APPENDICES

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APPENDIX A

CONCEPTS OF DEMONETISATION AND GST

DEMONETISATION

What is Demonetisation?

Demonetisation is the act of stripping a currency unit of its status as legal tender. It occurs whenever there is a change in the national currency. The current form of money is pulled out of circulation and is replaced with new currency notes/coins.

Demonetisation in India

On November 8, 2016, the Government of India demonetised the two largest denomination notes—₹ 500 and ₹ 1,000—with immediate effect and, thus, they ceased to be legal tender. At one fell swoop, 86 per cent of the cash in circulation (amounting to ₹ 15.44 lakh crore) was thereby rendered invalid. These notes were to be deposited in the banks by December 30, 2016, while restrictions were placed on cash withdrawals.

The basic objectives of this measure were: (*i*) destroy the black economy by forcing the 'dehoarding' of cash held by those generating black income, (*ii*) curb the use of high denomination notes by terrorists and smugglers, (*iii*) eliminate counterfeit currency, and (*iv*) curb corruption.

Benefits of Demonetisation

1. **Tax on black money:** The most important way to view demonetisation is as a tax administration measure, one designed to tax holdings of black money. However, since high-denomination notes are also earned through genuine channels and tax paid on their holdings, it is necessary to devise a mechanism that distinguishes between 'white' and 'black' income. Accordingly, the government scheme included a screening mechanism, aimed at separating 'white' income from 'black'. Cash holdings arising from incomes that had been declared could be deposited in banks and ultimately exchanged for new notes. But those with black money faced three difficult choices. They could: (*i*) declare their unaccounted wealth and pay taxes at a penalty rate; (*ii*) continue to hide it, not converting their old notes, thereby suffering a tax rate of 100 per cent; or (*iii*) launder their black money, paying a cost for converting the money into white.
2. **Transfer of wealth to the government:** Demonetisation has effected a transfer of wealth from holders of black money to the public sector, which can be redeployed in various productive ways – to repay government debt, recapitalise banks, or even redistribute it back to the private sector.
3. **Tax compliance:** Demonetisation can be interpreted as a regime shift on the part of the government. According to *Economic Survey* 2016-17, it is a demonstration of the government's resolve to crack down on black money, showing that tax evasion will no longer be tolerated or accepted as an inevitable part of life. Tax evaders might decide in the years to come that it would be better to pay a moderate regular tax rather than risk having to pay a sudden penal tax. Corruption and compliance could be permanently affected.

   The question that we must address at this juncture is: Did demonetisation result in better tax compliance? In this context, *Economic Survey* 2017-18 notes that over the 13-month period since demonetisation (November 2016-November 2017), as many as 10.1 million new taxpayers were added as compared to an average of 6.2 million in the preceding six years. However, not all increase can be attributed to demonetisation because there is also a natural increase in the number of tax payers every year. To account for this, a regression analysis is undertaken in the Survey. This analysis reveals that **1.8 million additional taxpayers were added over the said period due to demonetisation-cum-GST,** representing 3 per cent of existing taxpayers. However, most of the new filers reported income close to the income tax threshold of ₹ 2.5 lakh, limiting the early revenue impact. The Survey hopes that "as income

growth pushes many of the new tax filers over the threshold, the revenue dividends should increase robustly."

4. **Digitisation:** One intermediate objective of demonetisation is to create a less-cash economy, as this is the key to channelling more saving channelled through the formal financial system and improving tax compliance. Since cash transactions are anonymous, helping to preserve privacy, they are the main conduits of black money. As against this, digital transactions can be fully tracked and help control the flow of black money. *Economic Survey* 2016-17 mentions two cardinal virtues of such transactions. First, they help bring people into the modern 'wired' era. Second, they bring people into the formal economy, thereby increasing financial saving, reducing tax evasion, and levelling the playing field between tax-compliant and tax-evading firms (and individuals).
5. **Impact on real estate:** Demonetisation could have a particularly profound impact on the real estate sector. In the past, much of the black money accumulated was ultimately used to evade taxes on property sales. However, following demonetisation, as the role of black money reduces and financial transactions in the realty sector increasingly take place through electronic means, such type of tax evasion will also diminish.

The Costs and Demerits of Demonetisation

1. **Inconvenience and economic disruption:** Cash is the lifeblood of the Indian economy where an overwhelming proportion of economic transactions (more than 95 per cent) are done in cash. With as much as 86 per cent of this gone in the wake of demonetisation, there was widespread inconvenience to the public and substantial economic disruption. Billions of man-hours were wasted in queues waiting for cash, millions lost their jobs and incomes particularly in the informal sector and tragically many deaths were also reported. As far as consumption expenditure was concerned, it dropped sharply while investment activity was also badly impacted because of liquidity crunch. As a result, growth in income and output suffered a severe setback as shown in the data presented in the next sub-section.
2. **Not much impact on black money:** Much of the public enthusiasm about demonetisation came from the expectation that those with hoards of cash would not be able to exchange it in banks for new currency and would, therefore, lose their ill-gotten money. This group includes businessmen or politicians (either on their own behalf or on behalf of political parties) or bribe-taking bureaucrats. However, this has not materialised as this group of black money hoarders employed various means to convert their black money into white, sometimes in connivance with bank officials or by offering hefty commissions of 30 to 40 per cent (or even more) to 'intermediaries' to exchange their currency. These intermediaries organised a large number of individuals who could take smaller 'explainable' amounts of cash (less than ₹ 2.5 lakh) to the banks for deposit.

