

KSCSAPT – 508 - Answer and Explanation

1. D
2. A stone statues found at Harappa and Mohenjodaro are excellent examples of handling three dimensional volumes. Seals were usually made of steatite and occasionally of algate, chert, chert, copper, faience and terracotta. Some seals have also been found in gold and ivory
3. C

- Indus valley pottery consists of very fine wheel made wares, very few being handmade.
- Plain pottery is more common than painted ware.
- Plain pottery is generally red clay, with or without a fine red or grey slip.
- The black painted ware has a fine coating of red slip on which geometric and animal designs are executed in glossy black paint.

Painted Earthen Jar

- Found in Mohenjo-Daro.
- Made on a potters' wheel with clay.
- The shape was manipulated by pressure of the crafty fingers of the potter.
- After baking a clay model, it was painted with black colour.
- High polishing was done as a finishing touch.
- Motifs are vegetal and geometric forms.
- Designs are simple.
 - The Harappan men and women decorated themselves with a large variety of ornaments produced from every conceivable materials ranging from precious metals and gemstones to bone and baked clay.
 - White necklaces, fillets, armlets and finger rings were commonly worn by both sexes.
 - Jewellery found at Mohenjo-Daro and Lothal include necklaces of gold and semiprecious metal stones, copper bracelets and beads, gold earrings and head ornaments.
 - A cemetery has been found at Farmona in Harappa where dead bodies were buried with ornaments.
 - Well developed bead industries were present at Chauhadaro and Lothal.
 - Some beads were made of two or more stones cemented together.
 - Also made models of animals, especially monkeys and squirrels, used as pin head and beads.
 - Spinning of cotton and wool was very common (both rich and poor practiced spinning).
 - Men and women wore two separate pieces of attire similar to dhoti and shawl.
 - Shawl covered the left shoulder passing below right arm.
 - They were conscious of fashion.
 - Different hair styles were in vogue and beard was popular.
 - Cinnabar was used as a cosmetic and face-paint, lipstick and collyrium (eyeliner) were also known to them.

4. A

Putul Nautch of West Bengal:

Putul Nautch is the traditional rod puppet form of West Bengal. The puppets are carved from wood and follow different artistic styles varying from region to region. In Nadia district, rod-puppets used were of human size, similar to the Bunraku puppets of Japan. This form of rod puppetry is now almost extinct. The Bengal rod-puppets are about 3 to 4 feet in height and are dressed like the actors of Jatra – the traditional theatre form widely practiced in the State. There are three joints in the puppet. The head supported by the main rod is joined at the neck and both hands attached to rods are joined at the shoulders. The technique followed for manipulation of the puppets is highly theatrical. The singer is often accompanied by a drummer, harmonium and cymbals. The music and verbal text have close similarity with the Jatra theatre

5. D

Tholu Bommalata – Andhra Pradesh

The shadow theatre of Andhra Pradesh, Tholu Bommalata is known for its strongest and richest tradition. The shoulders, waist, elbows and knees of the puppets are jointed and are coloured on both the sides. The size of the puppets is large. The themes for the show are usually drawn from the epics Mahabharata and Ramayana or from the Puranas. The background music for the theatre show is influenced by the classical music of the region.

Ravanachhaya – Orissa

The shadow puppet form practiced in Orissa, is the most theatrically exiting form of shadow puppetry prevalent in India. The puppets do not have joints and are in one single piece. They are not coloured on either sides, therefore opaque shadows are thrown on the screen. The manipulation and movements of puppets requires great dexterity as there are no joints. The puppets are conceived in bold dramatic poses and are made of Deer skin. Apart from human and animal character, various props such as mountains, trees, chariots, houses are also used. The puppets create very sensitive, lyrical shadows on the screen. The Ravanachayya puppets are not more than two feet tall and are relatively smaller.

6. C

Putul Nautch of West Bengal:

Putul Nautch is the traditional rod puppet form of West Bengal. The puppets are carved from wood and follow different artistic styles varying from region to region. In Nadia district, rod-puppets used were of human size, similar to the Bunraku puppets of Japan. This form of rod puppetry is now almost extinct. The Bengal rod-puppets are about 3 to 4 feet in height and are dressed like the actors of Jatra – the traditional theatre form widely practiced in the State. There are three joints in the puppet. The head supported by the main rod is joined at the neck and both hands attached to rods are joined at the shoulders. The technique followed for manipulation of the puppets is highly theatrical. The singer is often accompanied by a drummer, harmonium and cymbals. The music and verbal text have close similarity with the Jatra theatre.

Yampuri of Bihar:

The traditional Rod puppet of Bihar is known as Yampuri. These rod puppets of Bihar are made of wood. These puppets are in one piece and do not have joints. Great dexterity is required while playing these puppets as they do not have flexible arms and legs. These are different from the traditional rod puppetry practiced in Orissa and West Bengal.

Gombeyata – Karnataka

- The dolls resemble the characters of Yakshagana- the regional traditional theatre form.
- Theatre performances are a glimpse of prasangas in Yakshagana.
- The puppets are maneuvered using strings attached.

7. C

Gatka is weapon-based Indian martial art basically created by the Sikhs of Punjab.

There are many weapons used in Gatka like, Stick, Bamboo sticks, Javelin spear Talwar, kirpan and kataar.

The attacking and defense methods are based upon the positions of the hands feet and nature of weapons used.

It is also displayed during the different celebrations or at fairs in Punjab.

The sport form is played by two opponents wielding wooden staves called *gatka*. These sticks may be paired with a shield. Points are scored for making contact with the stick.

The other weapons are not used for sparring, but their techniques are taught through forms training.

It is based on the basic principle of unification of the mind, body and spirit in a rhythm of life to train a saint-soldier to be able to defend himself/herself

8. B

Silambam (Tamil Nadu)

- Weapon based type
 - Variety of weapons used.
 - Majorly used “Silambam staff” as a weapon. (staff – a traditional pole weapon. It has many variants from just a stick to having knife at one end)
 - Foot movements plays a key role
 - Movements of animals like snake, tiger, elephant and eagle used
 - “Kuttu varisai” – a variant of silambam & uses no weapon
 - Associated Legend: this martial art was developed by Lord Muruga (son of Lord Shiva, other name – Kartekeya) & sage Agasthya
 - Travelled from Tamil Nadu to Malaysia
- ### **Musti Yuddha (Varanasi)**
- unarmed type
 - Punches, kicks, knees and elbow strikes used

- **Kashmiri** swordsmanship is said to have an ancient history, but it was only much later that it acquired its modern name of **sqay**. Sqay survived a decline following the partition of India by adopting competitive methodologies of karate and taekwondo. Types of competition include sparring, breaking, and forms or *khawankay*. Pracitioners spar using fake swords called *tora* which are paired with a shield. Sparring is point-based, the points being awarded for successful hits with the tora or with the foot.

9. A

Nagara Style of Architecture

- This style developed in the North of the country, i.e., the land lying between the Himalayas and the Vindhyas.
- This has its origins in the Gupta period.
- The main features of the Nagara style are given in the following points.
- The shikhar or the topmost part was representative of Mount. Meru which had a lot of significance.

- Garbha Griha or the inner sanctum. This part was a small portion which symbolized a personalized communication with the deity.
- Antaral or the vestibule.
- Kalash which is relevant even today. This is a symbolic water pot and it signifies fertility/productivity/birth.
- Maha Mandap, Mandap, Ardh Mandap – the assembly halls. This was not as large as in the South.
- Examples are Lingaraja temple (Bhubaneswar), dating from the 11th century; Kandariya Mahadeva temple at Khajuraho.

