	12-13-14	
2.	Discuss the cost of corporate bonds?	0-1-2-3-4	5-6-7-8	9-10-11	12-13-14	
3.	Calculate bond-related values?	0-1-2-3-4	5-6-7-8	9-10-11	12-13-14	
4.	Discuss the relationship between economic conditions and financial markets?	0-1-2-3-4	5-6-7-8	9-10-11	12-13-14	
5.	Organize information?	0-1-2-3-4	5-6-7-8	9-10-11	12-13-14	
21st CENTURY SKILLS						
6.	Reason effectively and use systems thinking?	0-1	2-3	4	5-6	
7.	Make judgments and decisions, and solve problems?	0-1	2-3	4	5-6	
8.	Communicate clearly?	0-1	2-3	4	5-6	
9.	Show evidence of creativity?	0-1	2-3	4	5-6	
10.	Overall impression and responses to the judge's questions	0-1	2-3	4	5-6	
					TOTAL SCORE	