

# CHAPTER - 4

## DISCOVERING TUT - THE SAGA CONTINUES

### A. Understanding the Text

**Question 1. Give reasons for the following:**

**(i) King Tut's body has been subjected to repeated scrutiny.**

**Answer:** The mummy of King Tutankhamun has earned world wide fame for the riches it was buried with. There is also speculation about the manner of his death and his age at the time of death. Hence King Tut's body has been subjected to repeated scrutiny.

**(ii) Howard Carter's investigation was resented.**

**Answer:** Howard Carter's investigation was resented because he used unscientific methods and illegitimate ways. He was focusing more on treasure and less on cultural and historical aspects.

**(iii) Carter had to chisel away the solidified resins to raise the king's remains.**

**Answer:** Carter found that the ritual resins had hardened. The result was that Tut's body had been cemented to the bottom of his solid gold coffin. Proper force could not move the resins. Even the scorching sun failed to loosen the resins. So he got the resins chiselled away to raise the king's remains.

**(iv) Tut's body was buried along with gilded treasures.**

**Answer:** The people of ancient Egypt believed in resurrection of the dead. Their kings were extremely rich. So Tut's body was buried with gilded treasures. Their eternal brilliance was meant to guarantee resurrection. Things of everyday use were also buried with the king.

**(v) The boy king changed his name from Tutankhaten to Tutankhamun.**

**Answer:** Tutankhamun means "living image of Amun". He was a major god in ancient Egypt. King Amenhotep IV who changed his name to Akhenaten smashed the images of Amun and got his temples closed. Tut oversaw a restoration of the old ways. He changed his name to express his belief in Amun.

**Question 2. (i) List the deeds that led Ray Johnson to describe Akhenaten as 'wacky'.**

**Answer:** Akhenaten means the servant of the Aten i.e. the sun disc. He moved the religious capital from the old city of the Thebes to the new city of Akhetaten, known now as Amarna. He smashed the images of Amun, a major God and closed his temples. These deeds led Ray Johnson to describe Akhenaten as 'Wacky'.

**(ii) What were the results of the CT scan?**

**Answer:** The results of the C.T. scan were quite encouraging. 1700 digital X-ray images in cross-section were created. A gray head appeared on screen. Neck vertebrae were quite clear. The images of hand, ribcage and skull were equally bright. These revealed that nothing had gone seriously wrong with Tut's body

**(iii) List the advances in technology that have improved forensic analysis.**

**Answer:** The advances in technology have helped in improving forensic analysis. Many scientific tests can be carried out to determine the causes of crime. These include X-ray, ultrasound, C.T. scan, post mortem, autopsy and biopsy. All these help in diagnosis and provide exact information.

**(iv) Explain the statement, "King Tut is one of the first mummies to be scanned— in death as in life"**

**Answer:** King Tut's mummy was the first one to be X-rayed by an anatomy Professor in 1968. On 5 January 2005 CT scan created virtual reality and produced life-like images. King Tut is one of the first mummies to be scanned. Thus in death as well as in life Tut moved regally ahead of his countrymen.

## **B. Talking About the Text**

**Discuss the following in groups of two pairs, each pair in a group taking opposite points of view:**

**Question 1. Scientific intervention is necessary to unearth buried mysteries.**

**(Students are expected to debate on issue raised in the text related to rediscovering history with the help of technology; respect for traditions, etc. While answering these questions, students are required to reflect on the issues and give their points of view.)**

**Answer: For the motion.**

Every nation glorifies its past history, culture and civilization. However, certain mysteries lie buried with them. Rituals and legends are insufficient to clear the wrap of mystery surrounding them. For example, take the case of Tutankhamun's mummy. He was laid to rest laden with gold more than 3,300 years ago. Since the discovery of his tomb in 1922 AD, the modern world has speculated about him. Some people believe that the boy king might have been murdered. There is a mystery around his life as well as death. Scientific intervention is necessary to clear the dust and cloud of mysteries around him. Hence, if we want to study archaeology properly we must take help of scientific techniques.

