



INSIGHTS IAS - WEEKLY COMPILATION

PYQ INITIATIVE

“PRACTICE TO PROGRESS”

12 FEB - 17 FEB 2024

PRACTICE CONSISTENTLY & YOU WILL
SEE SUSTAINABLE PROGRESS

PRACTICE TO PROGRESS {P2P}

MODERN HISTORY: PERSONALITIES

Q. Balgangadhar Tilak was associated with:

[CAPF 2015]

1. Poona Sarvajanik Sabha
2. The Age of Consent Bill
3. Gaurakshini Sabha
4. Atmiya Sabha

Select the correct answer using the code given below :

- a. 1 and 2 only
- b. 1, 2 and 4
- c. 3 and 4
- d. 2 and 4 only



SOLUTION

Ans: A

Exp:

ATMIYA SABHA timing **1815** so Tilak association not possible, he was born in 1856.

POONA SARVAJANIK SABHA:

- Poona Sarvajanik Sabha was established in 1870 by M.G. Ranade, G.V. Joshi, S.H. Chiplankar and his associates.
- It was a **sociopolitical organization** in British India which worked as a mediating body between the government and people of India in order to popularize the **peasants legal rights**.
- The organization organized lecture tours and meetings in order to instill a **sense of national pride** in the people. It also **coordinated relief efforts** during famines.
- Essentially, it was intended to serve as a link between the government and the people, allowing the former to be more in line with the latter's wishes and interests.
- Despite the fact that the majority of the members were from the upper-middle classes, membership was open to people of all castes and classes.
- The Sabha **represented peasant interests** to the government, as well as opposition to forest laws, salt laws, and press laws.
- It published a **quarterly journal** in which it promoted its ideas and urged In-

- dians to band together in order to press for economic and political reforms.
- The Sabha even **supported Swadeshi** by sending its member **Ganesh Vasudeo Joshi** to the **Delhi Durbar (1877)** dressed in hand-spun khadi.

AGE OF CONSENT 1861: The 1861 Act laid down 10 years as the minimum age for sexual intercourse. The **Hindu intelligentsia opposed** raising this age to 12 on the grounds that it **violated norms** related to garbhadhan.

AGE OF CONSENT ACT 1891: The Age of Consent Act, 1891 was a legislation enacted in British India on 19 March 1891 which raised the age of consent for sexual intercourse for all girls, married or unmarried, from ten to twelve years in all jurisdictions, its violation subject to criminal prosecution as rape.

The sufferings of two young girls Rukhmabai and Phulmoni Dasi has led to this act. Tilak's newspapers Maratha and Kesari were at the forefront of this campaign.

SARDA ACT:

The child marriage Restraint Act set the minimum age of marriage for women and men at 16 and 18 years respectively in 1929.

This law is also known as the Sarda Act after its sponsor Harbilas Sarda, a judge and member of Arya Samaj. The Sarda Act was amended in 1978 to prescribe the age of marriage for a girl and boy as 18 and 21 years respectively.

GAURAKSHINI SABHA: Cow protection movement is a predominantly Indian religious and political movement aiming to protect cows, whose slaughter has been broadly opposed by Hindus, Buddhists, Jains, Zoroastrians and Sikhs.

While the opposition to slaughter of animals, including cows, has extensive and

ancient roots in Indian history, the term refers to modern movements dating back to colonial era British India.

The earliest such activism is traceable to Namdhari (Kooka) Sikhs of Punjab who opposed cow slaughter in the 1860s.

The movement became popular in the 1880s and thereafter, attracting the support from the Arya Samaj founder **Swami Dayananda Saraswati** in the late 19th century, and from Mahatma Gandhi in the early 20th century.