Dravida Style Temple Architecture

- This style was seen in South India.
- Its origins can also be traced to the Gupta period.
- Pillars and pilasters are used extensively in this style.
- The top part is a bit more curved.
- There is a pyramidal elevation of the tower with a progression of stories each one smaller than the one below.
- The gateways were called Gopurams. This was a later addition to the style.
- The Dravidian temples had boundary walls, unlike their northern counterparts.
- Examples include the Brihadeeshwara temple at Thanjavur; Kailasanatha temple at Kancheepura
- Dwarapalakas are present at the entrance

10. B

- Ambubachi Mela is a four-day fair to mark the annual menstruation of the goddess at Kamakhya temple, centre for Tantra worship.
- Kamakhya, atop Nilachal Hills in Guwahati, is one of 51 shaktipeeths or seat of Shakti followers, each representing a body part of Sati, Lord Shiva's companion

About Kamakhya Temple:

- Kamakhya Temple denotes the spot where Sati used to retire in secret to satisfy her amour with Shiva, and it was also the place where her yoni fell after Shiva danced with the corpse of Sati.
- The only ones that avoid the temple are the descendants of the medieval Koch royalty, who had reconstructed Kamakhya temple in 1565.
- This is because the goddess is believed to have cursed the royalty after the king and his brother Chilarai — one of Assam's revered generals — had secretly watched her dance.
- There are legends about the goddess dancing when Kendukoli, a priest during Naranarayan's reign, performed puja with his eyes shut.
- Naranarayan and Chilarai convinced the priest to allow them to watch the goddess's dance.
- Incensed, the goddess punished the priest besides cursing the duo and their descendants with doom if they visited the Kamakhya temple ever

11. B

Kalaripayattu (Kerala specially) & rest of south

- Weapon based type
- "Kalari" means arena. "Payattu" means combat/fighting.
- Involves strikes, kicks, grappling, preset forms, weaponry and healing methods, the footwork movement
- Kerala's "Kathakali" incorporates greatly of this in their routines
- Considered older than Chinese martial arts
- Associated Legend: This art form was taught to early masters of this by Parashurama (an incarnation of Lord Vishnu) to protect the land he created.

Malla-Yuddha (South India)

- Combat-Wrestling type. Unarmed type.

- Four types:
 1. Hanumanti – for technical superiority
 2. Jambuvanti – focuses on locking and holding till opponent gives up
 3. Jarasandhi – breaking limbs and joints
 4. Bhimaseni – focuses on sheer strength

Thang Ta (Manipur)

- Weapon Based
- “Thang” means sword. “Ta” means spear.
- Anything from sword or spear can be used.
- Other weapons used are shield and axe.
- Used in three different ways
 1. As absolutely ritual in nature
 2. As spectacular performance
 3. As actual Fighting technique

12. A

Malla-Yuddha (South India)

- Combat-Wrestling type. Unarmed type.
- Four types:
 1. Hanumanti – for technical superiority
 2. Jambuvanti – focuses on locking and holding till opponent gives up
 3. Jarasandhi – breaking limbs and joints
 4. Bhimaseni – focuses on sheer strength

3. Silambam (Tamil Nadu)

- Weapon based type
- Variety of weapons used.
- Majorly used “Silambam staff” as a weapon. (staff – a traditional pole weapon. It has many variants from just a stick to having knife at one end)
- Foot movements plays a key role
- Movements of animals like snake, tiger, elephant and eagle used
- “Kuttu varisai” – a variant of silambam & uses no weapon
- Associated Legend: this martial art was developed by Lord Muruga (son of Lord Shiva, other name – Kartekeya) & sage Agasthya
- Travelled from Tamil Nadu to Malaysia

Musti Yuddha (Varanasi)

- unarmed type
- Punches, kicks, knees and elbow strikes used

Mardani Khel (Kolhapur, Maharashtra)

- Weapon Based
- Created by Marathas
- Suitable for hilly regions
- Uses sword mainly & needs rapid movements

13. D

Latina and phamsana are the different shikara types in Nagara architecture
 Vihara is a dwelling place of monks in Buddhism
 Stucco figures are common in Dravida architecture

14. A

In odisha architecture shikara is called duel and mandapa is called Jagamohana
3 components in odisha architecture are Rekhapida, pidhadel and khakra

15. B

Kirtharnuniya is the theme of mahabalipuram temple
Mahabalipuram temple in Dravida architecture

16. B

GDP: Gross Domestic Product (GDP) is the total money value of final goods and services produced in the economic territories of a country in a given year. Total value of goods and services produced in India for 2014-15 is projected to be around 100 lakh crore Indian rupees or around 2 trillion US dollars at current market prices. This is the value of Indian GDP when expressed at current market price.

GDP stands for total value of goods and services produced inside the territory of India irrespective of whom produced it – whether by Indians or foreigners.

GNP: Gross National Product (GNP) is the total value of goods and services produced by the people of a country in a given year. It is not territory specific. If we consider the GNP of India, it can be seen that GNP is lesser than GDP.

17. B

- There are two “economic evils”; namely inflation and deflation that experienced by the most of the countries in the world.
- Various economists and policy makers defined inflation in different ways. The essential features of inflation are the general price level is continuously rising and the value of money is declining.

Types of Inflation

- Inflation can be classified into different heads based on the rate of increase of prices or speed, magnitude, nature and causes of inflation.

Classification on the basis of magnitude

- **Creeping Inflation**
 - When the rise in general price level is very slow like of a snail or creeper, it is called creeping inflation. In terms of speed, a sustained rise in prices of annual increase of less than 3% per annum is characterized as creeping inflation; such an increase in price is regarded safe and essential for economic growth.
- **Walking or Trotting Inflation**
 - When the rise in general price level is in the intermediate range of 3 to 7% per annum or less than 10%, it is called walking inflation. Inflation at this rate is a warning signal for the government to control it before it turns into running inflation.
- **Running Inflation**
 - When price rise rapidly like the running of a horse at a rate of 10 to 20% per annum, it is called running inflation. Such inflation affects the poor and middle classes adversely. Its control requires strong monetary and fiscal measures; otherwise it leads to hyper inflation.
- **Galloping Inflation**
 - If the rate of rise in prices in the range of 20 to 100% per annum it is called galloping inflation. Here the rate of inflation is very high and running in the range of double-digit or triple digit (that is, **20%, 50%, 200% a year**).

- In the decades of 1970s and 1980s, many Latin American countries such as Chile, Brazil and Argentina had experienced galloping inflation in the range of 50% to 700%. This type of inflation alternatively called as '**jumping inflation**' and '**hopping inflation**'.
- **Hyper Inflation**
 - When price rises very fast at triple digit or more per annum it is called hyper inflation or runaway inflation. In reality hyper inflation is a situation when the rate of inflation becomes immeasurable and absolutely uncontrollable.
 - Prices rise many times every day and in a large and accelerating nature. Such a situation brings a total collapse of the monetary system because of the continuous fall in the purchasing power of money.
 - This type of inflation quickly leads to a complete loss of confidence in the domestic currency and people starting opting for other forms of money or might switch to barter system.
 - The best example of hyper inflation happened at Germany after the First World War, Bolivian inflation of mid 1985 (24000 per cent per annum) and the Yugoslavian inflation of 1993 (20 per cent per day)

DEFLATION

- Deflation is just opposite of inflation.
- It refers to a phenomenon of persistent decrease in the general price level.
- It occurs in an economy when the negative inflation prevails over a long period.
- The deflation involves not only fall in price level but also fall in output, income and employment.
- Deflation leads the economic system towards depression and every decline in prices, income, production and employment accelerates the downswing.
- According to John Maynard Keynes, "Inflation is unjust; deflation is inexpedient. of the two, deflation is worse".

Important Terminologies

Disinflation

- It indicates the removal of inflationary pressure from the economy and maintaining the value of the monetary unit through various economic policies.
- It means a reduction in the rate of inflation. Obviously, disinflation leads to fall in the prices but without causing unemployment. RBI wanted it while fighting for inflation.

Stagflation

- It refers to a situation of increasing prices but declining output and employment. That means a situation of stagnation plus inflation.

ie, Stagflation = stagnation + inflation

- Under stagflation: (a) Prices and wages rise (b) But people can't find jobs, companies can't find customers.

Reflation

- Reflation is a situation often deliberately brought inflation by the government to reduce unemployment and increase demand and there by ensure higher levels of economic growth.
- That is, Reflation is the policy of RBI to stop the fall in price levels, but without causing rise in the price levels (inflation).

Core Inflation and Headline Inflation

- These names are based on the inclusion or exclusion of the goods and services while calculating inflation. Core inflation shows price rise in all goods and services excluding energy and food articles. Headline inflation shows price rise in all goods and services including energy and food articles.

Open Inflation

- Inflation is open when market for goods or factors of production is allowed to function freely, setting prices of goods and factors without normal interferences by the authorities. Thus open inflation is the result of the uninterrupted operation of the market mechanism.

Suppressed Inflation

- When the government imposes fiscal and monetary controls to check open inflation, it is known as suppressed or repressed inflation.

18. D

Differences between Economic Growth and Economic Development

- Economic growth is a narrow concept (It studies only increase in real per capita income) while economic development is a broad concept (it studies increase in real per capita income as well as economic welfare).
- Economic growth is only a quantitative concept whereas economic development is both a quantitative as well as a qualitative concept.
- Economic growth ignores distribution of income. Economic development studies distribution of income.
- Economic growth is the essential element of progress of developed countries. Economic development is the essential element of the progress of under developed countries.
- Economic development accounts for structural, institutional and technical change in the economy while economic growth does not.