**Against the motion:**

If present is perfect and future certain, why many about the past? Let the dead past bury its dead and the mysteries surrounding them. In the present world full of competition, we must devote our money, time and energy to build up our resources and sustain the life style. Scientific techniques should be employed to feed the hungry millions and clad the naked ones. Some mysteries of the past have lost their relevance with the passage of time. Won't it be futile and wastage of precious resources of a developing nation in this idle pursuit? Let the thinkers, philosophers and priests worry about mysteries—not the scientists.

**Question 2. Advanced technology gives us conclusive evidence of past events.**

**Answer: For the motion.**

I fully subscribe to the observation that advanced technology gives us conclusive evidence of past events. Even my opponents will agree that there is no proper written record about many past events. Myths and legends surround even the most celebrated personalities and events of their life or circumstances of death. Facts and fiction are mingled together and sometimes

have become inseparable. Various persons have given coloured versions of the past events to suit the demands of their masters or to serve their own ends. The evidence that opposed their point of view has been condemned and rejected. Thus sometimes we get a warped version and subjective account of past events. Only advanced technology can help us understand the past in right perspective.

**Against the motion:**

I disagree with the remarks that advanced technology gives us conclusive evidence of past events. It may hold good in certain cases where evidence can be reconstructed and examined closely with the sophisticated techniques of modern science available now. However, it will be unfair to generalise and hold it true in all cases. Sometimes the processing of available data may yield contradictory accounts and create more confusion than unravelling the knotted issues. Moreover, the available evidence may not be worthy of analysis and examination. The tests may determine the possible time period of the action, but it is quite difficult to assess the causes that prompted it or the results that followed it.

**Question 3. Tradition, rituals and funerary practices must be respected.**

**Answer: For the motion.**

Different religions, cultures and civilizations follow various traditions, rituals and funerary practices. The dead bodies buried under the earth, are supposed to be in rest peacefully till the doom's day or the day of resurrection or after life. The ancient Egyptians had mastered the art of mummifying. Certain traditional rituals were performed while treating the dead body with special oils and wrapping it in cloth. Ritual resins held the mummy close to the bottom of the coffin. The burial chamber and grave contained all the important things that the king might need in after life. The funerary practices had a certain sanctity for the followers of that particular religion. We must learn to be more tolerant of the belief of others. Hence I conclude that traditions, rituals and funerary practices must be respected.

**Against the motion:**

The world is on the move. We have to be forward looking. We can't remain content with the achievements of the past or rest on our laurels. If traditions, rituals and certain funerary practices block the flow of information and knowledge, these may be overlooked for the greater benefit of humanity, i.e. clearing the air of mystery, ignorance and superstitions surrounding some of the age-old beliefs. However, in our quest for knowledge, we should not be intolerant or disrespectful. We must conduct our probe objectively and dispassionately. Facts must be given more weightage than the beliefs attached to them. A detached outlook can provide clear understanding of past events.

**Question 4. Knowledge about past lives is useful to complete our knowledge of the world we live in.**

**Answer: For the motion.**

Modern world has expanded the frontiers of knowledge. In fact the whole world has become a global village. Within a few seconds we become aware of incidents happening thousands of miles away. Information technology has indeed brought a revolution in the field of knowledge. Still our knowledge of the world is incomplete without the knowledge about past lives. We are the direct descendants of our ancestors and we must be aware of the circumstances in which they existed and how they coped with them. The structure of future is rooted in the past. We draw lessons from the past and make improvements. The lives of the people of the past are like beacon lights to guide and inspire us and enlighten us about the world we live in.

**Against the motion:**

We are constantly learning new things about the world we live in. The knowledge of our present circumstances and future prospects is more important than the knowledge about past lives. Their traditions, rituals, tools, ways of conduct and ethos are not going to help us in our struggle for existence in the highly competitive and complex modern world. The knowledge

about past lives can at best make us retrograde instead of being progressive. For many of us the world means their sphere of activities and the environment they live in. People aim at specializing in restricted fields instead of being Jack of all trades. As such the knowledge of the world we need is also restricted to our requirements and we need not bother about knowledge about past lives.