- **Bal Gangadhar Tilak** was an Indian nationalist and social reformer.
- *“Swaraj is my birth right, and I shall have it”* a popular declaration which motivated many revolutionaries and awakened them to fight for Freedom.
- He is classified as an ‘extremist’ in the national movement



PRACTICE TO PROGRESS {P2P}

POLITY: COUNCIL OF MINISTERS

**Q. Consider following statement in context of Indian Constitution
[UGC 2016]**

1. The Union Council of Ministers shall be collectively responsible to the Lok Sabha.
2. Union Ministers shall hold office during pleasure of the Prime Minister

Of these:

- a. Only 1 is correct
- b. Both 1 and 2 correct
- c. Neither 1 nor 2 is correct
- d. Only 2 is correct



SOLUTION

Ans. A

Exp.

Statement 1: **Article 75**: Council of Ministers is collectively responsible to the **Lok Sabha**. This means that all the ministers own joint responsibility to the Lok Sabha for all their acts of omission and commission.

The Lok Sabha can remove the ministry from office by **passing a vote of no confidence**. The no confidence motion can **only be introduced in Lok Sabha**.

Hence, the ministry stays in office so long as it enjoys the confidence of the majority of the members of the Lok Sabha.

RESPONSIBILITY OF MINISTERS:

COLLECTIVE RESPONSIBILITY: **Article 75** clearly states that the COM is collectively responsible to the Lok Sabha. This means that **all the ministers own joint responsibility** to the Lok Sabha for all their acts of omission and commission.

INDIVIDUAL RESPONSIBILITY: **Article 75** also contains the principle of individual responsibility. It states that the **ministers hold office** during the **pleasure of the President**, which means that the President can remove a minister even at a time when the **COM enjoys the confidence of the Lok Sabha**. However, the President removes a minister only on the advice of the Prime Minister.

Statement 2: The **Prime Minister is appointed by the President**. All other ministers are appointed by the President upon advice of the Prime Minister. The **Ministers hold office during pleasure of President**.

ARTICLE 78 (DUTIES OF PRIME MINISTER): To communicate to the President all decisions of the COM relating to the administration of the affairs of the Union and proposals for legislation.

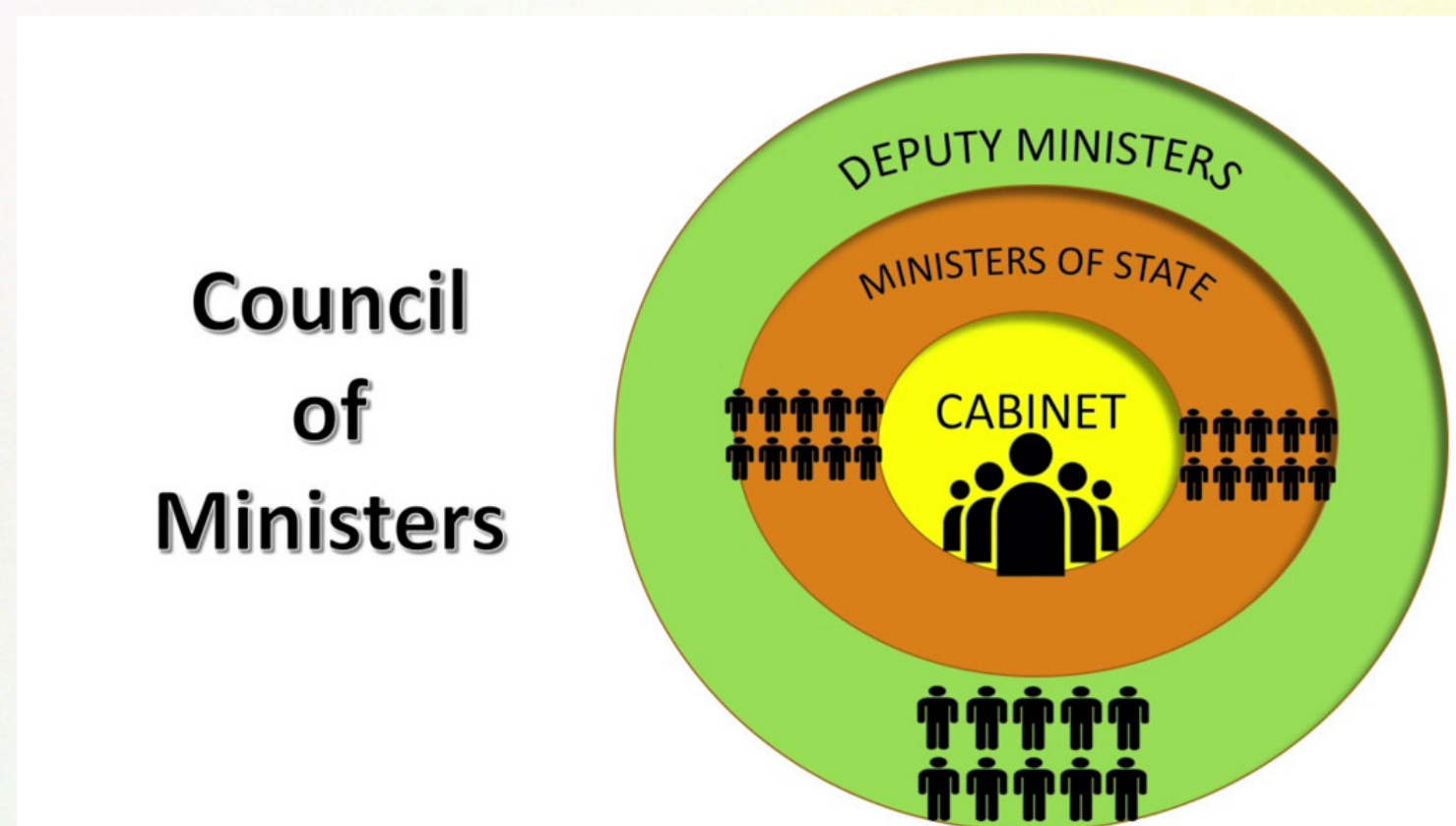
JUDGEMENT RELATED TO COUNCIL OF MINISTERS:

In **S.R. Chauhan vs State of Punjab (2001)**, Supreme Court held that a non-member cannot be re-appointed without being elected. However, a Non-member can also become a part of the council of ministers for a maximum of 6 months.

Supreme Court ruled that the description of a minister as Deputy Prime Ministers or any other type of minister such as minister of state or deputy minister of which there is no mention in the Constitution does not vitiate the oath taken by him so long as the substantive part of the oath is correct.

COUNCIL OF MINISTERS IN STATES:

The Council of Ministers in the states is constituted and functions in the same way as the Council of Ministers at the Centre (**Article 163**: COM to aid and advise Governor) and **Article 164**: Other Provisions as to Ministers).



PRACTICE TO PROGRESS {P2P}

ANCIENT HISTORY: REGIONAL DYNASTIES

Q. Which of following rulers were identified through Matronymics (names derived from that of the Mother)?

[CDS 2020]

- a. Mallas of Pava
- b. Videhas of Mithila
- c. Yaudheyas
- d. Satavahanas



SOLUTION

Ans: D

Exp:

SATAVAHANA DYNASTY (60 BC-225 AD):

- Emperor called himself as **Gautamiputra Satakarni** which meant Gauthami's son Satakarni.
- Gauthami referred to his mother, Gauthami Balashri. The Satavahanas, also known as Andhra's were an ancient Indian empire whose rule lasted from 1st Cent BCE to 2nd cent CE.
- Their capital was **Pratishthan – Paithan (Maharashtra)**.
- Gautamiputra Satakarni also described as Ekabrahmana (a peerless Brahmana) and Khatiya-dapa-manamada (destroyer of the pride of Kshatriyas). He was given the titles Rajaraja and Maharaja.
- He **donated land to the Buddhist monks**. The **Karle inscription** mentions the grant of Karajika village, Maharashtra.

SOURCES: SATAVAHANA DYNASTY: The **Puranas and inscriptions** remain important sources for the history of Satavahanas.

It majorly comprised present Andhra Pradesh, Maharashtra and Telangana. The early Satavahana kings appeared in Maharashtra and later in Andhra.