   As a result of these tactics adopted by the black money hoarders, the demonetisation exercise did not bring the desired results. The government had initially expected that around 25 per cent of the total currency (₹ 15.44 lakh crore) would not return to the system. However, according to Reserve Bank's *Annual Report* 2016-17, as many as 98.96 per cent of the ₹ 500 and ₹ 1,000 denomination notes returned to the banking system, which means that only ₹ 16,000 crore (1.04 per cent) did not come back to the system. This shows that demonetisation as an instrument to control black money proved a fiasco. In this context, it may be pointed out that in the demonetisations of 1946 and 1978, about 14 per cent and 10 per cent, respectively, of high denomination currency did not return to the central bank.
3. **Limited scope for digitisation:** Professor Deepak Nayyar has pointed to the fact that in India, just 53 per cent of adults have bank accounts, with two-fifths of these accounts lying dormant. Only 15 per cent of the existing bank accounts are used to make or receive payments. Bank penetration would have been far less but for the 250 million accounts that were opened under

the Pradhan Mantri Jan Dhan Yojana (PMJDY) during 2014-16, of which 60 million accounts have zero balance even today. It is, thus, clear that almost half of our population has no access to the banking system, and even a larger proportion does not use it. Digitisation in such conditions is a difficult proposition especially taking into account the fact that the bulk of India's population is not technology-savvy. There are also high cyber-security risks involved in a massive transition to digitisation, exposing a vast number of bank accounts to frauds and thefts. Experience from developed countries suggests that it will take many years before India can bring down cash transactions to 60 per cent from 95 per cent in number and to 50 per cent from 75 per cent in value.

4. **Not much effect on black economy:** According to eminent economist Arun Kumar, **the black money the government was targeting is only about 1 per cent of the black wealth held in the country and only 3.5 per cent of the black income generated in 2016**. Even if the government managed to suck out all the black money in circulation, it would not have much effect on the black economy which involves various activities in which black incomes are generated. It is no secret that the big fish who have amassed huge wealth from black money hold most of it in real estate, gold and other real assets. Some of it is also held as assets abroad. None of these are affected by demonetisation.
5. **Demonetisation unlikely to tackle the problem of terrorism:** At the time of demonetisation it was argued that the scheme would nullify counterfeit currency which is thought to be used to finance terrorist activities. However, as pointed out by Percy C. Mistry, counterfeit money is too small a proportion of the currency in circulation (under ₹ 400 crore out of over ₹ 16.6 lakh crore or 0.024 per cent) to be an issue. Moreover, if the old notes could be counterfeited, it is likely that the same will happen to the new notes. It must also be understood that terrorist activities are not just financed with Indian currency, they can be and are fuelled by dollars, gold, diamonds, drugs and so on. Terrorism is a continuing problem, not a one-off issue.
6. **Cost of remonetisation and pressure on RBI:** Printing of new notes to remonetise the economy cost the Reserve Bank ₹ 7,965 crore, more than double the amount it had spent on printing in the previous year. The surplus transferred to the Government of India was only ₹ 30,659 crore, less than half of what it was in the previous year. This diminished transfer to the government was in large part caused by the increased expenditure due to demonetisation. Moreover, the surge of cash that entered the banking system on account of demonetisation entailed banks having large deposits with the Reserve Bank. This meant that the RBI had to pay more to these banks as interest payments.

Goods and Services Tax (GST)

Goods and Services Tax (GST) is a tax levied when a consumer buys a good or service. It is meant to be a single, comprehensive tax that subsumes all other indirect taxes on consumption like service tax, etc. Thus, **GST is a single national uniform tax levied across the country on all goods and services.** The objective is to end the regime of multiple taxes on goods and services and bring them under one rate. **The motto is 'One Tax, One Market, One Nation'.**

Implementation of GST. GST was introduced in India on July 1, 2017, after more than a decade of efforts. Prior to this, India's indirect tax system was mired in multi-layered taxes levied by the Centre and State governments at different stages of the supply chain such as excise duty, octroi, Central sales tax (CST) and value added tax (VAT), among others. Now, all these are subsumed under GST. In particular, **the indirect taxes subsumed under GST are as follows:**

Central taxes: (*i*) Central excise duty; (*ii*) Duties of excise (medicinal and toilet preparations); (*iii*) Additional duties of excise (goods of special importance and textile and textile products); (*iv*) Additional duties of customs; (*v*) Special additional duty of customs; (*vi*) Service tax; (*vii*) Cesses and surcharges related to supply of goods or services.

State taxes: (*i*) State VAT; (*ii*) Central sales tax; (*iii*) Purchase tax; (*iv*) Luxury tax; (*v*) Entry tax (all forms); (*vi*) Entertainment tax (not levied by the local bodies); (*vii*) Taxes on advertisements; (*viii*) Taxes on lotteries, betting and gambling; and (*ix*) State cesses and surcharges.