### C. Thinking About Language

Read the following piece of information from The Encyclopedia of Language by David Crystal.

**“Egyptian is now extinct: its history dates from before the 3rd millennium BC, preserved in many hieroglyphic inscriptions and papyrus manuscripts. Around the 2nd century AD, it developed into a language known as Coptic. Coptic may still have been used as late as the early 19th century and is still used as a religious language by Monophysite Christians in Egypt.”**

**Question 1. What do you think are the reasons for the extinction of languages?**

**Answer:** A language becomes extinct when its use is restricted to certain classes or categories of people. Secondly, the harshness of rules and lack of flexibility in usage also contribute to the extinction of languages.

**Question 2. Do you think it is important to preserve languages?**

**Answer:** I think it is important to preserve languages. Various languages are the vehicles of thought and medium of interaction between the users of that language and the outside world. A language has intimate connection with the lives, culture and civilization of the people and reflects their thinking.

**Question 3. In what ways do you think we could help prevent the extinction of languages and dialects?**

**Answer:** Certain steps must be taken to help prevent the extinction of languages and dialects. The most important is to encourage its use. A language thrives as long as it is used by masses. Measures should be taken to propagate the languages and dialects used in certain areas. The help of interpreters may be provided for interaction between native users of language/dialect and non-users. Certain incentives in the form of stipends, scholarships, preferences in jobs etc. may also prove handy in attracting the youth towards languages and dialects which are on the verge of extinction. State patronage can also help in the preservation of languages.

### D. Working With Words

**Question 1. Given below are some interesting combinations of words. Explain why they have been used together:**

**(a) ghostly dust devils**

**(b) desert sky**

**(c) stunning artifacts**

**(d) funerary treasures**

**(e) scientific detachment**

**(f) dark-bellied clouds**

**(g) casket gray**

**(h) eternal brilliance**

**(i) ritual resins**

**(j) virtual body**

**Answer:**

In each combination of words, one word is an adjective and it modifies as well as reinforces the meaning of the noun following/preceding it. Let us try to understand the meaning of each combination of words:

- ghostly dust devils: ghost-like wicked evil spirits formed by dust .
- dark-bellied clouds: bulging/swelling clouds
- desert sky: the sky over the desert

- casket gray: the grey sky hiding the stars in it
- stunning artifacts: extremely attractive man-made objects if) eternal brilliance: everlasting shine
- funerary treasures: treasures stored following rituals of funeral
- ritual resins: resins applied according to religious rites
- scientific detachment: aloofness of a scientist
- virtual body: body made to appear to exist by computer software.

II. Here are some commonly used medical terms. Find out their meanings:

|                    |                    |                   |
|--------------------|--------------------|-------------------|
| <b>CT scan</b>     | <b>MRI</b>         | <b>tomography</b> |
| <b>autopsy</b>     | <b>dialysis</b>    | <b>ECG</b>        |
| <b>post mortem</b> | <b>angiography</b> | <b>biopsy</b>     |

Answer:

- **CT scan** : a medical-test in which a machine produces a three dimensional picture of the inside of a person's body on a computer screen after taking X-rays.
- **MRI**: an abbreviation for magnetic resonance imaging—a technique for producing images of body organs by measuring the properties of atomic nuclei in a strong magnetic field.
- **Tomography**: a technique for displaying a cross section through a human body (or other solid object) using X-rays or ultrasound.
- **Autopsy**: an examination of a dead body to discover the cause of death or the extent of disease.
- **Dialysis**: a technique of clinical purification of blood, as a substitute for the normal functions of the kidney.
- **ECG**: abbreviation for electrocardiogram or electrocardiograph; preparing a graph showing the measurement and recording the activity in the heart using electrodes placed on the skin.
- **Post mortem**: medical examination of the body of a dead person in order to find out how he died.
- **Angiography** : radiography of blood or lymph vessels, carried out after introduction of a substance that is opaque to X-ray.
- **Biopsy**: an examination of tissue taken from the body to discover the presence, cause, or extent of a disease.

