Program: Chemical Engineering
Curriculum Scheme: Revised 2012
Examination: Second Year Semester III
Course Code: CHC 306
Course Name: Chemical Engineering Economics
(Sample Questions)

Q.1.	Absence of close substitute for a particular product, is the characteristic of which type of market?
Option A:	Perfect competition market
Option B:	Monopoly market
Option C:	Oligopoly market
Option D:	Market under monopolistic conditions
Q.2.	Demand for a particular commodity when depends upon price of other related commodity, this is known as ________________
Option A:	Price elasticity of demand
Option B:	Income elasticity of demand
Option C:	Cross elasticity of demand
Option D:	Perfectly elastic demand
Q.3.	Large and reputed firms can get credits, loans from bank quickly, this kind of economies of scale is referred as _____________
Option A:	Financial economies
Option B:	Marketing economies
Option C:	Technical economies
Option D:	Managerial economies
Q.4.	The ratio of “total current assets” to “total current liabilities” is known as
Option A:	Cash ratio
Option B:	Turnover ratio
Option C:	Current ratio
Option D:	Cost capacity ratio
Q.5.	The amount of Rs. 5000 if invested at interest rate of 10% with continuous compounding, what will be the interest earned after 5 years?
Option A:	Rs. 3052.5
Option B:	Rs. 8052.5
Option C:	Rs. 8243.6
Option D:	Rs. 3243.6
Q.6.	Assuming there is a need of Rs. 10000 after 4 years, it was decided to deposit a certain amount of money at the end of every year for 4 years at 6% interest rate. What would this annual amount to be deposited?
Option A:	Rs. 2500
Option B:	Rs. 2067.3
Option C:	Rs. 2285.9
Option D:	Rs. 1854.8

Q.7.	The initial cost of equipment is Rs. 120000 and its salvage value at the end of its service life of 10 years is Rs. 8000, then what will be the declining balance factor if depreciation is calculated by declining balance method?
Option A:	0.436
Option B:	0.237
Option C:	0.158
Option D:	0.314
Q.8.	The tax charged on annual earnings of an individual is known as _______
Option A:	Property tax
Option B:	Capital gain tax
Option C:	Income tax
Option D:	Normal tax
Q.9.	When six tenth rule is used to calculate cost of equipment when cost of similar other equipment with different capacity is known, the equipment cost v/s capacity exponent used is equal to ____
Option A:	0.6
Option B:	0.1
Option C:	2
Option D:	0.8
Q.10.	For one company manufacturing a specific product, direct production cost per unit of product is Rs. 1000, and all other fixed costs are Rs. 10000000. The selling price of product is Rs. 2000 per unit. Then how many units of product per year will be produced by company at break even point?
Option A:	8000
Option B:	6000
Option C:	2000
Option D:	10000
Q.11.	The chemical manufacturing plant sells its product at Rs. 35 per kg. The annual production capacity of plant is 2500 tones. Fixed capital investment for plant is Rs. 3,75,00,000. Then what is the turnover ratio of this company?
Option A:	1.65
Option B:	2.33
Option C:	0.64
Option D:	2.97
Q.12.	A business firm has working capital of Rs. 2,93,000 and current assets of Rs. 4,70,000 in particular financial year. Then find out the current liabilities of firm in that financial year.
Option A:	Rs. 7,63,000
Option B:	Rs. 1,77,000
Option C:	Rs. 1,34,000
Option D:	Rs. 5,65,000
Q.13.	Annual rate of return on investment is calculated as ___________
Option A:	(Annual income) – (Annual production cost)
Option B:	(Working capital investment) / (Annual income)
Option C:	(Annual income) / (Annual production cost)
Option D:	(Annual profit) / (Total capital investment)

Q.14.	The company has total capital investment of Rs. 4,00,00,000 and working capital investment of Rs. 1,50,00,000. The average profit per year and average depreciation charges per year are Rs. 60,00,000 and Rs. 15,00,000 respectively. Then calculate the payout period for this company.
Option A:	3.33 years
Option B:	2.76 years
Option C:	6.21 years
Option D:	4.92 years
Q.15.	Waste heat recovery (WHR) equipment used saves the heat of value equivalent to Rs. 3,00,000. Total initial installed cost of this WHR equipment is Rs. 8,00,000. Annual operating cost and other fixed charges per year for this WHR equipment are Rs. 5000 and Rs. 1,60,000 respectively. Then calculate annual % returns on this investment.
Option A:	12.25 %
Option B:	10.62 %
Option C:	13.47 %
Option D:	16.87 %