1. **Telecom**: Briefly describe three key convergence issues for telecom regulators in the Caribbean. (12 points)

- Full credit
  - VoIP; emergency services
  - Defining services and markets
  - When to deregulate
  - Bundling
  - Number portability
  - Security
  - Institutional framework for regulation
  - Licensing and spectrum management
  - Quality of service
  - Cross ownership
  - Defining universal service
  - Legacy franchises and content regulation
  - Jurisdiction conflicts – geographic and role
1. **Energy**: Briefly describe the political risks regulators face in electricity pricing and when they arise. (12 points)

- Full credit
  - Efficiency vs. public acceptability; removing cross subsidies
  - Political sensitivity of prices
  - Political interests vs. independence
  - Financial needs for quality vs. affordability
  - Scapegoating

2. Describe the differences between Data Envelopment Analysis and Regression Analysis for benchmarking. (15 points)

- **Regression**
  - Statistical (econometric) approach
    - Single dependent variable
    - Statistical issues, such as autocorrelation
    - Gives statistical significance
    - OLS gives average efficiency
  - Can correct for data noise

- **DEA**
  - Frontier input/output relationship
  - No functional form
  - Benchmarks best in class
3. What information problems did the Barbados FTC face in the Cable and Wireless price review and how did the FTC resolve them? (10 points)

- **Problem**
  - C&W gave inadequate information

- **Response**
  - Regulator rejected tariff increase
  - Partial: Needed scrutiny of transactions

- **Extra credit**
  - Confidentiality of data

4. Compare historical cost, current/replacement cost, and market value approaches for asset valuation for rate making. (9 points)

- **Historical**
  - Original cost
  - False price signals

- **Replacement**
  - Cost of replacing today
  - Overcompensates investor unless adjust WACC
  - Proper price signals

- **Market value**
  - Value if operator sold
  - Double counts profits
5. List four issues raised by VoIP for telecom regulators in the Caribbean. (4 points)

- Regulate? How to price?
- Identifying and locating operators
- Is it a voice service?
- Number resources
- Interconnection
- Is this bypass?
- Security
- Emergency calls
- Competes with legacy voice
- Promotion of broadband
- Market monitoring and assessment