Deccan state: For the first time, a prominent state covering a major part of the Deccan was established.

Several rock-cut caves dedicated to the Buddha sangha bear evidence that they

were situated in the trade routes linking the interior to the coastal parts of the Konkan region. It was also a period of brisk **Indo-Roman trade**.

MOST IMPORTANT KING: GAUTAMIPUTRA SATAKARNI (106-130 AD):

SOURCES AND TITLES: Described as **Ekabrahman** in Nasik (by his mother, Gautami Balashri) and **Nanaghad inscriptions**.

Title of Kshatriyadarpa Mardana (Destroyer of the Pride of Kshatriyas) in Nasik inscription. Known as the destroyer of the Sakas, Pahlavas and Yavanas.

PATRONAGE TO BRAHMINS: He patronised Brahmanism, but he also donated land to the Buddhist monks. Karle inscription mentions the grant of a village by him to the Buddhist monks.

EXPANSION OF THE EMPIRE: His rule extended from Malwa and Saurashtra in the north to Krishna River in the south and from Konkan in the west to Vidarbha in the east.

He captured the whole of Deccan and expanded his empire. His victory over Nagapana, the ruler of Malwa, was remarkable.

According to the **Junagadh inscription of Rudradaman I**, he was defeated by Kardamaka ruler Rudradaman I, a Western Kshatrapa dynasty.



PRACTICE TO PROGRESS {P2P}

GEOGRAPHY: MINERALS

Q. Among the following, which are major iron ore producing States? [IES 2015]

- a. Assam, Bihar, Meghalaya, Tripura and West Bengal
- b. Chhattisgarh, Jharkhand and Odisha, Goa and Karnataka
- c. Maharashtra, Gujarat, Rajasthan, Punjab and Uttarakhand
- d. Uttar Pradesh, Andhra Pradesh, Telangana, Tamil Nadu and Kerala



SOLUTION

Ans: B

Exp:

MAJOR IRON ORE PRODUCING STATES:

The top four states of India in Iron Ore production are Orissa, Chhattisgarh, Karnataka and Jharkhand respectively.

Other principal states that produce iron ore in India are Madhya Pradesh, Goa, Maharashtra, Andhra Pradesh, Kerala, Rajasthan, and Tamil Nadu.

There are 4 types of iron ore found in India:

- Massive Hematite
- Magnetite
- Titanomagnetite
- Pisolitic Ironstone

MAGNETITE: It is the most important and best kind of iron ore.

It contains about 72% metallic iron in it. It is found in Karnataka, Andhra Pradesh, Rajasthan, Tamil Nadu, Goa and Kerala.

HEMATITE:

- It contains about 60-70 percent metallic iron in it.
- It is red and brown in colour.
- It is found in Odisha, Jharkhand, Chhattisgarh and Andhra Pradesh. In the western section, Karnataka, Maharashtra and Goa have this kind of ore.

LIMONITE: It contains about 30 to 40 percent metallic iron in it. It is mostly yellow in colour. It is low-grade iron ore.

SIDERITE:

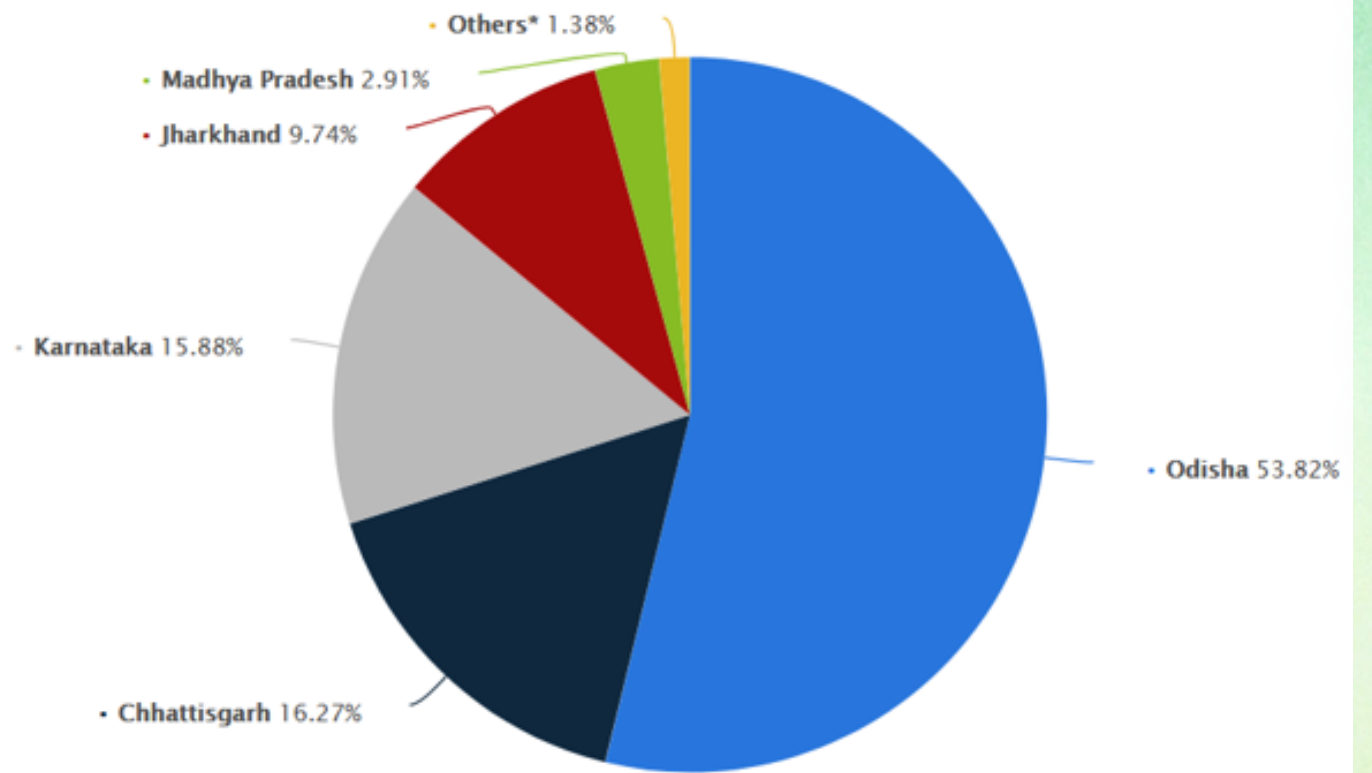
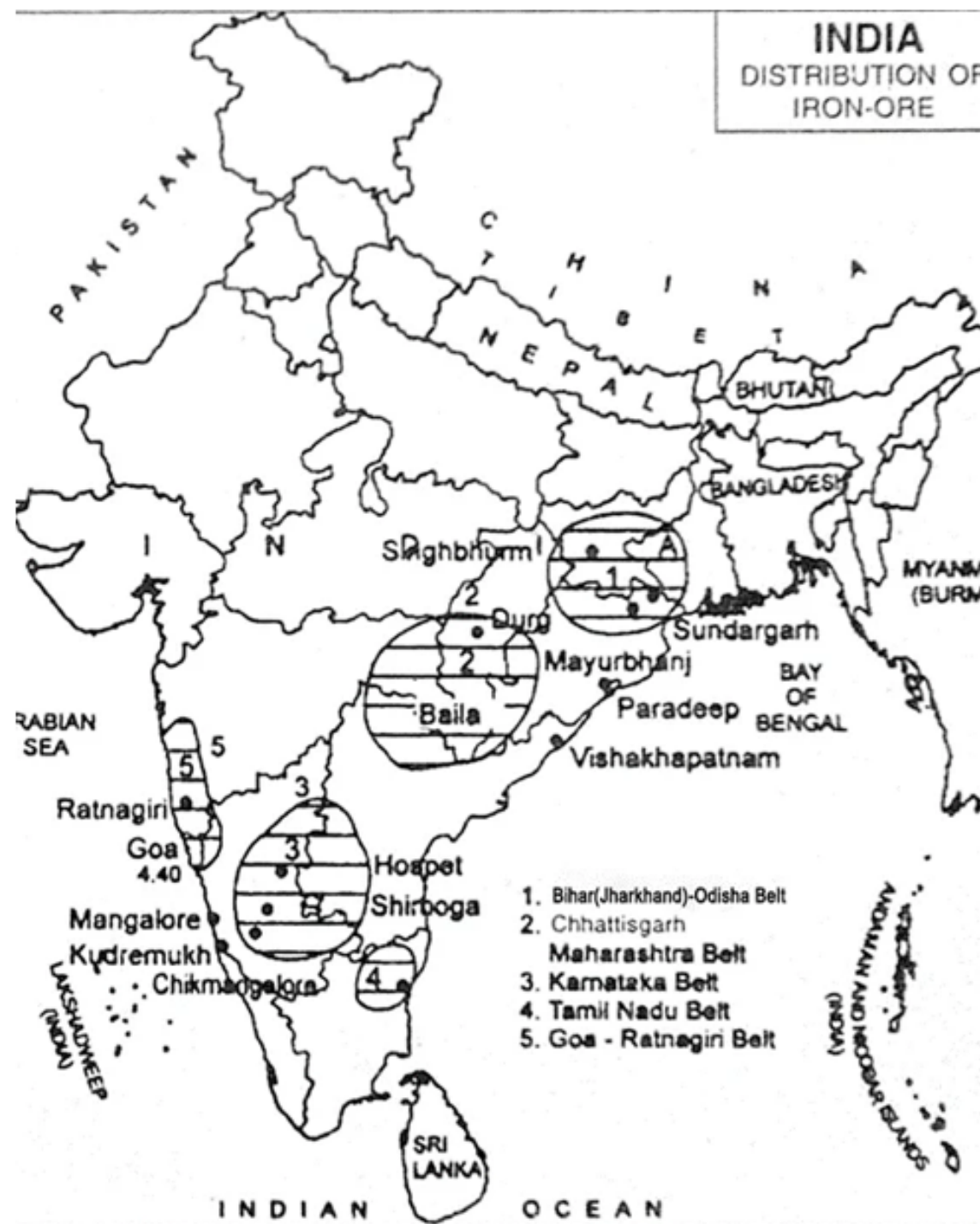
- It has more impurities.
- It contains about 48 percent metallic iron content in it.
- It is brown in colour.
- It contains a mixture of iron and carbon. It is low-grade iron ore. It is self-fluxing due to the presence of lime.