Factors responsible for economic development:
Capital Formation: higher saving for higher capital formation
Structural, Institutional and Technical Changes
Increase in Real per Capita Income
Marketable Surplus of Agriculture: rise in productivity to transform from substantial to commercial agriculture.
Conditions in Foreign Trade: in a country has proved to be beneficial for earning forex and decreasing current account deficit
Economic System: enhanced economic planning and capitalistic approach can be beneficial
Other factors includes: Desire to Develop; Less or no corruption; Social Organization; Human Resources and Increase in level of technical knowledge.

19. B

Outcome budget suggests listing of the projected outcomes under various schemes programmes. Outcomes are the end products and results of various Government initiatives and interventions, including those involving partnership with the State Governments, Public Sector Undertakings, autonomous bodies and the community. The outcomes are expected results not only in terms of monetary units or physical infrastructure but also in terms of qualitative targets and achievements

An incremental budget is a budget prepared using a previous period's budget or actual performance as a basis with incremental amounts added for the new budget period.

- The allocation of resources is based upon allocations from the previous period.
- This approach is not recommended as it fails to take into account changing circumstances
- Moreover it encourages "spending up to the budget" to ensure a reasonable allocation in the next period. It leads to a "spend it or lose" mentality.

A gender budget is not a separate budget for women. Instead, the gender budgets are an attempt to assess government priorities as they are reflected through the budget and examine how they impact women and men.

20. C

Fiscal slippage in simple terms is any deviation in expenditure from the expected

The measure provides a broader outlook and is computed using a simple formula $\text{Total budget expenditure} - (\text{Total Budget Receipts} - \text{Borrowings})$ Here the govt does'nt takes into account any kind of borrowings.

Primary Deficit

Definition: The **Primary Deficit** is the difference between the **fiscal deficit of current year and the interest paid** on the previous borrowings. Thus, primary deficits are government's borrowings exclusive of interest payment.

Generally, the loan raised by the government is inclusive of the interest amount, and if that amount is deducted from the principal loan amount, the balance amount is called as the primary deficit. The purpose of measuring such deficit is to know the amount of borrowings that government can utilize in the expenses other than the interest payments.

Symbolically, it can be represented as:

Primary Deficit = Fiscal Deficit – Interest payments on the previous borrowings

Effective Revenue deficit is a new term introduced in the Union Budget 2011-12. While revenue deficit is the difference between revenue receipts and revenue expenditure, the present accounting system includes all grants from the Union Government to the state governments/Union territories/other bodies as revenue expenditure, even if they are used to create assets. Such assets created by the sub-national governments/bodies are owned by them and not by the Union Government. Nevertheless they do result in the creation of durable assets

21. B

Under-employment: Those labourers are under –employment who obtain work for but their efficiency and capacity are nit utilized at their optimum and as a result they contribute in the production upto a limited level. A country having this type of unemployment fais to exploit the efficiency of their labourers

Disguised unemployment: if a person does not contribute any thing in the production process or in other words, if he can be removed from the work without affecting the productivity adversely, he will be treated as disguisedly unemployed. the marginal productivity of such unemployed person is zero. agriculture sector of underdeveloped/developing economics posses this type of unemployment at a large scale

Frictional unemployment-the unemployment generated due to the change in market conditions is called frictional unemployment. agriculture is the main occupation in India. the supply condition still depends on

weather's mood and similarly demand conditions depend on availability of resources. any change arising either of any or both creates a diversion from the equilibrium which results in frictional unemployment

22. B

The Phillips curve is an economic concept developed by A. W. Phillips stating that inflation and unemployment have a stable and inverse relationship. The theory claims that with [economic growth](#) comes inflation, which in turn should lead to more jobs and less unemployment. However, the original concept has been somewhat disproven empirically due to the occurrence of [stagflation](#) in the 1970s, when there were high levels of both inflation and unemployment

Basis For Comparison	Wholesale Price Index (WPI)	Consumer Price Index (CPI)
Meaning	WPI, amounts to the average change in prices of commodities at wholesale level	CPI, indicates the average change in the prices of commodities, at the retail level.
Published by	Office of Economic Advisor (Ministry of Commerce & Industry)	Central Statistics Office (Ministry of Statistics and Programme Implementation)
Measures prices of	Goods only	Goods and Services both
Measurement of Inflation	First stage of transaction	Final stage of transaction
Measurement of Inflation	First stage of transaction	Final stage of transaction
Prices paid by	Manufacturers and wholesalers	Consumers
How many items covered	697 (Primary, fuel & power and manufactured)	448 (Rural Basket)

	products)	460 (Urban Basket)
What type of items covered	Manufacturing inputs and intermediate goods like minerals, machinery basic metals etc.	Education, communication, transportation, recreation, apparel, foods and beverages, housing and medical care
Base year	2011-12	2012
Used by	Only a few countries including India	157 countries
Data released on	Primary articles, fuel and power (Weekly basis) & overall (monthly basis since 2012)	

23. D

- Treasury bills, or T-bills, are short-term debt instruments issued by the government . T-bills are issued for a term of one year or less. T-bills are considered the world’s safest debt as they are backed by the full faith and credit of the government.

They do not pay interest, but rather are sold a discount to their face value. The full-face value is paid at maturity, and the difference between the discounted purchase price and the full-face value equates to the interest rate

Government raise money, by issuing two types of debt instruments – Treasury bills and government bonds.

- Treasury bills are issued when the government need money for a shorter period while bonds are issued when it need debt for more than say five years.
- Treasury bills; generally shortened as T-bills, have a maximum maturity of a 364 days. Hence, they are categorized as money market instruments (money market deals with funds with a maturity of less than one year).
- Treasury bills are presently issued in three maturities, namely, 91 day, 182 day and 364 day.
- Treasury bills are zero coupon securities and pay no interest. Rather, they are issued at a discount (at a reduced amount) and redeemed (given back money) at the face value at maturity. For example, a 91 day Treasury bill of Rs.100/- (face value) may be issued at say Rs. 98.20, that is, at a discount of say, Rs.1.80 and would be redeemed at

the face value of Rs.100/-. This means that you can get a hundred-rupee treasury bill at a lower price and can get Rupees hundred at maturity.

- The return to the investors is the difference between the maturity value or the face value (that is Rs.100) and the issue price. The Reserve Bank of India conducts auctions usually every Wednesday to issue T-bills. The rationale is that since their maturity is lower, it is more convenient to avoid intra period interest payments.
- Treasury bills are usually held by financial institutions including banks. They have a very important role in the financial market beyond investment instruments. Banks give treasury bills to the RBI to get money under repo. Similarly, they can keep it as part of SLR.

Financial Market Classification

1. Money Market.

1. Call Money.
2. Treasury Bill.
3. Commercial Paper.
4. Certificate of Deposit.
5. Trade bill.

2. Capital Market.

1. Securities Market
 1. Primary Market : IPOs, Book Building, Private Placements.
 2. Secondary Market : Equity Market, Debt Market, Commodity Market, Futures and Options Market. (Secondary Market can be basically divided into two – spot market and forward market. Forward market has two divisions – futures and options/derivatives. Again, there are two types of options – put option and call option.)

2. Non-Securities Market

1. Mutual Funds.
2. Fixed Deposits, Savings Deposits, Post Office savings.
3. Insurance

24. C

The call money market is an essential part of the Indian Money Market, where the day-to-day surplus funds (mostly of banks) are traded. The money market is a market for short-term financial assets that are close substitutes of money. The most important feature of a money market instrument is that it is liquid and can be turned into money quickly at low cost and provides an avenue for equilibrating the short-term surplus funds of lenders and the requirements of borrowers.

The loans are of short-term duration varying from **2 to 14 days**, are traded in call money market. The money that is lent for one day in this market is known as "**Call Money**", and if it exceeds one day (but less than 15 days) it is referred to as "**Notice Money**". **Term Money** refers to Money lent for 15 days or more in the Inter Bank Market.

Banks borrow in this money market for the following purpose:

- To fill the gaps or temporary mismatches in funds
- To meet the Cash Reserve Ratio(CRR) & Statutory Liquidity Ratio(SLR) mandatory requirements as stipulated by the RBI

- To meet sudden demand for funds arising out of large outflows.

Thus call money usually serves the role of equilibrating the short-term liquidity position of banks

Participants in the Call Money Market:

As the RBI guideline, the participants in call/notice money market currently include **scheduled commercial banks** (excluding RRBs), **Development Financial Institutions, Co-operative banks** (other than Land Development Banks) and **Primary Dealers (PDs)**, both as borrowers and lenders.