While subsuming State-level taxes, the Central Government guaranteed all State governments 14 per cent annual growth in revenues for the next five years, a compensation that will be financed by cesses on demerit goods (tobacco, luxury cars, aerated beverages, etc.).

The Indian GST applies to supply of most goods and services occurring throughout the territory of India with taxing powers assigned as follows:

1. All sales within a State are taxed both by the Centre as well as the States over a common base, and at the same rate, which together add up to the full GST rate. The taxes levied are called State GST (SGST) and the Central GST (CGST), respectively.
2. All sales from one State to another are taxed by the Centre at the full GST rate applicable. The relevant tax levied is called the Inter-State GST (IGST). Proceeds from IGST are to be apportioned among the States. There will be seamless flow of input credit from one State to another.
3. GST is a destination-based tax. All SGST on the final product will ordinarily accrue to the consuming State.

The GST has different tax rates—0, 5, 12, 18 and 28 per cent. The tax on a host of goods and services like food, health and educational services is zero per cent while it is 28 per cent (14 per cent Central GST and an equal State GST) on luxury items. The GST is levied at 5 per cent, 12 per cent or 18 per cent on the remaining goods and services. Some goods receive special treatment under the GST. For instance, on ultra-luxury items and demerit goods such as big cars and tobacco products, there is a special cess (over and above a 28 per cent GST rate). Gold is taxed at 3 per cent, precious stones at 0.25 per cent, while alcohol, petroleum products, stamp duties on real estate and electricity duties are excluded from the GST regime and they continue to be taxed by the State governments at State-specific rates. There are also several exempted sales and exports are zero rated, which allows exporters to claim refund for taxes paid on inputs. The term 'services' is exhaustively defined as 'anything other than goods'.

The GST excludes small firms with a turnover below ₹ 20 lakh, and only taxpayers with a turnover of ₹ 1.50 crore or more charge GST on sales at the prescribed rates and can deduct GST paid on their purchases. Taxpayers who have a turnover of ₹ 20 lakh to ₹ 1.50 crore have the option of participating in a 'composition scheme' whereby they pay a tax on turnover instead of value added.

Administration of GST. The administration of GST has been harmonised between the Centre and the States using a common IT system and common rules with the powers to audit being shared. The audit and administration duties are shared as follows: for taxpayers with a turnover not exceeding ₹ 1.50 crore, State tax administrations administer 90 per cent of taxpayers and the Central tax administration administers the remaining 10 per cent; for taxpayers with a turnover over ₹ 1.50 crore, 50 per cent are administered by the Central tax administration and 50 per cent by the States.

To support the administration of the taxpayers, a common nation-wide IT backbone called the GST Network (GSTN) has been developed and all taxpayers are required to file their tax returns through this network. This portal captures all tax returns and allows for verifying input tax credits claimed by businesses. The systems can also aid in the selection of taxpayers through a risk-based selection mechanism.

A GST Council has been created for coordination between the Centre and the States, and between States, under the chairmanship of the Union Finance Minister. It has Finance Ministers of all States as members. The GST Council is an innovative and integrative body that formulates a common policy and administrative framework for the GST that applies to the whole country.

Benefits of GST. According to the Government, the main benefits and implications of GST are as follows:

1. Uniform taxation of goods and services across all States. All business processes have been made common, including the IT processes relating to registration, return, payment and refund of taxes. **This has paved the way for making the whole nation a common market.** As a result, most physical restrictions and taxes on inter-State trade will be eliminated.
2. The pre-GST regime suffered from cascading of taxes in which VAT and other State levies were being imposed on value inclusive of Central taxes. GST has removed such cascading of taxes.
3. GST will help in furthering 'cooperative federalism' as nearly all domestic indirect tax decisions will be taken jointly by the Centre and the States.
4. According to *Economic Survey* 2016-17, compared with the past, the new GST regime is simpler. Previously, every good faced an excise tax levied by the Centre and a State VAT. There were at least 8-10 rates of excise and 3-4 rates of State VAT, the latter potentially different across States. So, there was a structure of multiple rates across 29 States. All these have now been consolidated into the GST's five rates, applied uniformly across States (one good, one Indian tax).
5. Invoice matching to claim input tax credit will deter non-compliance and foster compliance. Previously, invoice matching existed only for intra-State VAT transactions and not for excise and service taxes nor for imports. Thus, there are reduced chances of corruption and leakage.
6. Tax neutrality for business as the scope of input tax credit has been widened considerably. It has also ensured that integrity of tax chain is maintained throughout the supply chain up to the stage of consumption. In the erstwhile regime, no credit of certain indirect taxes, such as SAD (special additional duty) on imports paid by a trader or the CST (Central sales tax) was available.
7. One of the benefits of GST is the **voluntary compliance** it would elicit. In this respect, *Economic Survey* 2017-18 presents some interesting information. **First**, there are about 1.7 million registrants who were below the threshold limit (and hence not obliged to register) who nevertheless chose to do so. **Further**, about 1.6 million taxpayers (17 per cent of the total) are registered under the composition scheme, the current threshold for which is fixed at ₹ 1.50 crore. They pay a small tax (1 per cent, 2 per cent or 5 per cent) on their turnover and are not eligible for input tax credits. This set-up not only minimises their administrative burden but also makes it difficult for them to sell to larger firms, which would not be able to secure input tax credits on such purchases. For this reason, about 1.9 million (24 per cent of total regular filers) of the registrants sized between the GST threshold of ₹ 20 lakh and the composition limit who could have opted for the composition scheme chose not to do so and decided instead to file under the regular GST. Put differently, 54.3 per cent {1.9/(1.9 + 1.6)} of those eligible to register under the composition scheme, chose instead to be regular filers.
8. GST has aided in widening the tax base, *for example*, the entire textile chain has now been brought under the tax net. Further, a segment of land and real estate transactions—"works contracts", referring to housing that is being built—has also been brought under the tax net. This, in turn, would allow for greater transparency and formalisation of cement, steel and other sales, which tended to be outside the tax net. The formalisation will occur because builders will need documentation of these input purchases to claim tax credit.
9. Another benefit will be the impact of GST in formalisation of the economy and, consequently, the information flow that would eventually augment direct tax collections. In the past, the Centre had little data on small manufacturers and consumption (because the excise was imposed at the manufacturing stage), while States had little data on the activities of local firms outside their borders. Under GST, there will be seamless flow and availability of a common set of data to both the Centre and the States, making direct tax collections more effective.