MEASURES TAKEN BY GOVERNMENT:

The Government has taken various steps to increase production and availability of iron ore, which inter-alia include Mining and Mineral Policy reforms to ensure enhanced production, early auction & operationalization of expired mines, ease of doing business, seamless transfer of all valid rights & approvals, incentivizing for starting of mining operation & dispatch, transfer of mining leases, allowing captive mines to sell up to 50% of the minerals produced, enhancing exploration activities, etc.

EXPORT OF IRON ORE FROM INDIA:

- India is the fifth largest exporter of iron ore in the world.
- About 50 to 60 percent of our total iron ore production to countries like Japan, Korea, European countries, and lately to Gulf countries.
- Japan is the biggest buyer of Indian iron ore accounting for about three-fourths of our total exports.
- Major ports handling iron ore export are Vishakhapatnam, Paradip, Mormugao, and Mangalore.



PRACTICE TO PROGRESS {P2P}

ENVIRONMENT: KEYSTONE SPECIES

Which of the following organisms perform waggle dance for others of their kin to indicate the direction and the distance to a source of their food? [UPSC CSE 2023]

- a. Butterflies
- b. Dragonflies
- c. Honeybees
- d. Wasps



SOLUTION

Ans: C

Exp:

HONEYBEES & WAGGLE DANCE:

Honeybees perform waggle dance to communicate the location of food sources or new nest sites to their colony mates. Hence, option c is correct.