Interest Rate:

Eligible participants are free to decide on interest rates in call/notice money market. Calculation of interest payable would be based on the methodology given by the **Fixed Income Money Market and Derivatives Association of India (FIMMDA)**.

25. A

Government securities in debt market are controlled by RBI

The Securities Contract (Regulation) Act, 1956 [SCRA] defines 'Stock Exchange' as any body of individuals, whether incorporated or not, constituted for the purpose of assisting, regulating or controlling the business of buying, selling or dealing in securities. Stock exchange could be a regional stock exchange or national exchanges

The primary market provides the channel for sale of new securities. Primary market provides opportunity to issuers of securities; Government as well as corporates, to raise resources to meet their requirements of investment and/or discharge some obligation. They may issue the securities at face value, or at a discount/premium and these securities may take a variety of forms such as equity, debt etc. They may issue the securities in domestic market and/or international market.

An Initial Public Offer (IPO) is the selling of securities to the public in the primary market. It is when an unlisted company makes *either a fresh issue of securities or an offer for sale of its existing securities or both for the first time* to the public. This paves way for listing and trading of the issuer's securities. The sale of securities can be either *through book building or through normal public issue*

Secondary market refers to a market where securities are traded after being initially offered to the public in the primary market and/or listed on the Stock Exchange. Majority of the trading is done in the secondary market. *Secondary market comprises of equity markets and the debt markets*

A blue chip is a nationally recognized, well-established, and financially sound company. Blue chips generally sell high-quality, widely accepted products and services

26. D

Masala Bonds

'Masala Bonds' are Indian rupee denominated bonds issued in offshore capital markets which issued to offshore investors settled in dollars and, therefore, the currency risk resides with investors. It is used to refer to rupee-denominated borrowings by Indian entities in overseas markets.

The International Finance Corporation (IFC) the investment branch of the World Bank issued a 10-year, 10 billion Indian rupee bonds in November 2014 to increase foreign investment in India and mobilize international capital markets to support infrastructure development in the country.

Masala bond was the first Indian bond to get listed in London Stock Exchange. IFC named it Masala bonds to give a local flavour by calling to mind Indian culture and cuisine. Moreover, there are popular bonds name are there in the list Dim-Sum Bond of China and Samurai Bonds of Japan, Yankee of USA and the bulldog of UK.

Benefits of issuing of the Masala Bonds

- It assists the Indian companies to diversify their bond portfolio. Now Indian companies can issue Masala Bonds in addition to the corporate bonds. It helps the Indian companies to cut down cost. If the company issues any bond in India, it carries an interest rate of 7.5%-9.00% whereas; Masala Bonds outside India is issued below 7.00% interest rate.
- It will helps in building up foreign investors confidence in Indian economy and currency which will strengthen the foreign investment in the country. It helps companies to tap a large number of investors as these bonds are issued in the offshore market.
- Offshore investor earns better returns by investing in Masala Bonds rather than by investing in his home country. An investor will benefit from his investment in Masala Bond if the rupee appreciates at the time of maturity.
- The Finance Ministry has cut the withholding tax (a tax deducted at source on residents outside the country) on interest income of such bonds to 5% from 20%, making it attractive for investors. Also, capital gains from rupee appreciation are exempted from tax.
- India is that rare fast-growing large economy, and 'Masala Bonds' are one way for investors to take advantage of this.
- These measures are intended to further deepen market development, enhance participation, facilitate greater market liquidity and improve communication. It results to widen the investor pool and ultimately deepen the market for additional Tier 1 and Tier 2 bond issuance amounts to ease a key constraint for banks in accessing new AT 1 and T 2 capital, given the limited size of the domestic investor pool relative to the scale of the capital need.

- It allows Indian companies, banks, non-banking finance companies (HDFC, India Bulls Housing Finance are examples of such companies) and infrastructure investment trusts and real investment trusts (investment vehicles that pool money from various investors and invest in infrastructure and real estate sectors) to issue rupee-denominated bond overseas.

27. C

First Narasimhan Committee Report – 1991

To promote the healthy development of the financial sector, the Narasimhan committee made recommendations.

Recommendations of Narasimhan Committee

1. Establishment of 4 tier hierarchy for banking structure with 3 to 4 large banks (including SBI) at the top and at bottom rural banks engaged in agricultural activities.
2. The supervisory functions over banks and financial institutions can be assigned to a quasi-autonomous body sponsored by RBI.
3. A phased reduction in statutory liquidity ratio.
4. Phased achievement of 8% capital adequacy ratio.
5. Abolition of branch licensing policy.
6. Proper classification of assets and full disclosure of accounts of banks and financial institutions.
7. Deregulation of Interest rates.
8. Delegation of direct lending activity of IDBI to a separate corporate body.
9. Competition among financial institutions on participating approach.
10. Setting up Asset Reconstruction fund to take over a portion of the loan portfolio of banks whose recovery has become difficult.

Banking Reform Measures of Government: –

On the recommendations of Narasimhan Committee, following measures were undertaken by government since 1991: –

1. Lowering SLR and CRR

- The high SLR and CRR reduced the profits of the banks. The SLR had been reduced from 38.5% in 1991 to 25% in 1997. This has left more funds with banks for allocation to agriculture, industry, trade etc.
- The Cash Reserve Ratio (CRR) is the cash ratio of banks total deposits to be maintained with RBI. The CRR had been brought down from 15% in 1991 to 4.1% in June 2003. The purpose is to release the funds locked up with RBI.

2. Prudential Norms: –

- Prudential norms have been started by RBI in order to impart professionalism in commercial banks. The purpose of prudential norms includes proper disclosure of income, classification of assets and provision for Bad debts so as to ensure that the books of commercial banks reflect the accurate and correct picture of financial position.
- Prudential norms required banks to make 100% provision for all Non-performing Assets (NPAs). Funding for this purpose was placed at Rs. 10,000 crores phased over 2 years.

3. Capital Adequacy Norms (CAN): –

- Capital Adequacy ratio is the ratio of minimum capital to risk asset ratio. In April 1992 RBI fixed CAN at 8%. By March 1996, all public sector banks had attained the ratio of 8%. It was also attained by foreign banks.

4. Deregulation of Interest Rates

- The Narasimhan Committee advocated that interest rates should be allowed to be determined by market forces. Since 1992, interest rates have become much simpler and freer.
- Scheduled Commercial banks have now the freedom to set interest rates on their deposits subject to minimum floor rates and maximum ceiling rates.
- The interest rate on domestic term deposits has been decontrolled.
- The prime lending rate of SBI and other banks on general advances of over Rs. 2 lakhs has been reduced.
- The rate of Interest on bank loans above Rs. 2 lakhs has been fully decontrolled.
- The interest rates on deposits and advances of all Co-operative banks have been deregulated subject to a minimum lending rate of 13%.

5. Recovery of Debts

- The Government of India passed the “Recovery of debts due to Banks and Financial Institutions Act 1993” in order to facilitate and speed up the recovery of debts due to banks and financial institutions. Six Special Recovery Tribunals have been set up. An Appellate Tribunal has also been set up in Mumbai.

6. Competition from New Private Sector Banks

- Banking is open to the private sector.
- New private sector banks have already started functioning. These new private sector banks are allowed to raise capital contribution from foreign institutional investors up to 20% and from NRIs up to 40%. This has led to increased competition.

7. Access To Capital Market

- The Banking Companies (Acquisition and Transfer of Undertakings) Act was amended to enable the banks to raise capital through public issues. This is subject to the provision that the holding of Central Government would not fall below 51% of paid-up-capital. SBI has already raised a substantial amount of funds through equity and bonds.

8. Freedom of Operation

- Scheduled Commercial Banks are given freedom to open new branches and upgrade extension counters, after attaining capital adequacy ratio and prudential accounting norms. The banks are also permitted to close non-viable branches other than in rural areas.

9. Local Area Banks (LABs)

- In 1996, RBI issued guidelines for setting up of Local Area Banks, and it gave its approval for setting up of 7 LABs in private sector. LABs will help in mobilizing rural savings and in channelling them into investment in local areas.

10. Supervision of Commercial Banks

- The RBI has set up a Board of financial Supervision with an advisory Council to strengthen the supervision of banks and financial institutions. In 1993, RBI established a new department known as Department of Supervision as an independent unit for supervision of commercial banks.

28. D

Certificate of Deposit (CD) is a negotiable money market instrument and issued in dematerialised form or as a Usance Promissory Note against funds deposited at a bank or other eligible financial institution for a specified time period. It was introduced in India in 1989.

Who governs CD in India?

