

Name:

49021 EVALUATION OF INFRASTRUCTURE INVESTMENTS
Assignment # 1 (Autumn 2016)

ANSWER-SHEET

1. Please summarize your results in the table below (5 Marks)

	Financial		Socio-economic	
	Proposal A	Proposal B	Proposal A	Proposal B
NPV				
IRR				
PB				
LCC				
EAC				
B/C				
CS				
PS				
TS				

Note: NPV, LCC, and EAC, CS, PS, and TS must be rounded off to the nearest billion dollars (i.e., no decimal places); PB and IRR to the nearest whole numbers (i.e., no decimals), and B/C - to just one decimal place.

2. Which proposal will you recommend from a financial perspective? (1 Mark)

A

B

Either

Neither

Why? Because _____

_____ (no more than 10 words)

3. Which proposal will you recommend from a socio-economic perspective? (1 **Mark**)

 A B Either Neither

Why? Because _____

_____ (no more than 10 words)

4. Will your recommendation (based on economic perspective) change if – due to malfunctioning technology - the useful economic life of project A gets reduced to 20 years)? (1 **Mark**)

 Yes No

Why? Because _____

_____ (no more than 10 words)

5. Will your recommendations (based on financial perspective) change if there was hyper-inflation over the useful life of this project (i.e., the discount rate is infinite) and the price of coal escalates by 20 percent instead of the estimated value of 2 percent? (2 **Marks**)

 Yes No

Why? Because _____

_____ (no more than 10 words)

6. Will your recommendation (based on economic perspective) change if – due to depressed global financial situation - there is 5 percent deflation (instead of inflation). (2 **Marks**)

 Yes No

Why? Because _____

_____ (no more than 10 words)

7. What is the **basis** of your calculations (for Question 1 on page 1) – Real Terms or Nominal terms? Please provide justification in support of your claim. (2 Marks)

Real terms

Nominal terms

None of the above

Why? _____

_____ (no more than 10 words)

8. Will your recommendation (based on economic perspective) change if evaluation is carried out with year twenty is the base year instead of year zero? (2 Marks)

Yes

No

Why? Because _____

_____ (no more than 10 words)

9. Will your recommendation (based on economic perspective) change if the construction time for each project is 5 years and the capital cost for each project is evenly spread over these five years? (3 Marks)

Yes

No

Why? Because _____

_____ (no more than 10 words)

10. Will your recommendation (based on economic perspective) change if – due to un-anticipated depressed state of the economy – the government decides to provide electricity to consumers (generated by both projects) for free for the first ten years; at 5 cents per unit for the next ten years; and at 10 cents there-after (3 Marks)?

Yes

No

Why? Because _____

_____ (no more than 10 words)

11. Will your recommendation (based on financial perspective) change if 'interest free' capital is available to build the hydro project, while interest is changed on capital required for building the thermal project? (3 **Marks**)

Yes

No

Why? Because _____

_____ (no more than 10 words)