10. The long-term benefits include the GST's impact on financial inclusion. Small businesses can build up a real-time track record of tax payments digitally.
11. GST makes the supply chain and logistics efficient. With the introduction of GST, the checkposts in the States have been removed as the whole nation has the same tax and compliance structure. If this trend continues, the reduction in transport costs, fuel use, and corruption could be significant. There is ample evidence to suggest that logistics costs within India are high. *For example*, one study suggests that trucks in India drive just one-third of the daily distance of trucks in the US (280 km vs. 800 km). This raises direct costs (especially in terms of time to deliver), indirect costs (firms keeping larger inventory), and location choices (locating closer to suppliers/customers instead of the best place to produce). Further, only about 40 per cent of total travel time is spent driving while one quarter is taken up by checkpoints and other official stoppages. Eliminating checkpoint delays could keep trucks moving almost 6 hours more per day, equivalent to additional 164 km daily—pulling India above global average and to the level of Brazil.
12. Overall, logistics costs (broadly defined, and including firms' estimates of lost sales) is 3-4 times the international benchmarks. Studies show that inter-State trade costs exceed intra-State trade costs by a factor of 7-16, thus pointing to the clear existence of border barriers to inter-State movement of goods. GST will dramatically reduce these costs and give a boost to inter-State trade in the country

A Critical Evaluation of GST. The introduction of GST in India has been accompanied by State administrations experiencing disruptions in the initial days after GST introduction. This included a lack of clarity on discontinuation of local taxes; demands for exemptions on lower tax rate; and on account of coping mechanisms to preserve revenue collections (for instance, Maharashtra increased motor vehicles tax to compensate for losses due to GST). "There have also been reports of an increased administrative tax compliance burden on firms and a locking-up of working capital due to slow tax refund processing. High compliance costs are also arising because the prevalence of multiple tax rates implies a need to classify inputs and outputs based on the applicable tax rate. Along with the need to apply the correct rate, firms are required to match invoices between their outputs and inputs to be eligible for full input credit, which increases compliance costs further." **Many firms are facing immense difficulties in preparing proper tax returns for filing.** To address some of these problems, the GST Council is making efforts for lowering and consolidating tax rates. On the administrative side, the GST Council recommended faster processing and payments of refund claims. To ease the compliance burden for small and medium businesses, the Council changed the filing frequency from monthly to quarterly for firms with annual aggregate turnover up to ₹ 1.50 crore. The Council also increased the turnover limit for the 'compensation scheme' from ₹ 75 lakh to ₹ 1.50 crore.

A comparison of India's GST with GST in other countries carried out in World Bank's *India Development Update*, March 2018, reveals the following results:

1. **The tax rates in the Indian GST system are among the highest in the world.** The highest GST rate in India at 28 per cent is the second highest among a sample of 115 countries which have a GST (VAT) system and for which data is available. A comparison with other Asian countries shows that India has the highest standard GST rate in Asia.
2. **India has among the highest number of different GST rates in the world.** As stated earlier, the Indian GST system currently has 4 non-zero GST rates (5, 12, 18 and 28 per cent). As against this, as many as 49 countries (of the 115 countries considered in the Report) use a single GST rate, 28 use two rates, and only 5 countries including India use four rates.

As correctly pointed out in the Report, in addition to the number of rates, the extent of exemptions and sales at a zero rate is a critical design parameter for a GST. "While exemptions allow to ease the tax burden on items with a high social value, such as health care, they also reduce the tax base and compromise the logic of the GST as they can reintroduce cascading where an

exempted good or service is an input into another taxable good or service; create incentives for vertical integration to keep the exempt status; and raise compliance costs by making it necessary to allocate input taxes between exempt and non-exempt output when manufactured or traded together." However, an assessment of exemption in the Indian GST system cannot be undertaken before revenue figures have stabilised. Moreover, international comparisons of exemptions are risky and challenging as their content and design differs significantly across countries.

