Pakistan Institute
of Public Finance Accountants

Model Solutions

Public Finance

Summer Exam-2023

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Q.1. (a) **Public Goods:** In economics, a public good refers to a commodity or service that is made available to all members of a society. Typically, these services are administered by governments and paid for collectively through taxation. 06

Examples of public goods include law enforcement, national defense, and the rule of law. Public goods also refer to more basic goods, such as access to clean air and drinking water.

A public good has two key characteristics: it is **non-excludable** and **non-rivalrous**. These characteristics make it difficult for market producers to sell the good to individual consumers.

- **Non-excludable** means that it is costly or impossible for one user to exclude others from using a good.
- **Non-rivalrous** means that when one person uses a good, it does not prevent others from using it. Therefore, the good can be used simultaneously by more than one person.

Free Rider problem with Public Goods:

Free Rider: A person who does not pay tax but enjoys public goods. When individuals make decisions about buying a public good, a *free-rider* problem can arise—people have an incentive to let others pay for the public good and then to "free ride" on the purchases of others.

The cause of the free rider problem stems from the fact that public goods are non-excludable and non-rival. Non-excludable means you and everyone else enjoy the public good as a common resource without exclusion. Non-rival consumption means you don't have to compete with one another to enjoy the service.

Private companies find it difficult to produce public goods. If a good or service is non-excludable—like national defense—it is impossible or very costly to exclude people from using the good or service. So how can a firm charge people for it? That's why these goods are commonly provided by government to every member of the society.

Q.1. (b) **Government Budget:** A government budget is a document prepared by the government and/or other political entity presenting its anticipated government revenues and proposed spending/expenditure for the coming financial year. In most parliamentary systems, the budget is presented to the legislature and often requires approval of the legislature. Through this budget, the government implements economic policy and realizes its program priorities. 04

The government budget balance, also alternatively referred to as general government balance, public budget balance, or public fiscal balance, is the overall difference between government revenues and spending. A positive balance (When govt anticipated revenue is greater than its proposed spending) is called a **government budget surplus** (When govt proposed expenditures are greater than its anticipated revenues), and a negative balance is a **government budget deficit**.

Total Marks 10

Q.2. (a) Developmental expenditure refers to the expenditure of the government which helps in economic development by increasing production and real income of the country. The development or non-recurring expenditures of government of Pakistan consists of: 05

1. The expenditures made on the irrigation projects as on construction of new dams and canals.
2. The expenditures on means of transportation like roads.
3. The expenditures made on agricultural and industrial development.
4. The expenditures made on development of railway etc.

Non-development expenditures refer to those expenditure of the government which does not directly help in economic development of the country. Cost of tax collection, cost of audit, printing of notes, internal law and order, expenditure on defense etc.

The non-development or re-curring expenditures of the government of Pakistan are as:

1. The repayment of loans and interest against them.
2. The defense Expenditures
3. The expenditures of civil government.
4. The expenditures regarding the provision of social services.
5. The expenditures on subsidies.

Q.2. (b) **Criticism of Wagner's Hypothesis:** 05

Although the Wagner hypothesis has many attributes, it also has 'several defects. Wagner's law of increasing state activity was criticized by Allan. T. Feacock and Jack Wiseman on the following grounds:

1. Wagner's hypothesis deals with inter-disciplinary phenomenon. But it lacks interdisciplinary approach in its analytical framework.
2. Wagner's law lacks comprehensiveness in analysis. Political science, economics and sociology are among the several disciplines to be incorporated in any theory of public expenditure. The Wagner's hypothesis excludes all these characteristics.
3. It is based on an organic self-determining theory of the state, which is not the prevailing theory of the state in most western countries.
4. The theory ignores the influence of war on governmental spending, and
5. It stresses a long-term trend of public economic activity, which tend to overlook the significant 'time pattern' or process of public expenditure growth.

