

Name:

Enrolment No:



**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination, May 2019**

**Course: Public Finance**

**Program: MA EE**

**Course code: ECON 7011**

**Instructions:**

**Semester: II**

**Time: 03 Hours**

**Max. Marks: 100**

**SECTION A**

		<b>Marks</b>	<b>CO</b>
Q 1	Government intervention is usually measured in terms of a. Share of public expenditure in GDP b. Ratio of public debt to GDP c. Ratio of fiscal deficit to GDP d. Number of government employees	<b>2</b>	<b>CO 1</b>
Q 2	A market failure exists when a. the price established in the market equals the marginal cost of production b. resources are optimally allocated c. the price established in the market does not equal the marginal social benefit and marginal social cost of producing the good d. competitive markets' clearing price equals both the marginal social cost and marginal social benefits	<b>2</b>	<b>CO 1</b>
Q 3	The productivity of a tax is not measured by a. Tax to GDP ratio b. Tax Buoyancy c. Tax elasticity d. Marginal tax rate	<b>2</b>	<b>CO 1</b>
Q 4	Progressive tax is one where the tax incidence a. Grows at the same rate as that of the tax base b. Grows at higher rate than that of the tax base c. Grows at lower rate than that of the tax base d. Remains independent of that of the tax base	<b>2</b>	<b>CO 1</b>
Q 5	Baumol's disease a. Rise in the government salaries even without any increase in the productivity b. Rise in the wage rate in the private sector with inflation c. Rise in the government expenditure due to wastages d. Rise in the government salaries as a result of inflation	<b>2</b>	<b>CO 1</b>
Q 6	Present value of cash inflows is ₹50,000 and present value of cash outflows is ₹55,000 then net present value is a. -₹105000 b. -₹5000	<b>2</b>	<b>CO 1</b>

	c. ₹5,000 d. ₹105,000		
Q 7	Income tax is progressivity is measured by a. Tax to income ratio b. Tax elasticity coefficient c. Tax inequality coefficient d. Laffer curve	2	CO 1
Q 8	International double taxation arises when a. Corporate dividends are taxed twice b. Interest income is taxed along with capital c. Foreign companies are taxed in the host and home countries d. Foreign investments are taxed	2	CO 1
Q 9	Income tax is said to be progressive when a. Marginal tax rate > average tax rate b. Marginal tax rate = average tax rate c. Marginal tax rate < average tax rate d. Marginal tax rate is constant	2	CO 1
Q 10	Tax cascading occurs when a. Sales tax is evaded b. Excess customs tariffs c. Retail sales tax includes previous tax d. Manufacturing tax falls on imports	2	CO 1
<b>SECTION B</b>			
Q 11	What are 'Merit goods' and how are they different from public goods?	5	CO 2
Q 12	Explain "Market Failure".	5	CO 2
Q 13	Bring out the essential differences between Wagner and Peacock-Wiseman theories of public expenditure.	5	CO 3
Q 14	Explain the need and theoretical basis for the Fiscal Responsibility and Budgetary Management Act in India.	5	CO 4
<b>SECTION-C</b> <b>Answer any two questions</b>			
Q 15	<p>Kenneth Arrow investigated the general problem of finding rules for deriving social preferences from individual preferences. He found that the so-called majority voting system does not always provide a solution especially, when there are three or more choices. This finding is well-known as Arrow's impossibility theorem, or Arrow's paradox.</p> <p>a. State the Axioms of rational choice as discussed by Arrow.</p> <p>b. As an illustration, consider the problem of a government determining the priority between three public goods: Roads, Water supply and Street-lights, through majority voting. Let the population is evenly divided between three groups, X, Y and Z. The rankings of the three</p>	15	CO 5

public goods by each of the groups are given below. For example, Group X people rate Roads as their number one choice, Water supply as their second choice and Street-lighting as their third choice.

Group	Roads	Water supply	Street-lights
X	1	2	3
Y	2	3	1
Z	3	1	2

Using the majority voting rule, explain in detail the process of deriving the social choice between the three public goods and prove that the final outcome need not reflect the individual preferences, thereby supporting the Arrow's theorem.

Q 16

Consider the case of VAT being levied on a commodity transactions chain – say, producing bread. At the first stage, a farmer sells wheat to a miller. In the second stage, the miller makes flour and sells to the baker. At the third stage, the baker manufactures bread and sells it to a retailer who sells it to the final consumers. The values of the transactions are as follows:

	Farmer (wheat)	Miller (flour)	Baker (bread)	Retailer (bread)
Purchase value (VAT-exclusive)	0	100	200	250
Sales value	100	200	250	300

Compute the total VAT liability using both 'Subtraction' method and 'Tax credit-invoice' method, and examine if the VAT liability computed by 'Subtraction' method is the same as that computed by the 'Tax credit – invoice' methods, – under the following cases (Show the results in separate tables):

c. Normal VAT: (No exemption, No zero-rating). VAT rate is uniform

15

CO 4

	<p>for all commodities at 10%.</p> <p>d. Normal VAT: (No exemption, No zero-rating). VAT rates differ: 4% on wheat, 6% on flour and 8% on bread.</p> <p>e. The commodity bread is zero-rated. VAT rate is uniform for all other commodities at 10%.</p> <p>f. The commodity bread is zero-rated. VAT rates differ: 4% on wheat, 6% on flour and 0% on bread.</p>		
Q 17	Do you think public debt affect the performance of Indian economy? explain in detail.	15	CO 3
<b>SECTION-D</b>			
Q 18	<p>Two consumers A and B have incomes of \$30,000 and \$100,000, respectively. A and B consume the same bundle of goods with a cost (including tax) of 24,000. The only tax on the economy is a commodity tax levied uniformly on all goods at a rate of 20 percent.</p> <p>i. What proportion of income is paid in tax by A and B?</p> <p>ii. What implications does such a tax have in terms of equity?</p> <p>iii. Is there any way the commodity tax can be restructured to improve its equity properties?</p>	10	CO 2
Q 18	Critically analyze the merits and demerits of Direct Taxes and Indirect Taxes. Discuss principles of taxation in this context.	20	CO 4 CO 5