Guidelines for issue of CDs are presently governed by various directives issued by the **Reserve Bank of India (RBI)**

Who can issue CD?

CDs can be issued by:

1. Scheduled commercial banks {excluding Regional Rural Banks and Local Area Banks}
2. Selected All-India Financial Institutions (FIs) that have been permitted by RBI

What is the return on CD?

The CDs are issued at discount price on face value. So return is the difference between issue price and face value.

Issue price

- Minimum amount = **1 lakh** and in multiple of Rs 1 lakh thereafter
- Maximum amount
 1. Banks can issue CDs depending on their funding requirements
 2. An FI can issue CD within the overall umbrella limit prescribed in the Master Circular on Resource Raising Norms for FIs, issued by DBOD and updated from time-to-time

Who can invest in CD?

CDs can be issued to:

- Individuals
- Corporations

- Companies (including banks and PDs)
- Trusts
- Funds
- Associations
- Non-Resident Indians (NRIs), but only on non-repatriable basis. Such CDs cannot be endorsed to another NRI in the secondary market.

Foreign portfolio investors (FPIs) are not permitted to invest in CDs

Maturity of CD

The maturity period of CDs is different for banks and FIs.

1. For Banks

- Minimum Period is 7 days
- Maximum period is 1 year

2. For financial institutions

- Minimum Period is 1 year
- Maximum period is 3 years

Commercial paper is an unsecured, short-term debt instrument issued by a corporation, typically for the financing of [accounts payable](#) and inventories, and meeting short-term liabilities. Maturities on commercial paper rarely range longer than 270 days. Commercial paper is usually issued [at a discount](#) from face value and reflects prevailing market interest rates.

Commercial paper is not usually backed by any form of [collateral](#), making it a form of unsecured debt. As a result, only firms with high-quality debt ratings will easily find buyers without having to offer a substantial discount (higher cost) for the [debt issue](#). Because commercial paper is issued by large institutions, the denominations of the commercial paper offerings are substantial. Other corporations, financial institutions, wealthy individuals and money market funds are usually buyers of commercial paper.

Advantages of Commercial Paper

A major benefit of commercial paper is that it does not need to be registered with the [Securities and Exchange Commission \(SEC\)](#) as long as it matures before nine months, or 270 days, making it a very cost-effective means of financing. Although maturities can go as long as 270 days before coming under the purview of the SEC, maturities for commercial paper average about 30 days, rarely reaching that threshold. The proceeds from this type of financing can only be used on current assets, or inventories, and are not allowed to be used on [fixed assets](#), such as a new plant, without SEC involvement.

29. A

Subdivisions of the Nagara temples are basically of five different shapes: square, usually called Kuta and also caturasra; rectangular or shala or ayatasra; elliptical, called gaja-prista or elephant-backed, or also called vrittayata, deriving from wagon vaulted shape of apsidal chaityas with a horse-shoe shaped entrance façade usually called a nasi; circular or vritta; and octagonal or ashtasra

30. D

31. C

Chaitya-were the place of worship in Buddhism
Vihara-were the dwelling place of Monks

32. A

- It is the oldest classical dance form of all dance forms. Bharatnatyam derives its name from **Bharatamuni** and Natyam which means dance in Tamil.
- The origin of this dance is traced to the solo dance performance of **Devadasis**(Temple dancers) in Tamil Nadu.
- The art became nearly extinct after the decline of devadasi system. The efforts of prominent freedom fighter **E.Krishna Iyer** revived this dance form.

Classification of Bharatnatyam

Alarippu: It is the beginning of dance with simple poses and movements. It seeks to get the blessing from the God. It helps the dancer to get ready for the performance.

Jatishwara: It is the pure form of dance in which body movements are synchronized with the Swara of Raga and Tala.

Shabda: It includes abhinaya in the song which generally praises the glory of God.

Varnam: Dance and emotions synchronized with **Raga** and **Tala**.

Padam: It is a mastery over abhinaya expressed by the performer.

Jawali: Short love-lyrics performed at a faster tempo.

Thillana: It is the last stage of performance which comprise of pure dance, high spirited body movements and complicated variation in rhythm.

- Movements of Bharatnatyam resemble that of the dancing flame.
- **Rukmini Devi Arundale**, a famous proponent Bharatnatyam brought global recognition for this dance form. She brought radical changes in the costumes of dancers

33. C

Kathak is the traditional dance form of **Uttar Pradesh**. Kathak derives its name from the 'Kathika' or storyteller who recites verses from the epics with music and gestures.

During the Mughal times, it was influenced by **Islamic features**, especially in costume and dancing style.

Later in the twentieth century, **Lady Leela Sokhey** revived the classical style of Kathak.

It is commonly identified with the court tradition in North India.

In the technique, Kathak follows Vertical lines with no breaks and deflection. Footwork is very important in training of dancers.

Kathak is based on **Hindustani music**.

It consists of different **kharanas** like Lucknow, Jaipur, Raigarh, and Banaras.

Jugalbandi is one of the main features of Kathak recital. It shows a competitive play between dancer and tabla player.

Gatbhaar is the dance without music or chanting. Mythological episodes are outlined by this.

Kathak is accompanied by **dhrupad music**. During the Mughal period, Taranas, Thumris, and Gazals were introduced.

Lachha Maharaj, Shambu Maharaj and Birju Maharaj etc are the main proponents of Kathak.

34. A

In the 15th century AD, **Vaishnava saint of Assam, Shankaradeva** introduced the Sattriya form of dance.

Sattriya derives its name from the Vaishnava Monastries Known as **Sattras**.

It focuses more on the devotional aspect of dance, It narrates the mythological stories of Vishnu.

The dance form is **performed in a group by male monks** known as **Bhokots** as part of their daily rituals.

Khol and **Flute** are the main instruments played in Sattriya dance.

Rhythmic syllables and dance postures along with footwork has given greater emphasis in Sattriya dance.

It combines the elements of Lasya and Tandava.

There is a strict guideline laid down for the hand gestures and footwork in Sattriya dance.

Gayan-Bhayanar Nach and **Kharmanar Nach** are two streams evolved in the modern times.

35. A

- Odissi derives its name from '**Odra Nirtya**' mentioned in Natya Shastra. **Khandariya-Udayagiri caves** provide some of the early examples of Odissi dance.
- It was patronized mainly by the **Jain King Kharvela** and primarily performed by Maharis.
- **Kabichanda Kallicharan Patnaik** revived this dance form after the independence. Later efforts of **Charles Fabri** and **Indrani Rehman** brought International acclaim to this dance form.
- Mudras and postures for expressing emotions are similar to that of Bharatanatyam.

- The three bent form of dance called **Tribangha posture** is an important feature of Odissi.
- Odissi dance performs Natya combined with an element of dancing and acting.
- It is a unique representation of gracefulness, beauty, and sensuality.
- Geometrical shapes and patterns are created with dancers body. Hence it is called '**Mobile Sculpture**'.

Elements of Odissi includes

Mangalcharan: It is the beginning of the dance.

Batunirtya: It comprises of dancing.

Pallavi: It includes the facial expression and representation of the song.

Tarijham: Pure dance before the conclusion.

- Odissi dance music is **Hindustani**.
- Water is symbolized in this dance form.
- **Guru Pankaj Charan Das, Guru Kelu Charan Mohapatra** etc are the main proponents of this dance form.

36. B

Earthquakes and volcanoes are examples of sudden movements which originate from inside the earth. We have already seen the [types of volcanoes](#). But, what is an earthquake? To put it simple, earthquake is the shaking of the earth. An earth quake can be defined as a sudden violent shaking of the ground as a result of movements in the earth's crust or volcanic action. These movements result in the release of energy along a fault and cause the earth to shake. An earthquake, like volcanoes is a type of [endogenic processes](#)

- The earthquake which originates in the lithosphere propagates different seismic waves or earthquake waves.
- Earthquake waves are basically of two types – body waves and surface waves.

Primary waves (p-waves):

- Primary waves are the fastest body waves (twice the speed of s-waves) and are the first to reach during an earthquake.
- They are similar to sound waves, i.e, they are longitudinal waves, in which particle movement is in the same direction of wave propagation.