Total Marks 10

Q.3. In present time, the amount of public debt is increasing at very fast rate. Developing economies need loans to finance different projects, economic growth, economic stability and to finance their deficits. We can discuss the importance of Public Debt for developing economies under the following points.

1. **Meeting Wartime Expenditure**:

   The unwarranted situation arising out of war and the prosecution of war cannot be possibly met out of ordinary tax-revenue. Hence, the government has to resort to public borrowings to collect sufficient funds to meet the cost of war. There is no other way left with the government to meet this abnormal expenditure.

2. **Fighting against Contingencies:**

   Contingencies are uncalled situation that need a lot of money to fight against them. In such circumstances. public debt is only way out with the government to meet the cost of such contingencies like floods, famines, drought, earthquakes etc. Such situations need immediate solutions for which the public debt is the only answer because tax collection requires a lot of time.

3. **Coping with Depression:**

   In order to fight against depression in the economy, the government generally goes in for public debt. The depression brings an atmosphere of despair and frustration specially among producer because of low demand for goods and services due to falling prices and profits. The government, in fighting such a situation, resort to large scale construction of public works such as railway, roads. dams, canals etc. to provide employment opportunities to the unemployment.

4. **Financing Development Projects:**

   The government cannot speed up the pace of economic development only with its tax- revenues specially in under-developed countries because the taxable capacity in such countries is low and therefore, the huge amount required for the development of the economy cannot be collected through taxation. But the development is must and this can only be achieved through public borrowings. With the help of these loans, the government may take steps to bring about the speedy development of various sectors of the economy i.e agriculture, industry, transport and other basic infrastructure.

5. **Providing for Social Services:**

   Public borrowings finance the social services like educations, medical aid, cheap housing, social. security measures etc. They require huge sums to be invested. These loans add to the productive capacity of the people hence they turn to be productive. The amount to be spent on these services cannot be sufficiently be raised through taxation.

6. **Containing Inflationary Pressure:**

   Public debt may be used as an instrument to check inflationary pressures in the economy. The government draws out a lot of money in circulation from the people who have surpluses. It keeps their mounting expenditure to a modest size. Drawing out of purchasing power from the public may help check the inflation.

7. **Advantages to Investors:**
   Lenders of public debt are also benefiting by it. Their investment is safe with the government in the sense that its interest and the principal are guaranteed by the government and therefore, it has no risks of losing their investment. The liquidity of government debt is more because they can be sold at any time in the open market.
8. **Finance to Public Enterprise:**
   Public sector plays a significant role in the development of the economy. of a country. The nature of public enterprises is such as to take up such projects which are not undertaken by the private sector due to heavy investment. The government borrows funds from the public and finances them towards their capital to facilitate them to undertake such projects. Besides producing goods and services, they help in building sound economic foundation and putting the economy out of the vicious circle of poverty.

Total Marks 10

Q.4. a **Public Finance:** The study of government's expenditure and revenue is called *Public Finance.* It addresses the question as to how does the government raise the finances for its ever-increasing expenditure. 05

Private Finance: The study of individuals' expenditure and income is called *Private Finance.* It addresses how an individual manage its income to make various kinds of personal and private expenditure.

Q.4. b **Limitations of Fiscal Policy:** 05

1. **Forecasting:**
   The fiscal policy is devised around predictions of various economic activities. For the fiscal policy to work as desired, these predictions need to be accurate. However, economic instability cannot be predicted accurately. Unless the amount of revenue, expenditure and budget balance could be analysed, policy cannot be suitably planned.
2. **Time Lag:**
   In general, there exists a time lag between an action is required and the time when the fiscal measure has its impact felt. The interval in between determines the extent of the effectiveness of the measure undertaken.
3. **Crowding Out Effect:**
   Increased government spending for stimulating aggregate demand might result in crowding out; that refers to decreasing the size of private sector investment due to increased government spending.
   When government expenditure exceeds the tax revenue, then to cover fiscal deficit government has to borrow. By this demand for loans increases which causes increase in rate of interest. At higher rate of interest, investment decreases.
4. **Disincentive of Tax:**
   Raising taxes in order to reduce Aggregate Demand may cause demotivation to work. Consequently, a fall in productivity might be observed and Aggregate Supply may fall.
5. **Side Effects of decrease in Public Spending:**
   Reduced government spending (G) to decrease inflationary pressure could adversely affect public services such as Public Health and Education causing market failure and social inefficiency.
6. **Lack of Coordination with Monetary Policy:**
   Successful fiscal policy largely depends upon the coordination with Monetary Policy. Any lack in this regard will leads to failure of fiscal policy.

