



Ossification Test

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Why in News?

Recently, one of the individuals accused in the **murder case** of a political leader underwent an **ossification test** to determine if he was a minor.

What is the Ossification Test?

▪ About:

- Ossification is the **natural process of bone formation**, beginning in the early developmental stage of the fetus and continuing until late adolescence, with **variations among individuals**.
- A person's **approximate age can be estimated based on the stage of development of their bones**.
- The test involves taking **X-rays of specific bones**, such as those in the hands and wrists, **to assess skeletal and biological development**.
 - The **X-ray images can be compared to standard development benchmarks** to help determine age.
 - The analysis may also **utilise a scoring system that evaluates individual bones** in the hands and wrists, comparing their growth to established maturation standards within a specific population.

▪ Reliability:

- **Variability in observing bone maturation** can affect the accuracy of ossification tests.
 - **Minor developmental differences among individuals** create potential for error in age estimation.
 - Ossification tests typically **provide an age range, such as 17-19 years**.
- Courts have addressed the **issue of margin of error within this range**, debating whether to accept the lower or upper end of the range.
 - For example, In 2024, the **Delhi High Court ruled** that in cases under the **POCSO (Protection of Children from Sexual Offences) Act, 2012** the **upper age limit of the ossification test's** reference range should be considered.
 - The court also stated that a **margin of error of two years should be applied when determining age**.

▪ Court's View About the Test:

- Under **Section 94 of the Juvenile Justice Act**, if there are "**reasonable grounds for doubt**" regarding the person's age, **the Board must initiate the process of age determination**.
- The **primary evidence** for age verification should be a **school-issued birth certificate or a matriculation certificate** from the relevant examination board.
 - If these documents are unavailable, a **birth certificate from a municipal authority, corporation, or panchayat** can be considered.
- The Act states that only in the absence of these documents should an **ossification test or another medical age determination test be conducted**, as ordered by the Committee or Board.
- In a March 2024 ruling, the Supreme Court emphasized that ossification tests should be

- used as a last resort for determining age.
- **Courts have ruled** that **ossification tests cannot override documentary evidence.**

Why is Age Determination Significant in the Criminal Justice System?

- **Criminal law distinguishes between children and adults** in terms of procedures, correction, rehabilitation, and punishment.
 - In India, individuals **below the age of 18 are classified as minors.**
- **Minors** are governed by the **Juvenile Justice (Care and Protection of Children) Act, 2015.**
 - A child in conflict with the law is not sent to an adult prison but is **placed in an observation home** and appears before a **Juvenile Justice Board (JJB)**, comprising a magistrate and two social workers with expertise in child welfare, rather than a traditional court.
 - After conducting an inquiry, the JJB can decide to admonish the child, assign community service, or place them in a special home for a maximum of three years, among other options.
- After **Juvenile Justice Amendment Act 2021,** for **children above 16 apprehended for heinous offences** (punishable by at least 7 years' imprisonment), the **JJB must conduct a preliminary assessment of their mental and physical capacity** to commit the offence.
 - The assessment also evaluates the child's understanding of the consequences and the circumstances of the offence to decide whether they should be tried as an adult.

UPSC Civil Services Examination, Previous Year Question (PYQ)

Q. With reference to India, consider the following statements :

1. When a prisoner makes out a sufficient case, parole cannot be denied to such prisoner because it becomes a matter of his/her right.
2. State Governments have their own Prisoners Release on Parole Rules.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Ans: (b)