B.TECH/CSBS/3RD **SEM/HMTS 2101/2021**

ECONOMICS FOR ENGINEERS (HMTS 2101)

Time Allotted: 3 hrs Full Marks: 70

Figures out of the right margin indicate full marks.

Candidates are required to answer Group A and anv 5 (five) from Group B to E, taking at least one from each group.

Candidates are required to give answer in their own words as far as practicable.

Group - A

		(Multiple Choice Type Questions)			
1.	Choo	se the correct alternative for the following	ng: $10 \times 1 = 10$		
	(i)	Debit the receiver & credit the giver is the go (a) personal account (c) real account	lden rule of (b) nominal account (d) management account.		
	(ii)	The column of ledger which links the entry w (a) L.F. column (c) J.F. column	vith journal is (b) Particular column (d) Date column.		
	(iii)	Quick ratio is a (a) profitability ratio (c) turnover ratio	(b) activity ratio (c) liquidity ratio		
	(iv)	The difference between the value of good country and the value of goods and services it (a) balance of payment (c) balance of trade	_		
	(v)	A is one in which the number of buyers and sellers is very large, all engaged in buying and selling a homogeneous product without any artificial restriction and possessing perfect knowledge of market at a time. (a) monopoly market (b) perfectly competitive market (c) monopolistic market (d) oligopoly market.			
	(vi)	Rent of building is a (a) fixed cost (c) semi variable cost	(b) variable cost(d) opportunity cost.		
	(vii)	Which of the following is NOT an advantage of partnership business? (a) Easy to set up (b) Partners bring new ideas to the business			

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- (c) Unlimited liability
- (d) Partners share responsibilities of the business.
- (viii) SLM is NOT a method of depreciation in which
 - (a) depreciation is calculated on the original cost of the asset.
 - (b) annual depreciation charge remains fixed during the life of the asset.
 - (c) the cost of the asset is spread uniformly over the life of the asset by writing off a fixed amount every year
 - (d) a fixed rate of depreciation is charged on the book value of the asset over its useful life.
- (ix) In replacement analysis, the existing asset which is considered for replacement is called

(a) challenger

(b) winger

(c) defender

(d) striker.

- (x) The period required for the project's profit or other benefits to equal the project's cost is called
 - (a) investment period

(b) pay back period

(c) payment period

(d) equalisation period.

Group-B

- 2. (a) How will you define market? (CO5/ Remember/LOCQ)
 - (b) What are the features of perfect competition? (CO5/Remember/LOCQ)
 - (c) Explain equilibrium price with the help of a diagram. (CO4/Understand/LOCQ)

2 + 4 + 6 = 12

- 3. (a) What is the importance of national income data? (CO2/Remember/LOCQ)
 - (b) Why does the demand curve slope downward? (CO3/Understand/LOCQ)
 - (c) Discuss any three causes that may cause inflation.(CO6/Analyze/LOCQ)

4 + 3 + 5 = 12

Group - C

- 4. (a) Company or partnership which form of business is advisable? Provide logical argument in favour of your viewpoint. (CO2Analyze/LOCQ)
 - (b) Mention the various functions of India's Central Bank. (CO5 Understand/LOCQ)
 - (c) Write a short note on International Monetary Fund. (CO5/Understand/LOCQ)

4 + 4 + 4 = 12

- 5. (a) Discuss any three characteristics of a Joint stock company. (CO5/Remember/LOCQ)
 - (b) List out the general utility services provided by commercial banks to its customer. (CO5/Remember/LOCQ)
 - (c) Explain Balance of Trade. (CO3/Understand/LOCQ)

3 + 5 + 4 = 12

Group - D

- 6. (a) Sales 5,000 units. Selling Price Rs 50/unit. Variable Cost Rs 30/unit. Total Fixed Cost Rs 35,000. Based on these information, calculate (i) Contribution/unit (ii) BEP in unit. (iii)BEP in rupees. (CO1/Evaluate/HOCQ)
 - (b) Prepare journal entries for the following transactions. (CO6/Evaluate/HOCQ) 2021

3rd Sep Introduced Rs.5,00,000 by cheque as capital

4th Sep Withdrew Rs.90,000 cash from bank

10th Sep Purchased goods for cash Rs.30,000

15th Sep Sold goods for cash Rs.45,000

25th Sep Paid rent Rs.5,000 by cheque

30th Sep Sold goods to Mr. Patel on credit Rs.10,000

6 + 6 = 12

- 7. (a) Calculate (i) Quick ratio, (ii) Current ratio, (iii) Debt -Equity ratio from following figures of a company.
 - Cash & bank balance Rs.3.5, Debtors Rs.10.2, Stock Rs.7.3, Current liabilities Rs.9.5, Long term loans Rs 19.5, Equity Share Capital Rs.14, Reserve & Surplus Rs.12 9 (figures in Rs. Lakhs). (CO2/Analyze/IOCQ
 - (b) Calculate material price variance, cost variance and usage variance from the following information.
 - Standard output from each ton of material 50 units, Standard price per ton Rs.150, Actual usage 100 tons, Actual price per ton Rs 200, Actual output 6000 units.(CO2/Analyze/IOCQ)

6 + 6 = 12

Group - E

- 8. (a) What are the differences between SLM and WDV method of depreciation? (CO 5/Analyze/LOCQ)
 - (b) If you deposit Rs 2,000 at the end of every year for 5 years in your savings account paying 5% interest compounded annually, how much money you will get at the end of the 5th year?(CO6/ Analyze/LOCQ)

6 + 6 = 12

- 9. (a) Compare debt and equity financing. (CO2/Evaluate/HOCQ)
 - (b) A company is considering the following investment projects:

	Cash Flows (in Rs.)			
Projects	C0	C1	C2	C3
A	- 10,000	+10,000	+10,000	
В	- 10,000	+7,500	+7,500	
С	- 10,000	+2,000	+4,000	+12,000

Rank the project according to NPV method; assuming discount rates of 10 per cent. (CO1/Evaluate/HOCQ)

5 + 7 = 12

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Cognition Level	LOCQ	IOCQ	HOCQ
Percentage distribution	40.63%	34.38%	25%

Course Outcome (CO):

After successfully completing this course the students will be able to:

- 1. Evaluate a project and estimate the total cost of the project
- 2. Apply financial analytical methodologies to prepare a report regarding the financial performance of an organization
- 3. Participate actively in an organization's capital budgeting process
- 4. Provide vital inputs regarding the pricing of a product
- 5. Apply the knowledge of the interplay of various economic variables and indicators in workplace
- 6. Provide insight about different accounting concepts and apply broader concepts like costs, revenues, assets, liabilities, capital, profit, investment and interest

Department & Section	Submission Link
CSBS	$\underline{https://classroom.google.com/c/NDA1MzQyNzE5Njk3/a/NDc1ODc3OTk0Njc1/details}$