Total Marks 10

Q.5. a **Advantages of Zero-Based Budgeting:** 05

- Traditional budgeting considers the fact that "how much" expense shall be incurred.However, zero-based budgeting is on the "why" approach. It goes to the root of the expense. Zero-based budgeting aims toward achieving the objectives and targets.
- Zero-based budgeting aims at cost-benefit analysis. It does not focus on studying the changes in expenses and preparing a variance analysis (such as why the expenses increased or reduced). However, it considers the necessity of the expense and the benefit which will derive from the expense.
- Since every line item is to be justified, a zero-based budget overcomes the weakness of incremental budgeting of budget inflation.
- Zero-based budgeting ensures that the resources are allocated economically and efficiently.
- For each year, the preparation of the zero-based budgeting is with the same assumption of not taking a base for any previous period. Each department analyzes the expenses every year. They make sure that there is an inclusion of only those expenses in ZBB that are necessary and derive benefits.
- In ZBB. all activities and functions of projects are completely analysed, and the projects whose cost are more than their benefits, they are dropped. In this situation, this method of budgeting enhances the operations of sectors and oraganisations. Thus, when the obsolete schemes are dropped or the schemes with less utility are abandoned, the departmental budget can be reduced to large extent.

Q.5. b 05

Capital Budget is a statement of the government's estimated capital receipts and capital expenditure. Capital budget covers capital items which are of non-recurring nature.	**Revenue Budget** is a statement of the government's estimated revenue receipts and revenue expenditure for a period of one financial year. Revenue budget covers revenue items which are of recurring nature and are non-redeemable.
Capital Budget has two components: Capital Receipt and Capital Expenditure.	Revenue Budget has two components: Revenue Receipt and Revenue Expenditure.
Capital Receipts are receipts of the government which create liabilities or reduce financial assets, e.g., market borrowing, recovery of loan, etc. Capital Expenditure is the expenditure of the government which either creates assets or reduces liability like creation of an asset, investment.	The Revenue Receipts include both tax revenue like income tax, excise duty and non-tax revenue like interest receipts, profits. Revenue Expenditure is expenditure for normal running of the government department and various services, interest charges on debt incurred by government, subsidies etc.

Total Marks 10

Q.6. a **Effects of Taxation on Income Distribution:** 04

Taxation has both favourable and unfavourable effects on the distribution of income and wealth. Whether taxes reduce or increase income inequality depends on the nature of taxes. A steeply progressive taxation system tends to reduce income inequality since the burden of such taxes falls heavily on the richer persons.

But a regressive tax system increases the inequality of income. Further, taxes imposed heavily on luxuries and nonessential goods tend to have a favourable impact on income distribution. But taxes imposed on necessary articles may have regressive effect on income distribution.

However, we often find some conflicting role of taxes on output and distribution. A progressive system of taxation has favourable effect on income distribution but it has disincentive effects on output.

A high dose of income tax will reduce inequalities but such will produce some unfavourable effects on the ability to work, save, investment and, finally, output. Both the goals—the equitable income distribution and larger output—cannot be attained simultaneously.