Despite all the above criticisms and problems, there is no doubt that the introduction of GST in India is an 'historic reform'. Comparing the design of India's GST system to similar taxes on value added across other countries, it is clear that India's GST system is relatively more complex, with its high tax rates and a larger number of tax rates, than in comparable systems in other countries. However, while problems on the administrative and design side persist, introduction of GST should be considered as the start of a process, not the end. The adaptation and adjustment to the new system might take many more months, but as the Report points out, "the benefits of the GST are likely to outweigh its costs in the long run."

POINTS TO REMEMBER

- Demonetisation is the act of stripping a currency unit of its status as legal tender. On November 8, 2016, the Government of India demonetised the largest denomination notes, ₹ 500 and ₹ 1,000, with immediate effect and they ceased to be legal tender.
- GST (Goods and Services Tax) was introduced on July 1, 2017. It has subsumed all indirect taxes except customs duty. The motto is 'One Tax, One Market, One Nation'.

EXERCISES

Multiple Choice Questions

1. Demonetisation implies:
   (*a*) appreciation in the value of a currency in terms of other currencies
   (*b*) depreciation in the value of a currency in terms of other currencies
   (*c*) the act of stripping a currency unit of its status as legal tender
   (*d*) none of the above
2. Which of the following is not a benefit of demonetisation?
   (*a*) it helps in taxing black money
   (*b*) it helps in taxing the profits of NRIs (Non-Resident Indians)
   (*c*) it promotes tax compliance
   (*d*) it helps in digitisation of the economy
3. Which of the following was not a basic objective of demonetisation in India?
   (*a*) eliminating counterfeit currency
   (*b*) improving tax compliance
   (*c*) destroying the black economy
   (*d*) curbing the use of high denomination notes by the terrorists and smugglers
4. Which of the following statements regarding GST is true?
   (*a*) it subsumed all direct taxes
   (*b*) it subsumed all indirect taxes (excluding customs duties)
   (*c*) it subsumed all direct taxes and indirect taxes
   (*d*) it replaced service tax

5. GST was introduced on:
   (*a*) November 8, 2016 (*b*) July 3, 1991
   (*c*) July 1, 2017 (*d*) February 1, 2018
6. Which of the following taxes has not been subsumed under GST?
   (*a*) Central Excise Duty (*b*) Income Tax
   (*c*) State VAT (*d*) Central Sales Tax
7. The number of tax rates under GST are:
   (*a*) 5 (*b*) 3
   (*c*) 2 (*d*) 1

ANSWERS

1. (*c*) 2. (*c*) 3. (*b*) 4. (*b*) 5. (*c*)
6. (*b*) 7. (*a*)

Fill in the Blanks

1. ₹ 500 and ₹ 1,000 currency notes were demonetised on _____.
2. Demonetisation is a means to tax the holdings of _____.
3. As a result of demonetisation, only ₹ _____ crore (_____ per cent) of ₹ 500 and ₹ 1,000 currency notes did not return to RBI.
4. Printing new notes to remonetise the economy cost ₹ _____ crore to the Reserve Bank of India.
5. Pradhan Mantri Jan Dhan Yojana was used to convert black money into _____.
6. All indirect taxes except _____ have been subsumed under GST.
7. All SGST on the final product accrues to the _____.
8. GST in India has _____ rates.
9. The chairman of the GST council is the _____.

ANSWERS

1. November 8, 2016 2. black money 3. 16,000, 1.04
4. 7,965 5. white money 6. customs duties
7. consuming state 8. 5 9. Union Finance Minister

State whether True or False

1. The Government of India demonetised ₹ 500 and ₹ 1,000 currency notes on November 8, 2016.
2. Demonetisation failed to control black money as 98.96 per cent of ₹ 500 and ₹ 1,000 currency notes returned to the banking system.
3. Demonetisation helped the Reserve Bank of India in tackling the inflationary pressures on the economy.
4. As a result of demonetisation, economic growth picked up considerably in the immediate post-demonetisation period.
5. As a result of demonetisation, food inflation fell down in the immediate post-demonetisation period.
6. The motto of GST is 'One Tax, One Market, One Nation'.
7. GST was introduced on November 8, 2016.
8. GST in India has 3 rates.

9. All sales from one state to another are taxed by the Centre at the full GST rate applicable.
10. GST is a destination-based tax.
11. GST has ensured uniform taxation of goods and services across all states.
12. Corporate tax is a part of GST.

ANSWERS

1. True	2. True	3. False	4. False	5. True
6. True	7. False	8. False	9. True	10. True
11. True	12. False			

Very Short Answer Type Questions (Solved)

1. What is demonetisation?

Ans. Demonetisation is the act of stripping a currency unit of its status as legal tender. Thus, it implies an act of cancelling the legal tender status of a currency unit in circulation.

2. When did the Government of India undertake demonetisation?

Ans. The Government of India demonetised ₹ 500 and ₹ 1,000 currency notes on November 8, 2016.

3. What were the basic objectives of demonetisation?

Ans. The basic objectives of demonetisation were: (i) destroying the black economy by forcing the 'de-hoarding' of cash held by those generating black incomes, (ii) curbing the use of high denomination notes by terrorists and smugglers, (iii) eliminating counterfeit currency, (iv) curbing corruption.