III. Notice these expressions in the text. Guess the meaning from the context.

|                                  |                         |
|----------------------------------|-------------------------|
| ➤ <i>forensic reconstruction</i> | ➤ <i>scudded across</i> |
| ➤ <i>casket gray</i>             | ➤ <i>resurrection</i>   |
| ➤ <i>funerary treasures</i>      | ➤ <i>circumvented</i>   |
| ➤ <i>computed tomography</i>     | ➤ <i>eerie detail</i>   |

Answer:

- forensic reconstruction:activity of building again something damaged or to help'scientific test to solve a crime
- scudded across:moved quickly across something
- casket gray: a small gray box or grey sky
- resurrection:a new beginning for something which is old
- funerary treasures:collection of valuable things used at a funeral
- circumvented:found a way of avoiding a difficulty or a rule

- eerie detail: strange and frightening little bits of facts.

## E. Things to do

**I. The constellation Orion is associated with the legend of Osiris, the god of the afterlife.**

**Find out the astronomic descriptions and legends associated with the following:**

- (i) Ursa Major (Saptarishi Mandala) (ii) Polaris (Dhruva tara)**  
**(iii) Pegasus (Winged horse) (iv) Sirius (Dog star)**  
**(v) Gemini (Mithuna)**

**Answer: (i) Ursa Major (Saptarishi mandala).** This bright constellation can be observed all year long as it never sinks below the horizon. It is also known as 'Greater Bear' as it represents the back and tail of the bear. According to Sanskrit mythology this group of seven sages (sapta rishi) also moves around the constant star 'Dhruva Tara' known as Polaris.

**(ii) Polaris (Dhruva tara).** This star remains constant and always points to the North. The direction of Ursa Major keeps changing with the passage of the night, but Polaris remains unchanged. It is associated with the legend of Dhruva, the six year old boy who was blessed by Lord Vishnu with a permanent and constant abode in the universe.

**(iii) Pegasus (Winged horse).** This is associated with Greek mythology as the winged horse, sprung from Medusa's blood. It carries lightning bolts for Zeus. Pegasus' constellation may be seen when stars are out.

**(iv) Sirius (Dog star).** This is associated with the legend of Orion. It is called 'Dog Star' as it represents Orion's large hunting dog. The first glimpse of Sirius in dawn announced the rising of the Nile in ancient Egypt.

**(v) Gemini (Mithuna).** A combination of two Nakshatras—Aardhara and Punarvasu and having contradictory qualities.

**II. Some of the leaves and flowers mentioned in the passage for adorning the dead are willow, olive, celery, lotus, cornflower. Which of these are common in our country?**

**Answer:** Willow, olive, lotus and cornflower are common in our country.

**III. Name some leaves and flowers that are used as adornments in our country.**

**Answer:** Roses, Lotus, myrtles, marigolds, champa and chameli flowers and the leaves of mango, peepal, banana and basil are used as adornments in our country.

## MORE QUESTIONS SOLVED

### A. Short Answer Type Questions

**Question 1. Why is 5th January 2005 significant in Tutankhamun's saga ?**

**Answer:** On this date for the first time Tutankhamun was removed from his tomb and taken to a C.T. scanner brought there to probe the lingering mysteries surrounding this young ruler.

**Question 2. How was the atmosphere when Tut's body was taken for C.T. scan?**

**Answer:** Violent wind raised ghost like shapes of dust. Bulging clouds moved quickly across the desert sky and hid the stars in the grey sky.

**Question 3. How did the visitors to Tut's grave pay their respects to him?**

**Answer:** They gazed at the murals on the walls and peered at Tut's gilded face on his mummy shaped outer coffin lid. Some visitors read from guide book in whisper. Others stood silently.

