

Marks : 40	FYJC Subject : Economics Topic – Money or Partition Values	Time : 1.5 Hrs.
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SOLUTION**Q1. Complete the correlation:****(5)**

1. **Contingent function of money** Basis of credit Secondary functions of money standard of deferred payments.
2. Primary function of money Medium of exchange **Secondary function of money** Transfer of value
3. Divisibility smaller denomination **Portability** easy to carry from one place to another.
4. Commodity money shells **Plastic money** credit card.
5. Barter system Goods Modern economy **Money**

Q2. Suggest an economic term :**(5)**

1. Procedure for dividing the data into equal parts.

Ans. Partitioning

2. Provision for making payments in future

Ans. Deferred payment

3. Value that divides the series into ten equal parts.

Ans. Deciles

4. Money not accounted for in the bank and not disclosed to the government

Ans. Black money

5. Value that divides the whole set of observations into four equal parts.

Ans. Quartiles**Q3. Choose the correct option :****(5)**

1. Arrange in the order of evolution of money.

(a) Metallic money

(b) Animal money

(c) Metallic Coins

(d) Commodity money

1) a, b, c, d 2) b, d, a, c 3) d, c, a, b 4) c, a, b, d

Ans. b, d, a, c

2. Statements that do not apply to Quartiles.

a) First arrange the values in ascending or descending order.

b) Observation can be divided into 4 parts.

c) They are represented as Q_1 , Q_2 and Q_3 d) Q_2 is also known as median.

1) a 2) b and c 3) a, b, and c 4) None of these

Ans. None of these

3. D from the given data.

Data – 4, 5, 6,7,8,9,10,11,12

a) 7 b) 9 c) 10 d) 12

Ans. 10

4. Statements related to partition values that are correct.

a) Exact divisions of percentiles into 100 parts gives 99 points

b) Deciles have total 9 parts

c) Quartiles are shown by Q_1 , Q_2 and Q_3

d) Symbolically, percentiles and deciles are shown by P and D

1) a and c 2) a and b 3) a, b and c 4) a, c and d

Ans. a, c and d

5. Arrange in the order of evolution of money.

(a) Plastic money

(b) Paper money

(c) Electronic money

(d) Credit money

1) b, d, a, c 2) a, b, c, d 3) d, c, b, a 4) c, b, a, d

Ans. b, d, a, c

Q4. Identify the concept with reasons. (Any two) : (5)

1. Vasantsheth provides coal from his shop to farmers in exchange for food grains.

Ans. (a) Identified concept: Barter exchange.

(b) Explanation of concept: barter exchange is a type of exchange in which goods and services are exchanged for goods and services.

2. Babanrao deposits his money in a nationalized bank.

Ans. (a) Identified concept: Bank money

(b) Explanation of concept: Bank money refers to deposits which are in the form of cash saved by people in banks.

3. Charu used her debit card to purchase a shirt for her younger brother.

Ans. (a) Identified concept: Plastic money

(b) Explanation of concept: Plastic money is a money in the form of credit cards and debit cards that is used in transaction due to advanced technology.

4. Malathi purchased a house through an agent. The agent accepted the commission amount in cash but did not issue a receipt to her.

Ans. (a) Identified concept: Black money

(b) Explanation of concept: Black money is a type of money is received in cash but not accounted for and on which tax is not paid to the government.

5. To prevent misuse/fraudulent use of the national currency, a note ban is imposed on its use at certain times.

Ans. (a) Identified concept: Demonetization.

(b) Explanation of concept: Demonetization is a tool of a withdrawal of metal coins, paper notes from use as legal tender.