WAGGLE DANCE:

- The dance consists of a straight run followed by a loop to one side and then another straight run followed by a loop to the other side, forming a figure-eight pattern.
- The angle of the straight run relative to gravity indicates the direction of the food source relative to the sun, and the duration of the straight run indicates the distance of the food source from the hive.
- Young bees that were **isolated** from older foragers could perform waggle dance spontaneously, but they made more errors in encoding distance information than bees that had older role models.
- This suggests that **honeybees learn from observing and practicing** with experienced dancers before they become proficient foragers themselves.
- Therefore, honeybees waggle dance is both innate and learned, like human language or songbird communication.

COMMUNICATING RESOURCES AT EVEN GREATER DISTANCES:

The **waggle dance** and the **round dance** are **two forms of dance behavior** that are part of a continuous transition.

As the distance between the resource and the hive increases, the round dance transforms into variations of a transitional dance, which, when communicating resources at even greater distances, becomes the waggle dance.

In the case of **APIS MELLIFERA LIGUSTICA**, the round dance is performed until the resource is about 10 meters away from the hive, transitional dances are performed when the resource is at a distance of 20 to 30 meters away from the hive, and finally, when it is located at distances greater than 40 meters from the hive, the waggle dance is performed.

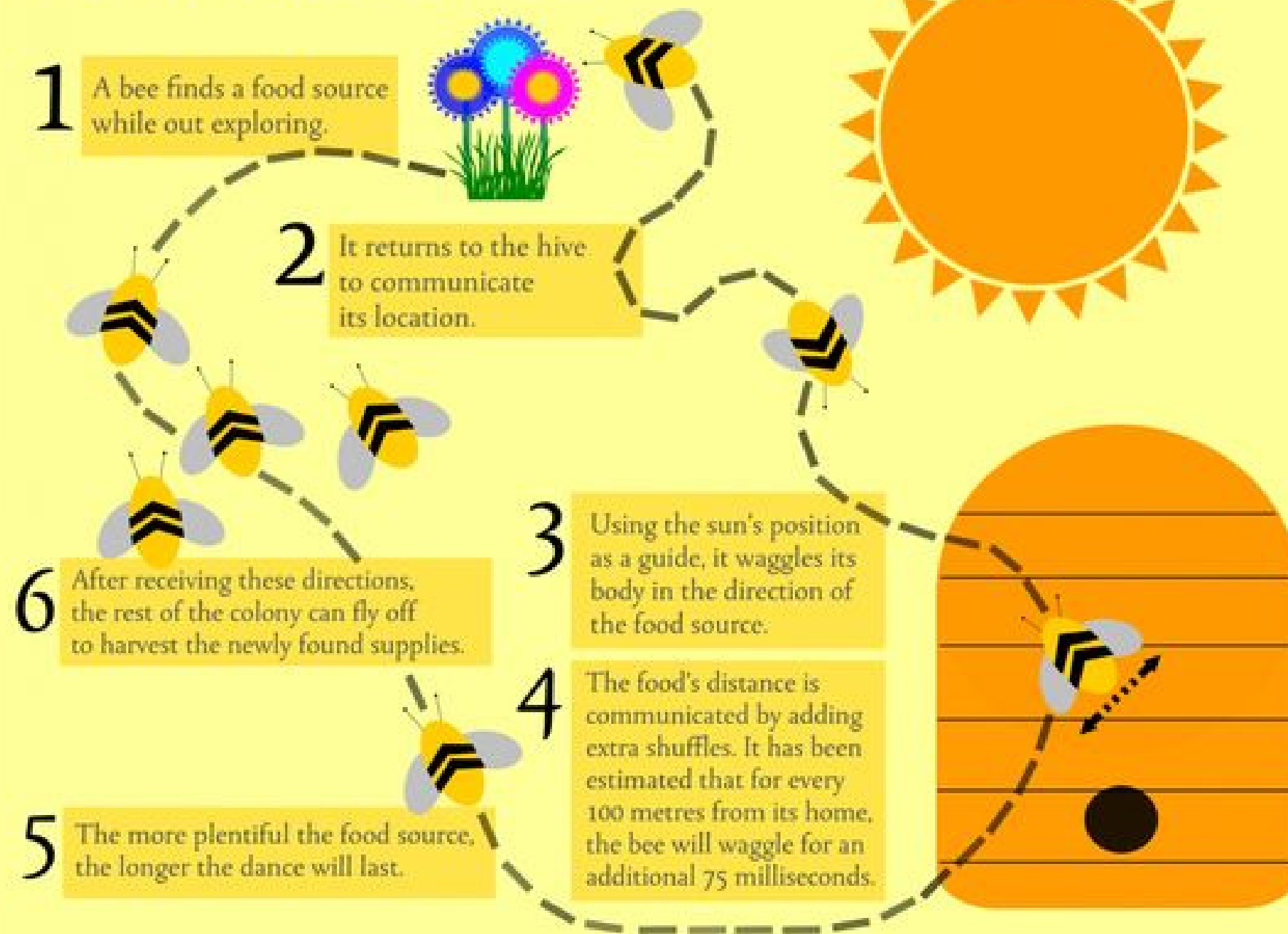
However, even close to the nest, the round dance can contain elements of the waggle dance, such as a waggle portion.