**Question 4. What according to A.R. Williams were the thoughts of the visitors who stood silently near Tut's grave?**

**Answer:** Perhaps some of them were thinking deeply over Tut's untimely death in his teens. Others might be trembling with fear and wondering if the Pharaoh's curse was really true.

**Question 5. What was the Pharaoh's curse? Who refers to it and in what context?**

**Answer:** The pharaoh's curse was that death or misfortune would fall upon those who disturbed him. The silent visitors are the first to refer to it. Later on a guard joked nervously when the million dollar scanner stopped functioning because of sand in a cooler fan.

**Question 6. "The mummy is in very bad condition because of what Carter did in the 1920s." Who was Carter? What did he do to the mummy ?**

**Answer:** Howard Carter was a British archaeologist. He discovered Tut's tomb in 1922 after many years of futile searching. Carter's men removed the mummy's head and cut off almost every major joint to remove the golden adornments.

**Question 7. What problem did Carter face when he reached the mummy ? How did he find a way out?**

**Answer:** Carter found that the ritual resins had become quite hard. These had fixed Tut to the bottom of his solid gold coffin. The heat of the sun could not melt it. So the solid resins had to be chiselled away to free the King's remains from the box.

**Question 8. How did Carter defend his action of cutting the mummy free?**

**Answer:** Carter said that if he hadn't cut the mummy free, thieves would certainly have found a way of avoiding the guards. Then they would have torn apart everything forcibly to remove the gold.

**Question 9. List some of the adornments and golden objects on Tut's body.**

**Answer:** Precious collars, inlaid necklaces and bracelets, rings, amulets, a ceremonial apron, sandals, sheaths for fingers and toes and the inner coffin and mask. All of them were made of pure gold. His coffin was of solid gold.

**Question 10. Why do you think the royals carried so much gold to grave?**

**Answer:** There were two reasons: first, the royals were extremely wealthy. Secondly, they thought or hoped that they could take their riches with them to the great beyond.

**Question 11. What is so special about the contents of Tut's tomb?**

**Answer:** Stunning artifacts in gold found in Tut's tomb remain the richest royal collection ever found. These caused a sensation at the time of the discovery. Even now they get the most attention.

**Question 12. Which evidence proves the burial of Tut in March or April?**

**Answer:** Tut's shroud was found adorned with faded garlands of willow and olive leaves, wild celery, lotus petals and cornflowers. Since some of them are available only at the end of winter season, Tut must have been buried in March or April.

**Question 13. How did Carter's men treat Tut's body while removing gold?**

**Answer:** They removed the mummy's head and cut off every joint to remove the golden adornments. Then they reassembled the remains on a layer of sand in a wooden box and filled it with soft material to hide the damage caused by chiselling.

**Question 14. What startling fact came to light in 1968 through X-ray?**

**Answer:** In 1968, an anatomy Professor X-rayed the mummy. He revealed a startling fact. Tut's breast-bone and front ribs were missing beneath the resin that covers his chest with a thick layer.

**Question 15. How can CT scan prove more effective than the X-ray?**

**Answer:** In CT scan, hundreds of X-rays in cross section are put together like slices of bread to create a three-dimensional virtual body. X-ray provides only a two-dimensional image.

**Question 16. Which two questions still linger about Tut?**

**Answer:** Two questions still remain unanswered. The first is: "How did Tut die?" The second one is, "How old was he at the time of death?"

**Question 17. How has Archaeology undergone change in the twentieth century?**

**Answer:** The change is in two ways: approach and techniques. Now Archaeology focuses less on treasure and more on the fascinating details of life and interesting mysteries of death. Secondly, it uses more sophisticated tools including medical technology.

**Question 18. How was Tut's body carried to the C.T Scanner?**

**Answer:** Workmen carried Tut from the tomb in his wooden box. They climbed a ramp and a flight of stairs in the sand outside. Then they rose on a hydraulic lift and went into the trailer that held the scanner.