Q.6. b **Advantages and Disadvantages of Progressive Tax:** 06

Advantages:

1. **Built-in stabilizer:** Progressive tax works as built-in stabilizer as its rate is auto adjusted. Progressive tax is helpful for aggregate demand management.
2. **Equitable:** It is argued that a progressive tax is relatively equitable as high amount of tax is collected from rich class and less from poor.
3. **Relative certainty:** Tax slabs for progressive tax are well defined for tax payers. Therefore, this tax is relatively certain as tax payer are well aware that when and how much tax they have to pay.

Disadvantages:

1. **Discourages economic activity:** Progressive tax discourages macroeconomic activity, because tax rate increases along an increase in income of the citizens. High rate of tax trims down the saving ability and then reduces the pace of capital formation.
2. **Persuasion of tax evasion:** Progressive tax is discouraging for high income groups; therefore, they may evade tax at the very least.
3. **Invasion of individual rights:** Opponents of progressive tax argue that it is a sort of invasion of individual rights as they feel it as punishment of their efforts.

Total Marks 10

Q.7. a (i) **Proportional Tax:** If the rate of tax does not change with the change in income level, it is called Proportional Tax. **Example:** Tax on services. Income tax in a particular slab OR Zakat where rate remains unchanged are the examples of proportional taxes. 03

Lump Sum Tax: If the amount of tax does not change with the change in income level, then, it is called lump Sum Tax. **Example:** Professional tax in Pakistan. Thus, proportional tax is levied as the fixed percentage of income whereas the Lump Sum tax is the fixed amount irrespective of income/value.

Q.7. a (ii) **Specific Tax:** Tax per unit regardless to the value of good is called Specific Tax. **Example:** Toll Tax 03

Ad valorem Tax: If tax is imposed as percentage of value of the product is called Ad valorem Tax. **Example:** General Sales Tax

Q.7. b **Canon of Elasticity:** This canon requires that the rules governing the expenditure policy of the government should not be rigid. It should be allowed to vary according to needs and circumstances. The expenditure policy should be elastic, rather than rigid in character. 04

There should be enough scope for change in expenditure policy, according to time and requirement. Government should be able to increase public expenditure during periods of economic emergency and to decrease during periods of normalcy.

Canon of Surplus: The government should always aim at a surplus of income over expenditure. Findlay observes "public authorities must earn their living and pave their way like ordinary citizens". Government must live within his means. It should not always overspend and run into permanent deficits years after years.

If possible, the expenditure should be kept less than the earnings of government. The surplus thus generated can be used when there is unavoidable deficit. Surplus can be generated either by controlling public expenditure or by increasing current revenue.

Total Marks 10

Q.8. a **Redeemable and Irredeemable Debt:** On the criterion of maturity, public debts may be classified as redeemable or irredeemable. Loans which the government promises to pay off at some future dates are called redeemable debts. For redeemable debts, the government has to make some arrangement for their repayment. They are, therefore, terminable loans. 04

Whereas loans for which no promise is made by the government regarding the exact date of maturity, and all that the government does is to agree to pay interest regularly for the bonds issued, are called irredeemable debts. Their maturity period is not fixed. They are generally of a long duration. Under such loans, society is burdened with a perpetual debt, as tax-payers would have to pay heavily in the end. Therefore, redeemable debts are preferred on grounds of sound finance and convenience.

Q.8. b **Article-160**(1) Within six months of the commencing day and thereafter at intervals not exceeding five years, the President shall constitute a National Finance commission consisting of the Minister of Finance of the Federal Government, the Ministers of Finance of the Provincial Governments, and such other persons as may be appointed by the President after consultation with the Governors of the Provinces. 06

(2) It shall be the duty of the National Finance Commission to make recommendations to the President as to: -

a. the distribution between the Federation and the Provinces of the net proceeds of the taxes mentioned in Clause (3);
b. the making of grants-in-aid by the Federal Government to the Provincial Governments;
c. the exercise by the Federal Government and the Provincial Governments of the borrowing powers conferred by the Constitution; and
d. any other matter relating to finance referred to the Commission by the President.

Total Marks 10

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