Q5. Short notes (Any Two):**(10)****1. Difficulties in Barter system.****Ans.**

- 1. Problem of double coincidence of wants:** lack of double co-incidence of wants was one of the major limitations of barter system. For instance, person 'A' has cloth and he wants rice in exchange and person 'B' has rice but he does not want cloth in exchange. In this case exchange between 'A' and 'B' would not take place as their wants do not coincide with each other.
- 2. Lack of common measure of value:** While exchanging goods for goods, there was no standard unit of account to determine the value of a commodity. e.g. it was difficult to compare two liters of milk with two kilograms of rice..
- 3. Difficulties in storage of goods:** it is necessary to store goods for future consumption. Sometimes due to perishable nature of certain goods it was difficult to store them for future. Perishable commodities like milk eggs, fish, vegetable etc. were difficult to store. Difficulties were also experienced due to lack of space required to store heavy and bulky goods.
- 4. Indivisibility of certain goods:** in barter system it was inconvenient to divide animals, house etc. into small parts, so it was difficult to fix proportion of one commodity in exchange for another commodity, e.g. individual 'A' has a sack of wheat and he wants a goat in exchange. Individual 'B' has a goat and he wants only half a sack of wheat. In this situation exchange between the two commodities is impossible due to indivisible nature of goat, for it being a live stock.
- 5. Problem of making deferred payments:** deferred payment means payments to be made in future. Repayment of loan was difficult due to exchange of commodities, e.g. it was difficult to repay the perishable goods in the same condition in future.

2. Types of money**Ans.**

- 1. Animal money:** in protohistoric period 'animal money' was used as a means of exchange, e.g. cow sheep goat etc. however due to their indivisible nature, commodity money came into existence.
- 2. Commodity money:** in olden days, the commodities to be used as money were dependent upon climatic conditions and culture, e.g. animal skin, grains, shells, feathers, tusk, salt, rare articles and stones were used as a medium of exchange. Due to the problem of storage of such commodities metallic money came into existence.
- 3. Metallic money:** metallic money used durable metals such as gold, silver, copper, aluminum, nickel etc. however scarcity of precious metals and lack of uniformity in metallic pieces gave rise to the use of metallic coins.
- 4. Metallic coins:** in ancient times, rulers of various kingdoms used small pieces of metals and affixed their seals on them. With the passage of time, the monetary system was taken over by the government authorities with a view to give uniformity and legal status to metallic coins. Coins can be classified as under.
 - a) Standard or full bodied coins:** full bodied coins are those whose face value is equal to their intrinsic value. Face value indicates the exchange value fixed by issuing authority. These coins are made out of precious

metals like gold, silver etc. standard coins were used for some days during the British period.

- b) **Token coins:** token coins are those whose face value is higher than their intrinsic value. These coins are made of cheaper metals like aluminum, nickel etc. these coins are of lower denominations and are generally used for settling smaller transactions. In India all coins in circulation today are token coins. Difficulties in transportation of token coins gave rise to paper money.
5. **Paper money:** paper money was a substitute for metallic money. In course of time issue of currency notes was monopolized by the central bank of the country. In India one rupee note and all coins are issued by the government of India. Currency notes of higher denominations are issued by the Central bank (reserve bank of India). Inconvenience in handling and risk of storing paper money gave rise to bank money.
6. **Bank money or credit money:** bank money refers to deposits which are in the form of cash saved by the people. It is used to create credit money. This can be withdrawal and transferable on demand by means of cheque, demand draft etc. cheque, demand draft are not actual money but credit instruments through which deposits are transferable. Credit money plays an important role in economic development. On the background of global economy, cashless transaction gained importance thereby giving rise to plastic money.
7. **Plastic money:** plastic money is easy to use in transaction due to advanced technology. Debit cards and credit cards are used as plastic money. Further innovation in smart transactions led to the introduction of electronic money. Find out: recent changes introduced by banks for safe use of plastic money
8. **Electronic money:** E-money or electronic money is a monetary value that is stored and transferred electronically through a variety of means i.e. a mobile phone tablet smart cards, computer etc. it is backed by the Central Bank. Electronic money is used for purchases and transactions globally. Digital wallets are also a form of stored electronic money.

3. Qualities of Money

Ans.

