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### **GIET UNIVERSITY, GUNUPUR – 765022**

B. Tech (Third Semester - Regular) Examinations, December - 2020

# BHSMS 3050 - ECONOMICS FOR ENGINEERS (Civil Engineering)

Time: 2 hrs Maximum: 50 Marks

The figures in the right hand margin indicate marks.

PA	ART – A: (Multiple Choice Questions)	$(1 \times 10 = 10 \text{ Marks})$				
<b>Q</b> .1	. Answer ALL questions					
a.	The horizontal demand curve parallel to x-axis implies that the elasticity of demand is					
	(i)Zero	(ii)infinite				
	(iii)equal to one	(iv) greater than zero but less than infinity				
b.	In which of the following market structure is the degree of clarge?	control over the price of its product by a firm very				
	(i) Imperfect competition	(ii) Perfect competition				
	(iii) Monopoly	(iv) In A and B both				
c.	The reduction of the value of an asset due to constant use and passage of time.					
	(i)book value	(ii)depletion				
	(iii)scrap value	(iv) depreciation				
d.	Depreciation is charged on to record the diminut	tion in their value due to usage				
	(i)Liabilities	(ii) capital				
	(iii)current assets	(iv)fixed assets				
e.	The first cost of any property includes					
	(i) the original purchase price and freight and transportation charge	(ii) installation expenses				
	(iii) initial taxes and permits fee	(iv) all of the above				
f.	If 'S' is the future capital accumulated in 'n' years at the rate of interest 'i' per annum, then present worth is:					
	$(i)   S/(1+i)^n$	(ii) S (1+i)n				
	(iii) S $(1+i)1/n$	(iv) None of these				
g.	The 72 rule of thumb is use to determine					
	(i) how many years money will triple	(ii) how many years of money will double				
	(iii) how many years to amass 1 million	(iv) how many years to quadruple the money				
h.	We may classify an interest rate, which specifies the actual rate of interest on the principal for one year as					
	effective rate	exact interest rate				
	nominal rate	rate of return				
i.	Reduction in the level of national income and output usual level is called	ction in the level of national income and output usually accompanied by the fall in the general price is called				
	Deflation	Depreciation				
	Devaluation	Inflation				
j.	In order to control credit, Reserve Bank of India should					
	(i) Increase CRR and decrease Bank rate	(ii) Decrease CRR and reduce Bank rate				
	(iii) Increase CRR and increase Bank rate	(iv) Reduce CRR and increase Bank rate				

#### **PART – B: (Short Answer Questions)**

 $(2 \times 5 = 10 \text{ Marks})$ 

#### Q.2. Answer *ALL* questions

- a. Differentiate between Micro economics and macro economics?
- b. Define Scarcity.
- c. Explain the concept of angle of incident?
- d. What is time value of money?
- e. Distinguish between GDP and GNP.

#### **PART – C: (Long Answer Questions)**

 $(6 \times 5 = 30 \text{ Marks})$ 

#### Answer ANY FIVE questions

Marks

- 3. What is engineering economics? Describe the natures of engineering economics?
- (6)

(6)

4. After a careful statistical analysis, Tasty Burgers of Mumbai concluded that the demand function for its burgers is:

Q =500 -3P+2Pi+0.1Y, where Q: Quantity demanded of its burgers, P: Price of its burgers, Pi: Price of burgers of jumbo burgers (the closest rival of Tasty Burgers), Y: Disposable income of consumers of Mumbai.

In the year 2011, P = Rs. 10/-; Pi = Rs20/-; Y = 6000

- (a) What is the price elasticity for the burgers of Tasty Burgers?
- (b) What is the income elasticity for burgers of Testy Burgers?
- (c) What is the cross elasticity of demand between the burgers of Testy Burgers and Jumbo Burgers ?
- 5. What is depreciation? Describe the needs and causes of depreciation in detail?

(6)

6. Calculate P/V ratio and sales volume to earn a profit of Rs 40,000 from the following information:

(6)

Sales: Rs 1,00,000

Profit: Rs 10,000

Variable cost is 70%.

7. Distinguish between Net present value and Internal rate of return method?

(6)

8. Calculate Internal Rate of Return from the following information: Initial investment = Rs 6.00.000

(6)

Life of the asset = 4 years

Estimated net annual cash inflows:

 $1^{st}$  year ended = Rs 1,50,000

 $2^{nd}$  year ended = Rs 2,00,000

 $3^{rd}$  year ended = Rs 3,00,000

 $4^{th}$  year ended = Rs. 2,00,000.

9. Briefly describe the primary functions of commercial banks?

(6)

10. Explain the different methods of measuring national income?

(6)