

**Name:**  
**Enrolment No:**

**UNIVERSITY OF PETROLEUM & ENERGY STUDIES**  
**End Semester Examination (Online) – May, 2021**

**Program: BA(Hons) Economics**  
**Subject/Course: Public Economics-I**  
**Course Code: ECON 2018**
**Semester: IV**  
**Max. Marks: 100**  
**Duration: 3 Hours**

**Section-A**

- 1. Each question will carry 5 marks**
- 2. Select the correct answer(s)**

S.No.	Question	Marks	COs
1	Suppose total endowments of two goods are 10 and 50. The perimeter of the Edgeworth box will be a) 50                      b) 120                      c) 500                      d) 10	5	CO 1
2	The additional resource cost of another person consuming private good is a) Zero b) positive c) negative d) none of the above	5	CO 1
3	In a Pareto efficient equilibrium a) trying to make someone better off will make someone else worse off b) governments collect some tax revenue c) trying to make someone better off will make someone else better off d) there is a fair distribution of income	5	CO 1
4	The first theorem of welfare economics states that a) all prices are equal in a competitive equilibrium b) a competitive equilibrium is pareto efficient c) a competitive equilibrium maximizes the supply of goods d) a competitive equilibrium a maximizes profits	5	CO 2
5	Among the following, what causes market failure? 1) Externality 2) Asymmetry of information 3) Perfect competition <i>Select the correct answer using the codes given below.</i> a) Only 1                      b) 2 and 3 c) 1 and 2                      d) All of these	5	CO 1
6	In an economy of two individuals (A and B) and two commodities (X and Y) general equilibrium of exchange is reached when	5	CO

- a)  $MRTS_{XY} = MRTS_{YX}$       b)  $MRS_{XY} = P_X / P_Y$   
 c)  $(MRS_{XY})_A = (MRS_{XY})_B$       d)  $MRS_{XY} = P_Y / P_X$

1

**Section-B**

- 1. Each question will carry 10 marks**  
**2. Instruction: Write short/ brief notes**

7.	Are the following policies conduct for efficiency or equity motives: Explain the reason why a. Provision of old age pension to BPL family? b. Provision of Mid-day meal schemes by Govt. of India? c. Provision of higher education? d. Provision of retirement pensions? e. Prohibiting smoking in public places?	10	CO 2
----	---	----	---------

8.	Critically Analyse Arrow Impossibility Theorem with the following example. <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Group</th> <th style="padding: 5px;">Vanilla (V)</th> <th style="padding: 5px;">Chocolate (C)</th> <th style="padding: 5px;">Strawberry (S)</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">x</td> <td style="padding: 5px;">1</td> <td style="padding: 5px;">2</td> <td style="padding: 5px;">3</td> </tr> <tr> <td style="padding: 5px;">y</td> <td style="padding: 5px;">2</td> <td style="padding: 5px;">3</td> <td style="padding: 5px;">1</td> </tr> <tr> <td style="padding: 5px;">z</td> <td style="padding: 5px;">3</td> <td style="padding: 5px;">1</td> <td style="padding: 5px;">2</td> </tr> </tbody> </table>	Group	Vanilla (V)	Chocolate (C)	Strawberry (S)	x	1	2	3	y	2	3	1	z	3	1	2	10	CO 2
Group	Vanilla (V)	Chocolate (C)	Strawberry (S)																
x	1	2	3																
y	2	3	1																
z	3	1	2																

9.	What do you mean by effect of tax shifting? Explain the effect of unit tax on suppliers. (Use Diagram to explain)	10	CO 2
----	---	----	---------

10.	Explain Peacock-Wisemen Hypotheses and Cannons of Public Expenditure.	10	CO 3
-----	---	----	---------

11	Explain the difference between direct and indirect taxes. Show their impact on production, distribution, and economic activities.	10	CO 3
----	---	----	---------

**Section-C**

- 1. Each question carries 20 Marks.**  
**2. Instruction: Write long answer.**

12	<p>A steel factory has the right to discharge waste into a river. The waste reduces the number of fish, causing damage for fisheries. Let X denotes the quantity of waste dumped. The marginal damage, denoted MD, is given by the equation <math>MD = 2 + 5Q</math>. The marginal benefit (MB) of dumping waste is given by the equation <math>MB = 34 - 3Q</math>.</p> <p>(a) Calculate the efficient quantity of waste.</p> <p>(b) What is the efficient fee, in dollars per unit of waste, which would cause the firm to</p>	20	CO 4
----	--	----	---------

dump only an efficient quantity of waste?

(c) What would be the quantity dumped if the firm did not care about the fishery?