1. **General Acceptability:** anything which is used as money must be easily accepted by all for exchange purpose.
2. **Divisibility:** money should be easily divisible into smaller denominations to facilitate small transactions.
3. **Durability:** Money should also possess the characteristic of durability. Currency notes and coins are being used repeatedly and shall continue to do so for years together on account of durability.
4. **Congnizability:** Money must be easily recognised. It should have certain distinct marks so as to avoid confusion by the receiving person.
5. **Portability:** it should be easy to carry from one place to another without any difficulty expense and inconvenience e.g. currency notes are easily portable.
6. **Homogeneity:** Money of a particular denomination must be homogeneous or identical in its features.
7. **Stability:** Money should have a stable monetary value. It serves as a measure of value to exchange goods and services. These goods can be sold and purchased in future as per requirement.

Q6. Answer in long (Any One) :

(10)

1. Explain the functions of money in detail

Ans.

A) Primary functions

- 1) **Medium of Exchange:** the most important function of money is to serve as medium of exchange. Any commodity can be purchased or sold for money.
- 2) **Measure of value or unit of account:** price is the value of a commodity or a service expressed in terms of money. Money enables to compare the prices of commodities. Different currencies are used to express the value of commodity in different countries, e.g. rupee in India, Dollar in U.S.A. pound in U.K. yen in Japan etc. income and expenditure of all kinds, assets and liabilities are stated in terms of money as a unit of account.

B) Secondary functions:

- 1) **Standard of deferred payments:** Under barter system taking loans was easy but its repayment was difficult because loan was in the form of grains, cattle etc. Money has overcome this difficulty. Payments to be made at a future date is called deferred payments. By serving as a standard measure of payment over a time money makes borrowing and lending easy.
- 2) **Store of value:** Money acts as a store of value. Money not only satisfies wants in the present but also makes provision for satisfaction of wants in future. This is possible due to savings. According to lord J.M.Keynes money is a link between the present and future.
- 3) **Transfer of value:** Money enables transfer of value from one person to another and from one place to another. Real assets like building, plot, shop, agricultural land etc. can be sold at one place and can be purchased at another place with the help of money.

C) Contingent functions: according to prof. Kinley, in the modern period money plays an important role almost in all economic transactions.

- 1) **Measurement of National Income:** National Income is expressed in money terms. Distribution of national income among the four factors of production is in terms of monetary rewards. E.g. rent wages interest, profits etc.
- 2) **Basis of credit:** Commercial banks credit money on the basis of primary deposits. Money provides a liquid base for creation of credit money.
- 3) **Imparts liquidity to wealth:** Money is called the most liquid asset. Money can be easily converted into any asset and any asset can be converted into money. e.g. a person can purchase gold and if he wants he can sell it and purchase government bonds securities etc.
- 4) **Estimation of macro economic variables:** Macro economic variables like gross national product (GNP), total savings total investment etc. can be easily estimated in monetary terms. It also

2. Solve the following

a) Calculate Q_3 for the following data.

Sales (in lakhs ₹)	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70
No. of firms	20	30	70	48	32	50

Ans.

Sales (in lakhs ₹) (x)	Number of firms (f)	CF
10 – 20	20	20
20 – 30	30	50
30 – 40	70	120
40 – 50	48	168
50 – 60	32	200
60 – 70	50	250
	n = 250	

$$\begin{aligned}
 Q_3 &= \text{size of } 3 \left(\frac{n}{4}\right)^{\text{th}} \text{ observation} \\
 &= \text{size of } 3 \left(\frac{250}{4}\right)^{\text{th}} \text{ observation} \\
 &= \text{size of } 3 (62.5)^{\text{th}} \text{ observation} \\
 &= \text{size of } 187.5^{\text{th}} \text{ observation}
 \end{aligned}$$