It has therefore been suggested that the term waggle dance is better for describing both the waggle dance and the round dance.

Honeybees accumulate an electric charge during flying and when their body parts are moved or rubbed together. Bees emit constant and modulated electric fields during the waggle dance.

Both low- and high-frequency components emitted by dancing bees induce passive antennal movements in stationary bees according to Coulomb's Law.

THE WAGGLE DANCE



PRACTICE TO PROGRESS {P2P}

GENERAL SCIENCE: PROMINENT MINERALS

Q. Which one of following is not true for Diamond?

[CDS 2015]

- a. Each carbon atom is linked to four other carbon atoms.
- b. Three-dimensional network structure of carbon atoms is formed.
- c. It is used as an abrasive for sharpening hard tools.
- d. It can be used as a lubricant.



SOLUTION

Ans: D

Exp:

GRAPHITE AND DIAMOND:

Graphite and diamond are two of the most interesting minerals. They are identical chemically – both are composed of carbon (C), but physically, they are very different. Minerals which have the **same chemistry** but **different crystal structures are called polymorphs**.

When you look at graphite and diamond, it is hard to imagine that they are **identical chemically**, for they are so different physically.

Graphite is **opaque and metallic**- to earthy-looking, while diamonds are transparent and brilliant.

DIAMOND AND ITS CARBON ATOMS:

- Carbon (6) has an electronic arrangements of 2, 4.
- In a diamond, each carbon shares electrons with four other carbon atoms-forming **four single bonds**.
- This is a **giant covalent structure** that continues on and on in three dimensions that gives it a very rigid 3-D structure.
- It is difficult to break this extended covalent bonding and due to this diamond is the hardest natural substance known.
- Thus, it is used as an **abrasive for sharpening hard tools**.
- Diamond **cannot** be used as a **lubricant** whereas graphite can be used as a

lubricant as it is soft and slippery and the layers are held together by the weak Van der Waal's forces of attraction. Therefore, option D is correct.

PHYSICAL PROPERTIES OF DIAMOND

- Diamond has a very **high melting point (almost 4000°C)**. Very strong carbon-**carbon covalent bonds** have to be broken throughout the structure before melting occurs.
- Diamond is **very hard**. This is again due to the need to break very strong covalent bonds operating in 3-dimensions.
- Diamond **doesn't conduct electricity**. All the electrons are held tightly between the atoms, and aren't free to move.
- Diamond is **insoluble in water** and organic solvents. There are no possible attractions which could occur between solvent molecules and carbon atoms which could outweigh the attractions between the covalently bound carbon atoms.