- They travel through solid, liquid and gaseous materials.
- They create density differences in the earth material leading to stretching and squeezing

Secondary waves (s-waves):

- They arrive at the surface with some time-lag after primary waves.
- They are slower than primary waves and can pass only through solid materials.
- This property of s-waves led seismologists to conclude that the earth's outer core is in a liquid state. (the entire zone beyond 105° from the epicenter does not receive S-waves)
- They are transverse waves in which directions of particle movement and wave propagation are perpendicular to each other

Surface Waves

- When the body waves interact with surface rocks, a new set of waves is generated called as surface waves.
- These waves move along the earth surface.
- Surface waves are also transverse waves in which particle movement is perpendicular to the wave propagation.
- Hence, they create crests and troughs in the material through which they pass.
- Surface waves are considered to be the **most damaging waves**.
- Two common surface waves are Love waves and Rayleigh waves

37. C

Crust

- It is the outermost solid part of the earth, normally about 8-40 kms thick.
- It is brittle in nature.
- Nearly 1% of the earth's volume and 0.5% of earth's mass are made of the crust.
- The thickness of the crust under the oceanic and continental areas are different. Oceanic crust is thinner (about 5kms) as compared to the continental crust (about 30kms).
- Major constituent elements of crust are Silica (Si) and Aluminium (Al) and thus, it is often termed as **SIAL** (Sometimes SIAL is used to refer Lithosphere, which is the region comprising the crust and uppermost solid mantle, also).
- The mean density of the materials in the crust is 3g/cm³.
- The discontinuity between the **hydrosphere and crust** is termed as the **Conrad Discontinuity**.

Mantle

- The portion of the interior beyond the crust is called as the mantle.
- The discontinuity between the **crust and mantle** is called as the **Mohorovich Discontinuity or Moho discontinuity**.
- The mantle is about 2900kms in thickness.
- Nearly 84% of the earth's volume and 67% of the earth's mass is occupied by the mantle.
- The major constituent elements of the mantle are Silicon and Magnesium and hence it is also termed as **SIMA**.
- The density of the layer is higher than the crust and varies from 3.3 – 5.4g/cm³.
- The uppermost solid part of the mantle and the entire crust constitute the **Lithosphere**.
- The **asthenosphere** (in between 80-200km) is a highly viscous, mechanically weak and ductile, deforming region of the upper mantle which lies just below the lithosphere.

- The asthenosphere is the main source of magma and it is the layer over which the lithospheric plates/continental plates move (plate tectonics).
- The discontinuity between the **upper mantle and the lower mantle** is known as **Repetti Discontinuity**.
- The portion of the mantle which is just below the lithosphere and asthenosphere, but above the core is called as **Mesosphere**.

Core

- It is the innermost layer surrounding the earth's centre.
- The **core is separated from the mantle by Guttenberg's Discontinuity**.
- It is composed mainly of iron (Fe) and nickel (Ni) and hence it is also called as **NIFE**.
- The core constitutes nearly 15% of earth's volume and 32.5% of earth's mass.
- The core is the densest layer of the earth with its density ranges between 9.5-14.5g/cm³.
- The Core consists of two sub-layers: the inner core and the outer core.
- The inner core is in solid state and the outer core is in the liquid state (or semi-liquid).
- The discontinuity between the upper core and the lower core is called as **Lehmann Discontinuity**.
- **Barysphere** is sometimes used to refer the core of the earth or sometimes the whole interior.

38. _

39. _

40. _

41. _

42. _

43. _

44. _

45. A

- In 1967, McKenzie and Parker suggested the theory of plate tectonics. The theory was later outlined by Morgan in 1968.
- By then, the 'continental drift theory' was completely **discarded** with the emergence of 'convectonal current theory' and 'see floor spreading theory'.
- Both 'convectonal current theory' and 'see floor spreading' paved the way for the Theory of Plate Tectonics.

Theory

- According to the theory of plate tectonics, the earth's **lithosphere** is **broken** into **distinct plates** which are floating on a **ductile layer** called **asthenosphere** (upper mantle). Plates move horizontally over the **asthenosphere** as rigid units.
- The lithosphere includes the **crust** and **top mantle** with its thickness range varying between 5-100 km in oceanic parts and about 200 km in the continental areas.
- The oceanic plates contain mainly the **Simatic crust** and are relatively thinner, while the continental plates contain **Sialic material** and are relatively thicker.
- Lithospheric plates (sometimes called **crustal plates, tectonic plates**) vary from **minor plates** to **major plates, continental plates** (Arabian plate) to **oceanic plates** (Pacific plate), sometime a **combination** of both continental and oceanic plates (Indo-Australian plate).
- The movement of these crustal plates causes the formation of various landforms and is the principal cause of all earth movements.

Rates of Plate Movement

- The Arctic Ridge has the slowest rate (less than 2.5 cm/yr), and the East Pacific Rise in the South Pacific [about 3,400 km west of Chile], has the fastest rate (more than 15 cm/yr).
- Indian plate's movement during its journey from south to equator was one of the fastest plate movements.

Major tectonic plates

1. Antarctica and the surrounding oceanic plate
2. North American plate
3. South American plate
4. Pacific plate
5. India-Australia-New Zealand plate
6. Africa with the eastern Atlantic floor plate
7. Eurasia and the adjacent oceanic plate

Divergence forming Divergent Edge or the Constructive Edge

- As the name itself suggests, in this kind of interaction, the plates diverge [move away from each other].
- **Mid-oceanic ridges** are formed due to this kind of interaction. Here, the basaltic magma erupts and moves apart (see floor spreading).
- On continents, **East African Rift Valley** is the most important geomorphological feature formed due to divergence of **African and Somali plates**.
- Such edges are sites of earth **crust formation (hence constructive)** and volcanic earth forms are common along such edges.
- Earthquakes (shallow focus) are common along divergent edges.
- The sites where the plates move away from each other are called spreading sites.
- The best-known example of divergent boundaries is the Mid-Atlantic Ridge. At the mid-oceanic ridge in Atlantic ocean, the American Plate(s) is/are separated from the Eurasian and African Plates.

Convergence forming Convergent Edge or Destructive Edge

- In this kind of interaction, two lithospheric plates collide against each other (in detail in the next post).
- The zone of collision may undergo crumpling and folding and folded mountains may emerge.
- This is an orogenic collision. **Himalayan Boundary Fault** is one such example.
- When one of the plates is an oceanic plate, it gets embedded in the **softer asthenosphere** of the continental plate and as a result, **trenches** are formed at the **zone of subduction**.
- The subducted material gets heated, up and is thrown out forming volcanic islands and dynamic equilibrium is achieved
- There are mainly three ways in which convergence can occur.
- **between an oceanic and continental plate;**
- **between two oceanic plates; and**
- **between two continental plates.**

Transcurrent Edge or Conservative Edge or Transform Fault

- Formed when two plates move past each other.
- In this kind of interaction, two plates grind against each other and there is no creation or destruction of landform but only deformation of the existing landform. [Crust is neither produced nor destroyed as the plates slide horizontally past each other].
- In oceans, transform faults are the planes of separation generally perpendicular to the midoceanic ridges.
- San Andreas Fault along the western coast of USA is the best example for a transcurrent edge on continents

The sites where the plates move away from each other are called spreading sites
46. C

Minerals in the Earth's Crust

- A mineral is a naturally occurring organic or inorganic substance, having an orderly atomic structure and a definite chemical composition and physical properties.
- A mineral is composed of two or more elements. But, sometimes single element minerals like sulphur, copper, silver, gold, graphite, etc are also found.
- The basic source of all minerals is the hot magma in the interior of the earth.
- When magma cools, crystals of the minerals appear and a systematic series of minerals are formed in sequence to solidify so as to form rocks.
- The minerals which contain metals are called as metallic minerals (eg: Haematite) and the metallic minerals which are profitably mined are called as the ores.
- The crust of the earth is made up of more than 2000 minerals, but out of these, only six are the most abundant and contribute the maximum.
- These six most abundant minerals are feldspar, quartz, pyroxenes, amphiboles, mica and olivine.

Characteristics of some of the major minerals

1. Feldspar:

- Silicon and oxygen are major elements of all types of feldspar.
- Sodium, potassium, calcium, aluminium, etc are found in specific feldspar varieties.
- **Half of the earth's crust is composed of feldspar (plagioclase (39%) and alkali feldspar (12%)).**
- It has light cream to salmon pink colour.
- It is commonly used in ceramics and glass making.

2. Quartz:

- It is one of the most important components of sand and granite.
- It consists of silica and it is a hard mineral virtually insoluble in water.
- It is usually white or colourless.
- They are used in the manufacturing of radio, radar, etc.

3. Pyroxene:

- The common elements in pyroxene are Calcium, aluminium, magnesium, iron and silicon.
- About 10% of the earth's crust is made up of pyroxene.
- It is commonly found in meteorites.
- Its colour is usually green or black.