Size of 187.5^{th} observation lies in cf 200
Hence, quartile class is 50-60

$$\therefore L = 50, f = 32, cf = 168, n = 250, h = 10$$

$$Q_3 = l + \left(\frac{\frac{3n}{4} - cf}{f}\right)h$$

$$Q_3 = 50 + \left(\frac{3 \times 250 - 168}{32}\right) \times 10$$

$$Q_3 = 50 + \left(\frac{750 - 168}{32}\right) \times 10$$

$$Q_3 = 50 + \left(\frac{528}{32}\right) \times 10$$

$$Q_3 = 50 + \left(\frac{5820}{32}\right)$$

$$Q_3 = 50 + 181.875$$

$$Q_3 = 231.875$$

Ans. $Q_3 = 231.875$

b) Calculate D_7 for the following data.

Profit (in crores ₹)	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70
No. of firms	20	30	70	48	32	50

Ans.

Profit (in crores ₹) (x)	Number of firms (f)	CF
10 – 20	20	20
20 – 30	30	50
30 – 40	70	120
40 – 50	48	168
50 – 60	32	200
60 – 70	50	250
	n = 250	

$$D_7 = \text{size of } 7 \left(\frac{n}{10}\right)^{\text{th}} \text{ observation}$$

$$= \text{size of } 7 \left(\frac{250}{10}\right)^{\text{th}} \text{ observation}$$

$$= \text{size of } 7 (25)^{\text{th}} \text{ observation}$$

$$= \text{size of } 175^{\text{th}} \text{ observation}$$

Size of 175th observation lies in cf 200

Hence, ductile class = 50 – 60

$$\therefore l = 50, f = 32, cf = 168, n = 250, h = 10$$

$$D_7 = l + \left(\frac{\frac{7n}{10} - cf}{f}\right) \times h$$

$$D_7 = 50 + \left(\frac{\frac{7 \times 250}{10} - 168}{32}\right) \times 10$$

$$D_7 = 50 + \left(\frac{\frac{1750}{10} - 168}{32}\right) \times 10$$

$$D_7 = 50 + \left(\frac{175 - 168}{32}\right) \times 10$$

$$D_7 = 50 + \left(\frac{7}{32}\right) \times 10$$

$$D_7 = 50 + \left(\frac{70}{32}\right)$$

$$D_7 = 50 + 2.1875$$

$$\therefore D_7 = 52.1875$$

Ans. $D_7 = 52.1875$

c) Calculate P_{15} for the following data

Investment (₹ in lakhs)	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60
No. of firms	5	10	25	30	20	10

Ans.

Investment (in lakhs ₹) (x)	Number of firms (f)	CF
0 – 10	5	5
10 – 20	10	15
20 – 30	25	40
30 – 40	30	70
40 – 50	20	90
50 – 60	10	100
	n = 250	

$$P_{15} = \text{size of } 15 \left(\frac{n}{100}\right)^{\text{th}} \text{ observation}$$

$$= \text{size of } 15 \left(\frac{100}{100}\right)^{\text{th}} \text{ observation}$$

$$= \text{size of } 15 (1)^{\text{th}} \text{ observation}$$

$$= \text{size of } 15^{\text{th}} \text{ observation}$$

size of 15^{th} observation lies in cf 15

Hence, percentile class = 10 – 20

$$\therefore l = 10, f = 10, cf = 5, n = 100, h = 10$$

$$P_{15} = l + \left(\frac{\frac{15n}{100} - cf}{f}\right) \times h$$

$$P_{15} = 10 + \left(\frac{\frac{15 \times 100}{100} - 5}{10}\right) \times 10$$

$$P_{15} = 10 + \left(\frac{1500}{100} - 5\right) \times 10$$

$$P_{15} = 10 + \left(\frac{15-5}{10}\right) \times 10$$

$$P_{15} = 10 + \left(\frac{10}{10}\right) \times 10$$

$$P_{15} = 10 + \left(\frac{1000}{10}\right)$$

$$P_{15} = 10 + 10$$

$$\therefore P_{15} = 20$$

Ans. $P_{15} = 20$