4. What is GST?

Ans. GST is a tax levied when a consumer buys a good or service.

5. When was GST introduced?

Ans. GST was introduced on July 1, 2017.

6. What is the motto of GST?

Ans. The motto of GST is 'One Tax, One Market, One Nation'.

7. Have all indirect taxes been subsumed under GST?

Ans. No, customs duties have not been subsumed under GST. Thus, all indirect taxes (except customs duties) have been subsumed under GST.

8. What is the purpose behind the creation of the GST Council?

Ans. The GST Council has been created for coordination between the Centre and states, and between the States.

9. Who is the chairman of the GST Council?

Ans. The Union Finance Minister is the Chairman of the GST Council.

Short Answer Type Questions (Unsolved)

1. What is demonetisation? Why did Government of India carry out demonetisation in November 2016?
2. How does demonetisation help in (i) tax compliance, and (ii) digitisation of the economy?
3. It is said that demonetisation did not have much impact on black wealth. What is your view? Write reasons for it.
4. What is GST? When was it introduced in India?
5. How are the taxing powers assigned under GST in India?
6. How many tax rates does GST have in India? Mention some of the goods on which tax rate is zero per cent under GST.

7. How can the GST help in the formalisation of the economy?
8. How can the GST help make the supply chain and logistics efficient?

Long Answer Type Questions (Unsolved)

1. What is demonetisation? What are the expected benefits from demonetisation?
2. What are the benefits and costs of demonetisation?
3. What is demonetisation? Discuss the macroeconomic impact of demonetisation in India in November 2016.
4. What is GST? What Central and State taxes have been subsumed under GST?
5. Explain GST. What is its objective? How are taxing powers assigned under GST?
6. What do you understand by GST? What are its benefits?
7. Attempt a critical evalution of GST as implemented in India.

APPENDIX B

INFRASTRUCTURE: CASE STUDIES

CASE STUDY I: MEANING AND TYPES OF INFRASTRUCTURE

Meaning of Infrastructure

In Economics, infrastructure is often described as social overhead capital (SOC) to distinguish it from directly productive capital (DPC). According to noted author and economist, Albert O. Hirschman, "SOC (infrastructure) is usually defined as comprising those basic services without which primary, secondary and tertiary productive activities cannot function. In its wider sense, it includes all public services from law and order through education, and public health to transportation, communications, power and water supply, as well as such agricultural overhead capital as irrigation and drainage systems".[1] However, the core of the concept of infrastructure restricts it to **power and electricity generation (the energy sector), the petroleum sector, coal, steel, cement, transport and communications, port installations, etc.**

The common characteristics of infrastructure are as follows:

First, infrastructure is a source of external economies. Once a railway line or a road is constructed, all people located on its route benefit from it. Similarly, a power generation unit and a transmission system can be used to obtain power by all persons within the region the system is located.

Secondly, infrastructure falls in the category of public goods. In the theory of public expenditure, goods are classified either as 'private goods' or 'public goods'. Private goods are purchased by individuals from their own income and are meant for their personal consumption. Public goods are provided by the State. Infrastructure is a kind of public good and although private sector's participation in the development of infrastructure has been increasing over time, an overwhelming part of the infrastructure (particularly electricity and power generation, rail and road transport, etc.), continues to be provided by the State, particularly in developing countries.

Thirdly, infrastructural development involves heavy costs. Underlining this point, economist Ragnar Nurkse has stated that infrastructure consists of 'large and costly installations' which are beyond the capacity of individuals or private organisations to establish.[2] Historical experience the world over has been that normally individuals or corporate enterprises rarely had the requisite resources for the development of infrastructure. Sometimes even if they had the capacity to do so, they were reluctant to make investment in infrastructural development because the gestation period of most of these projects is pretty long and the expected return quite uncertain.

Fourthly, infrastructural development is a kind of investment which creates conditions for innovations and from this point of view, there is all the more reason why it should be developed by the State. Eminent economist A.J. Youngson has argued with particular reference to education (it is equally relevant with respect to other forms of infrastructure) that "it is a matter of facilitating the evolution of new ideas, of new combinations of the factors of production. It is indeed a matter of promoting innovations, and it is the peculiar quality of innovation that it makes nonsense of average calculations of future benefits. It is at this point that the idea of external economies meets that of Schumpeterian innovation. *Overhead capital is facilitating investment which promotes innovation"*.[3] The role of infrastructure in inducing innovation is of great importance for the development of underdeveloped countries. In these countries, infrastructure creates conditions whereby it becomes possible for producers to adopt modern techniques.

Finally, infrastructure stimulates directly productive activities. Sometimes directly productive activities would not be possible at all without developing infrastructure. Professor Hirschman argues, "Access to an area by sea, road, rail or air is indispensable before other economic activities unfold there".[4]

1. Albert O. Hirschman, The Strategy of Economic Development (New Haven: Yale University Press, 1958), p.83.
2. Ragnar Nurkse, Problems of Capital Formation in Underdeveloped Countries (London: Oxford University Press, 1952), p.268.
3. A.J. Youngson, Overhead Capital (Edinburgh, Edinburgh University Press, 1967), p.71.
4. Albert O. Hirschman, op.cit., p.86.