4. Amphibole:

- Aluminium, calcium, silicon, iron and magnesium are the major elements of amphiboles.
- **They form 7% of the earth's crust.**
- It is green or black in colour and is used in asbestos industries commonly.
- Hornblende is another form of amphiboles.

5. Mica:

- It is made up of elements like potassium, aluminium, magnesium, iron, silicon, etc.
- It forms 4% of the earth's crust.
- It is commonly found in igneous and metamorphic rocks.
- Mica is widely used in electronic instruments.

6. Olivine:

- Magnesium, iron and silica are the major elements of olivine.
- It is commonly found in basaltic rocks with a greenish colour.
- Olivine is used commonly in jewellery.

47. D

Potholes and Plunge Pools

Over the rocky beds of hill-streams more or less circular depressions called potholes form because of stream erosion aided by the abrasion of rock fragments. Once a small and shallow depression forms, pebbles and boulders get collected in those depressions and get rotated by flowing water and consequently the depressions grow in dimensions. A series of such depressions eventually join and the stream valley gets deepened. At the foot of waterfalls also, large potholes, quite deep and wide, form because of the sheer impact of water and rotation of boulders. Such large and deep holes at the base of waterfalls are called plunge pools. These pools also help in the deepening of valleys. Waterfalls are also transitory like any other landform and will recede gradually and bring the floor of the valley above waterfalls to the level below.

Drumlins

Drumlins are smooth oval shaped ridge-like features composed mainly of glacial till with some masses of gravel and sand. The long axes of drumlins are parallel to the direction of ice movement. They may measure up to 1 km in length and 30 m or so in height. One end of the drumlins facing the glacier called the stoss end is blunter and steeper than the other end called tail. The drumlins form due to dumping of rock debris beneath heavily loaded ice through fissures in the glacier. The stoss end gets blunted due to pushing by moving ice. Drumlins give an indication of direction of glacier movement.

48. A

Blood rain: the fallout of red sands with falling rains associated with 'sirocco' local wind is south Italy called blood rain

Cherry blossom: the rain during hot and dry summer seasons in Karnataka is called cherry blossom

Chinook/Foehn: warm and local dry winds blowing on the leeward slopes of the mountains are called 'chinook' in the USA and foehn in Switzerland

Snow eater: warm Chinook wind system in the regions where they change their directions twice a year

49. D

Bise-an extremely cold wind in France

Santa ana-a warm, dry wind in the USA

Tramontane-a warm wind in the central Europe

Purge-a snow laden cold wind in Russian Tundra

Levanter-a strong easterly cold wind in southern Spain

Norwester-a warm, dry and gusty wind in Newzealand

Pampero-a northwesterly cold wind in the pampas of south America

50. C

Siberian Climate – Cool Temperate Continental – Taiga Climate

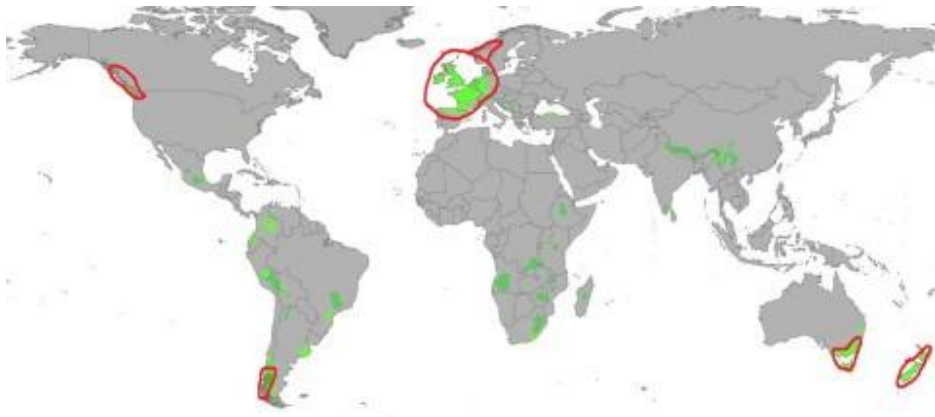
- Cool temperate continental (Siberian) climate is only experienced in northern hemisphere, where the continents within the high latitudes have a broad east west spread.
- On its poleward side, it merges into Arctic tundra of Canada & Eurasia at around Arctic Circle;
- Southwards, the climate becomes less severe & fades into the temperate Steppe climate
- Predominant vegetation of this Siberian or sub-arctic type of climate is evergreen coniferous forests that stretch in a great, continuous belt across North America, Europe & Asia.
- The greatest single band of the coniferous forest is Taiga (a Russian word for coniferous forest) in Siberia.
- In Europe, this climate & forests are mainly confined to Northern Europe, Sweden & Finland;
- However there are small amount of coniferous forests at high altitudes in Germany, Poland, Austria, Switzerland & other parts of the Europe.
- In North America, the sub-arctic belt stretches across from Alaska across Canada into Labrador & is found in the high Rocky Mountains further south.



British Type Climate or Cool Temperate Western Margin Climate or North-West European Maritime Climate.

- The cool temperate western margins are **under the influence of the Westerlies all-round the year.**
- They are the regions of **frontal cyclonic activity [Temperate Cyclones].**
- This type of climate is typical to Britain, hence the name 'British Type'.
- Also called as North-West European Maritime Climate due to **greater oceanic influence.**

Distribution of British Type Climate



Europe

- Most pronounced in and around Britain.
- In Europe the climate extends inland some 2,000 km.
- Climatic belt stretches far inland into the lowlands of North-West Europe (northern and western France, Belgium, the Netherlands, Denmark, western Norway and also north-western Iberia).

North America

- Confined mainly to the coastlands of British Columbia. [high Rockies prevent the on-shore Westerlies from penetrating far inland]

Southern Hemisphere

- The climate is experienced in southern **Chile, Southern Australia, Tasmania** and most parts of **New Zealand**.

British Type Climate

- Moderately warm summers and fairly mild winters.
- **Rainfall occurs throughout the year with winter maxima.**

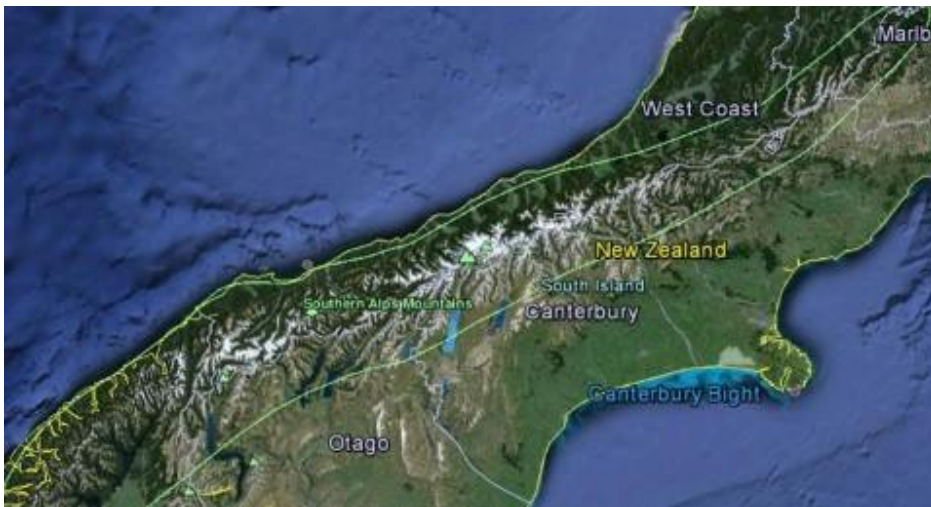
Temperature

- The mean annual temperatures are usually between 5° C and 15° C.
- Winters are **abnormally mild**. This is because of the warming effect brought by **warm North Atlantic Drift**.
- Sometimes, unusual cold spells are caused by the invasion of **cold polar continental air (Polar Vortex)** from the interiors.

Precipitation

- The British type of climate has **adequate rainfall throughout the year** with a tendency towards a slight **winter maximum (due to frontal cyclones)**.

- Western margins have the heaviest rainfall due to westerlies.
- Relief can make great differences in the annual amount. This is particularly significant in New Zealand where the western margins are subjected to heavy orographic rainfall whereas the eastern **Canterbury plains** receive comparatively less rainfall due to **rain-shadow effect**.