Case Study II: Infrastructure—Development of Railways

The development and expansion of railways has revolutionised the transport system the world over. In India, the railways provides the principal mode of transportation for freight and passengers. The Indian Railways has been a good integrating force for more than l65 years (the first railway line was operationalised in 1853 between Bombay and Thane). The railways is the most convenient mode of transport for long distances and is most suitable for carrying heavy and bulky goods like iron ore, iron and steel, heavy machinery, minerals, etc. Railways carries raw materials from the mines and the quarries and other interior areas of the country to the industrial centres. It links up the various regions of the economy and increases the occupational mobility of people. In short, it plays a crucial role in economic development.

In terms of route length, Indian Railways network is the fourth largest in the world after US rail/roads and Russian and Chinese railways. As regards freight traffic, again it is fourth but substantially behind the other three railway systems. In passenger traffic, even though Japan carries more passengers, Indian Railways is the largest in terms of passenger kilometres. The total route length of Indian Railways is 66.7 thousand km., of which 23.6 thousand km., (*i.e.*, 35.4 per cent) is electrified. During 2015-16, the railways carried 8,107 million passengers and 1,101.5 million tonnes of revenue-earning freight traffic. The railways operates services on three gauges—the broad gauge (1.676 metres), the metre gauge (1.00 metre), and the narrow gauge (0.762 metre and 0.610 metre). The broad gauge network is the largest operating system (55,956 km) in the country and accounts for the bulk of traffic, both freight and passenger.

Railways and the Plans

At the time of Independence, the railways was under severe strain and, therefore, the First Plan was devoted mainly to the rehabilitation and modernisation of rolling stock and of fixed assets. On account of the heavy replacement demands, the need for expansion could not be fully met in the First Plan. The Second Plan also had to make a substantial provision for rehabilitation of aged assets. The emphasis in this plan, however, shifted to the programmes required to augment line capacity on different sections of the railways and to the procurement of additional rolling stock to meet the growing demand for railway transport arising from increased production in the agricultural and industrial sectors of the economy. The Third Plan envisaged a rapid expansion of railways due to its importance for industrial programmes (particularly the carrying of heavy goods like coal, iron ore and other materials for the steel plants, etc.). It was also recognised that in view of the difficulties of coping with anticipated increase in traffic with steam traction in the regions where coalfields and new steel plants are situated, electrification and dieselisation had become an operational necessity. Provision was accordingly made for the electrification of a number of sections on the Eastern, South-eastern, Central and Southern Railways.

The basic objective of the Fourth Plan for the railways was to provide in full for the increase in traffic expected, to modernise the railway equipment and practices within the limits of the funds available and to convert 1,676 km. of metre gauge into broad gauge in areas of rapid economic development and high traffic potential. The expenditure on rolling stock, track renewals and line capacity works constituted about 70 per cent of the expenditure on railways in the Fourth Plan. The Fifth Plan recognised the important role that railways had to perform in developing the transportation systems in the economy and provided for an outlay of ₹ 2,350 crore of which around 68 per cent was to be for rolling stock, track renewals and line capacity works.

The Sixth Plan kept an outlay of ₹ 5,100 crore for railways of which ₹ 2,100 crore was to be for rolling stock and ₹ 500 crore for track renewal. However, the actual expenditure in the Sixth Plan was around ₹ 6,573 crore. The railways recorded an excellent performance during the Seventh Plan in terms of additional transport effort, rehabilitation of the system, financial performance, better productivity, technological upgradation, modernisation and industrial relations. The main thrust in the Eighth Plan for railways was on capacity generation. Some other aspects which

received special attention during the Eighth Plan were rehabilitation, modernisation, energy conservation, manpower planning, financial viability, safety and customer satisfaction through better quality of services.

During the Planning period covered by the first Eight Five Year Plans (the period from 1950-51 to 1996-97), passenger output measured in terms of non-suburban passenger kilometres increased by 5.4 times and the freight transport measured in terms of net tonne kilometres increased by 6.3 times. However, the share of railways in total traffic steadily declined over these years. It came down from 89 per cent in 1951 to 40 per cent in 1995 in respect of freight traffic and from 68 per cent to 20 per cent in respect of passenger traffic.

The main thrust of the Ninth Plan was on strengthening the capacity of the Indian Railways as the prime carrier of long-distance bulk freight and passenger traffic. To this end, the railways is concentrating on electrification of dense corridors, improvement in operations, optimal assets utilisation, increasing container facility and raising manpower productivity. There was a strategic shift in the objectives of railways under the Tenth Plan so that it regains some of the business it has lost to other modes of transport over the past few decades. With this end in view, the thrust was on modernisation and technological upgradation of the railway system. It was also decided to make Indian Railways a more user-friendly and market-savvy organisation.

The Eleventh Five Year Plan document observed that the infrastructure deficit for the railways is reflected in saturation of routes and slow speeds for freight and passenger traffic. The objectives for the railways during the Eleventh Plan were laid down as follows: (*i*) capacity enhancement, (*ii*) technology upgradation, (*iii*) achieving higher maintenance standards, and (*iv*) safety and passenger amenities. The approved outlay for railways during the Eleventh Plan was ₹ 2,33,289 crore while the actual expenditure was ₹ 1,92,147 crore. Thus, there was a shortfall of ₹ 41,142 crore (17.6 per cent). Total outlay for railways in the Twelfth Plan was ₹ 5,19,221 crore.