The seasons

- As in other temperate regions there are **four distinct seasons**.
- Winter is the season of cloudy skies, foggy and misty mornings, and many rainy days from the passing depressions.
- Spring is the driest and the most refreshing season when people emerge from the depressing winter to see everything becoming green again.
- This is followed by the long, sunny summer.
- Next is the autumn with the roar of gusty winds; and the cycle repeats itself.
- This type of climate with its four distinct seasons is something that is **conspicuously absent in the tropics**. [Rainforest == Only Rainy season, Tropical Monsoon == Summer, Winter and Rainy, Tropical Savanna == Summer (rains) and Winter]

- Different variants of Warm Temperate Eastern Margin Climate include the
 1. **Temperate monsoon Climate or China Type Climate,**
 2. **Gulf Type Climate and**
 3. **Natal Type Climate.**
- Found between **20° and 35° N and S latitude** (warm temperate latitudes just outside the tropics); on the **east coast** in both hemispheres.

China Type Climate

- Temperate Monsoon or China Type climate is observed in most parts of China. The climate is also observed in **southern parts of Japan**.

Gulf Type Climate

- Found in **south-eastern U.S.A.**, bordering the Gulf of Mexico where continental heating in summer induces an inflow of air from the cooler Atlantic Ocean.

Natal Type Climate

- Found in in **New South Wales (Australia), Natal (South Africa), Parana-Paraguay-Uruguay basin (South America)**.
- Natal type is different from temperate monsoon or China type as it **receives rainfall from on-shore Trade Winds all the year round**.

51. c

Indigo planting started in Bengal as early as 1777.

When the British Power expanded, the Indigo planting was emphasized because of a high demand of the Blue Dye in Europe. Apart from the reasons mentioned above, others are:

- Indigo farmers received very low returns for their crops.
- The land under Indigo degraded the land for cultivation of any further crop.
- The contract conditions under which Indigo planters kept the cultivators were harsh.
- The loan made the people indebted and resulted in a rebellion.

52. c

The Battle of Plassey was essentially due the conflicts between the Bengal Nawab and the East India Company.

This is judged to be one of the pivotal battles in the control of Indian subcontinent by the colonial powers.

The British now wielded enormous influence over the Nawab and consequently acquired significant concessions for previous losses and revenue from trade.

The British further used this revenue to increase their military might and push the other European colonial powers such as the Dutch and the French out of South Asia, thus expanding the British Empire.

53. d

Right to equality: Which includes equality before law, prohibition of discrimination on grounds of religion, race, caste, gender or place of birth, and equality of opportunity in matters of employment, abolition of untouchability and abolition of titles. Right to equality is provided from Article 14 to Article 18 of Indian constitution.

Right to equality extends to reservation policy as it's guaranteed by the Constitution within Right to Equality provisions.

54. a

Article 23 prohibits traffic in human beings, begar (forced labour) and other similar forms of forced labour. The expression 'traffic in human beings' include selling and buying of men, women and children like goods, immoral traffic in women and children, devadasis and slavery. Article 23 also provides for an exception to this provision. It

permits the State to impose compulsory service for public purposes, as for example, military service or social service, for which it is not bound to pay.

Article 24 prohibits the employment of children below the age of 14 years in any factory, mine or other hazardous activities like construction work or railway. But it does not prohibit their employment in any harmless or innocent work.

55. d

56. a

57. b

The constitution was formally adopted on 26th November 1949 as mentioned in the Preamble of the Constitution but it came into force on 26th January 1950. 26 January was specifically chosen as a date of commencement of the constitution because of its historical importance. It was on this day in 1930 that PurnaSwaraj day was celebrated, following the resolution of the Lahore session (December 1929) of the INC. Hence, option (b) is correct

58. b

Statement 1 is correct: They demanded the following: The Turkish Sultan or Khalifa must retain control over the Muslim sacred places in the erstwhile Ottoman empire; the Jazirat-ul- Arab (Arabia, Syria, Iraq, Palestine) must remain under Muslim sovereignty; and the Khalifa must be left with sufficient territory to enable him to defend the Islamic faith.

Statement 2 is correct: The Khilafat Movement (1919-1920) was a movement of Indian Muslims, led by Muhammad Ali and Shaukat Ali.

Statement 3 is incorrect: The Congress supported the movement and Mahatma Gandhi sought to conjoin it to the Non-cooperation Movement.

59. d

60. d

61. c

62. b

63. a

In keeping with the spirit of human rights movement all over the world, the national Human Rights Commission (NHRC) came into existence in India in 1993 through an ordinance promulgated on 28th September 1993 by the president of India. The ordinance was replaced by a statute called the Protection of Human Rights Act, 1993 which came into force in 1994. This Act provides for setting up the NHRC at the centre as well as one commission each at the state level. Chairman of NHRC must be no less than a former Chief Court. Its powers are only recommendatory in nature. Only 15 states have state human Rights Commission and it is not mandatory to appoint a women as a member of the commission.

64. c

65. b

66. a

It is Article 15 that specifically states that backwardness of citizens is measured on the basis of social and educational backwardness. What constitutes backwardness of citizens in matters of public employment as given under Article 16 was a matter of judicial interpretation given by the Supreme Court in Indra Sawhney vs. Union of India 1992 case.

67. d

68. d

69. d

70. c

71. a

The power of Council of States to suggest amendments to a Money Bill is borrowed from Section 53 of Australian Constitution. Indirect election of members of Council of States was borrowed from the then Constitution of South Africa.

72. b

73. d

74. a

75. b

Citizenship clauses need a simple majority only in the Parliament. The same is true for changing the boundary of states and for changing number of judges.

76. a

77. d

78. c

79. b

Mahatma Phule aimed at complete abolition of the Varna system. He dedicated his book to the African American movement for Slavery. With the help of his wife, Savitribai Phule, he opened the first indigenously run school for girls at Pune.

80. d

The reformers of the 19th century did not believe in blind imitation of western ideas. They believed in modernization, rather than westernization of Indian society.

The Rahnumai Mazdayasnan Sabha was founded by English-educated Parsis to improve the social condition of the people of their community.

Radha Kant Deb organized Dharma Sabha to counter the liberal ideas of Brahmo Samaj regarding abolition of Sati etc.

Indian Social Conference met annually at the same time and venue as the Indian National Congress since 1887. It focussed attention on social issues and advocated inter-caste marriages, monogamy etc.

81. b

82. b

83. d

84. b

85. c

86. d

87. d

Article 50 : Separation of judiciary from executive The State shall take steps to separate the judiciary from the executive in the public services of the State

Establishing village panchayats and endow them with necessary powers and authority to enable them to function as units of self-government (Article 40).

To protect monuments, places and objects of artistic or historic interest which are declared to be of national importance (Article 49)-ASI performs this function.

To promote cottage industries on an individual or co-operation basis in rural areas (Article 43). KVIC performs this function.

88. d

89. a

90. a

91. a

Power is shared among different organs of government, such as the legislature, executive and judiciary. Let us call this horizontal distribution of power because it allows different organs of government placed at the same level to exercise different powers. Such a separation ensures that none of the organs can exercise unlimited power. Each organ checks the others. This results in a balance of power among various institutions. Even though ministers and government officials exercise power, they are responsible to the Parliament or State Assemblies. Similarly, although judges are appointed by the executive, they can check the functioning of executive or laws made by the legislatures. This arrangement is called a system of checks and balances.

92. c

93. a

94. d

95. A

96. D

UNCCD adopted in Paris, France on June 1994 and entered into force in December 1996. The Convention is to combat desertification and mitigate the effects of drought through national action programs that incorporate long-term strategies supported by international cooperation and partnership arrangements. The Convention addresses specifically the arid, semi-arid and dry sub-humid areas, known as the drylands, where some of the most vulnerable ecosystems and peoples can be found. It is the first and only internationally legally binding framework set up to address the problem of desertification.

Desertification is extreme form of land degradation in which once cultivable land is converted to non-cultivable waste land so desertification occurs not only due to expansion and encroachment of deserts into marginal lands.

It most commonly occurs in arid, semi-arid and dry sub-humid regions, both due to natural factors and man-made causes (like land fallowing, shifting cultivation, deforestation etc)

97. D

98. d

99. b

100. a

<http://www.un.org/en/events/forestsday/>: Wood provides the world with more energy than solar, hydroelectric or wind power, accounting for roughly 45 percent of current global renewable energy supply.

<http://www.unredd.net/about/what-is-redd-plus.html>: REDD+ is a mechanism developed by Parties to the United Nations Framework Convention on Climate Change (UNFCCC). It creates a financial value for the carbon stored in forests by offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development. Developing countries would receive results-based payments for results-based actions. REDD+ goes beyond simply deforestation and forest degradation, and includes the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.

<http://pib.nic.in/newsite/PrintRelease.aspx?relid=170685>: The Partnership for Land Use Science (Forest-Plus) is a joint programme by USAID and MoEFCC to strengthen capacity for REDD+ implementation in India.