Problems and Issues in Railway Development

The main problems and issues in railway development are as follows:

1. The biggest constraint that railways faces today is of inadequate network capacity and infrastructure. In fact, capacity creation on railways over the years has not kept pace with the transport output. In this context, the *White Paper* released by the Ministry of Railways along with the Railway Budget for 2015-16 pointed out that **whereas over the period 1950-51 to 2013-14, route-kilometres increased by just 23 per cent and double and multiple route length by 289 per cent, the freight and passenger output went up by more than 14 and 17 times respectively.** This clearly showed that additional infrastructure had not kept pace with the increase in traffic output. As a result, there was large-scale congestion of the system.
2. Freight earnings account for over 67 per cent of the total traffic earnings of Indian Railways. Indian Railways' freight traffic rate is among the highest in the world (it is four times as compared with the US rail/roads, more than three times as compared with Russian railways and more than twice as compared with Chinese railways). One of the main reasons for this is that passenger fares are very low in India as compared with most of the foreign railways with the result that there are substantial losses in passenger operations (the losses in passenger operations were as large as ₹ 21,391 crore in 2013-14). **High freight rates cross-subsidise low passenger fares**. This makes the fare-freight ratio of Indian Railways one of the lowest in the world. According to *Economic Survey*, 2016-17, while during the period 2002-03 to 2015-16, passenger fares increased at a CAGR (compound annual growth rate) of only 3.6 per cent, the freight rates increased at a CAGR of 6.2 per cent. Thus, while passenger fares have remained more or less flat, freight rates have increased sharply since 2012-13. **High freight rates result in high prices of transported goods creating inflationary conditions in the economy.**

3. There is a massively skewed traffic pattern on the railways with heavy traffic moving on the golden quadrilateral and its diagonals, connecting the four metropolitan cities of Delhi, Kolkata, Mumbai and Chennai. Further, 161 out of a total of 247 sections, *i.e.*, **65 per cent of the sections are running at 100 per cent or above line capacity of high-density network routes. Freight transit time on these highly congested routes is severely affected. A number of mineral and port routes are also severely congested.**
4. **There is a common corridor for both freight and passenger traffic.** With freight trains and slow-moving passenger trains on the same corridor, it is extremely difficult to run fast passenger services. Further, with emphasis on passenger traffic, passenger trains take precedence over running of freight trains. On some of the major trunk routes, introduction of new passenger trains directly affects freight train movement. It is, therefore, not surprising that the average speed of freight trains is very low.
5. There is a large shelf of pending projects which is estimated at ₹ 4,91,510 crore on the basis of originally estimated costs. Projects have been languishing for years on account of absence of assured funding. Moreover, there is constant pressure to undertake new projects (mostly in the form of new lines) by various sections of the society. The severe scarcity of funds has led to the spreading of resources thinly over a large number of projects, which get delayed due to shortage and uncertainty in the availability of funds, leading inevitably to time and cost over-runs.
6. Indian Railways has suffered from chronic and significant under-investment as a result of which the network expansion and modernisation has not happened at the requisite pace leading to an erosion of share in national freight and passenger traffic. Due to under-investment, there has been severe congestion on the network which has resulted in the inability of the system to accommodate more trains and increase the speed of trains. Therefore, "the need of the hour is to undertake a massive infrastructure expansion and decongestion programme coupled with upgradation of technology and judicious electrification of tracks along with enhancement of terminal capacity".
7. The market share of rail transport has fallen drastically over the years with the road sector being the biggest gainer. For improving the market share of the railways, a focused strategy aimed at providing better services at competitive tariffs is required. In addition, it is also necessary to provide faster transit and efficient handling at terminals. As far as passenger segment is concerned, it is facing increasing competition from better roads and low-cost, no-frills airlines. Accordingly, railways needs to provide an adequate number of faster intercity and medium-distance services to face the competition and win back business.
8. In a situation of limited resources, significant savings in investment and in cost of operations (along with improvement in quality of services) can be realised by inducting modern technology. **The existing technology of both electric and diesel locomotives is considerably old**. There is a need for introduction of higher horsepower electric and diesel locomotives, which are also fuel-efficient. In view of the rapid growth of technology, it is necessary for us to build a technology base of our own, capable of not only selecting and assimilating the latest and most appropriate technologies but also of developing them further, continually, so as to achieve near self-sufficiency in the technological know-how.

   In addition to the above problems and issues, it is also necessary to emphasise some other factors that have affected the operations of railways adversely. These include lower capacity utilisation of wagons, rampant corruption, strikes on various pretexts, etc. Also, the incidence of online failure of equipment is fairly high. **This brings about 'quasi-paralysis of corridor' and consequent wastage of transport capacity**. This leads to underutilisation of costly assets and even somewhat nullifies the investments. Thus, there is an urgent need to improve design, manufacture and maintenance capabilities. The failure frequency has to be reduced to near-zero.