**Question 19. What snag did the million dollar scanner develop? How was it set right?**

**Answer:** The million dollar scanner had stopped functioning because of sand in a cooler fan. Two men ran to an office nearby and brought a pair of white plastic fans. These substitute fans worked well enough for the scanner to work.

**Question 20. Why do you think Zahi Hawass smiled and felt relieved?**

**Answer:** Clear images of C.T. scan revealed that the head, neck vertebrae and ribcage were in proper order. Zahi Hawass smiled and felt relieved that nothing had gone seriously wrong. Evidently, the curse of the Pharaoh had not hindered the work of the technicians. –

**Question 21. How was the atmosphere when the CT scan of Tut was over?**

**Answer:** It was nearly midnight. The wind that blew in the evening had now stopped. The dust storm and clouds had cleared off. The winter air lay cold and still. Just above the entrance to Tut's tomb stood Orion—the soul of Osiris, the god of afterlife.

**B. Long Answer Type Questions**

**Question 1. How has Tut's mummy fascinated the scientists and commoners alike over the previous decades?**

**Or**

**Give a brief account of the exploration of Tut's mummy from 1922 to 2005.**

**Answer:** King Tutankhamun was the last of his family line. His funeral marked the end of a dynasty. He was laid to rest laden with gold as the royals in Tut's time were extremely wealthy and thought they could take their riches with them. His tomb was discovered by Howard Carter, a British archaeologist in 1922, more than 3000 years after his death. The rich royal collection of jewellery and golden artifacts fascinated Carter. Visitors thronged the boy King's tomb. The particulars of King Tut's death and its aftermath are not clear. In 1968, more than 40 years after Carter's discovery, an anatomy Professor X-rayed the mummy. He revealed a startling fact. The breast-bone and front ribs of Tut were missing. On 5 January 2005 a CT scan was done to obtain precise data for an accurate forensic reconstruction of King Tut. It was hoped that it would offer new clues about his life and death. Thus Tut's mummy has been the centre of fascination throughout the previous decades.

**Question 2. "He was the last of his family line." What do you learn about Tut's dynasty from the extract 'Discovering Tut: The Saga Continues'?**

**Answer:** Tut's grandfather, Amenhotep III, was a powerful Pharaoh who ruled for almost four



decades at the height of the dynasty's golden age. His son Amenhotep IV promoted the worship of the Aten, the sun disc. He changed his name to Akhenaten, or "Servant of the Aten". He moved the religious capital from the old city Thebes to the new city of Akhetaten. He further shocked the country by attacking Amun, a major God, breaking his images and closing his temples. Thus the wacky king started one of the strangest periods in the history of ancient Egypt. After Akhenaten's death, a mysterious ruler named Smenkhkare appeared briefly and departed without leaving any sign. Then a very young Tutankhaten took the throne. He is widely known today as king Tut. The boy king soon changed his name to Tutankhamun, "Living image of Amun." He supervised the restoration of the old ways. Tutankhamun ruled for about nine years and then died unexpectedly. The details of his passing away are not available. The modern world has speculated about what happened to him. How did he die and how old was he at the time of his death?" are two unanswered questions.

**Question 3. Why did Tut's body have to undergo a C.T. scan? How was it carried out and what results did it yield?**

**Answer:** A veil of mystery surrounded Tut's life and death. Old methods of archaeology did not provide satisfactory clues to the circumstances of his death and his age at the time of demise. An X-ray of the mummy in 1968 further complicated the confusion. CT scan was undertaken to create a three dimensional virtual body.

A scanner was taken in a trailer to the sandy area near Tut's tomb. Tut's body was carried there from his tomb in a box. The CT machine scanned the mummy head to toe, creating 1700 digital X-ray images in cross section. Tut's entire body was scanned in 0.62 millimetre slices. The C.T. scan produced clear images of Tut's head, neck vertebrae, ribcage, hand and skull. The results proved satisfactory. A team of specialists in radiology, forensics and anatomy are busy probing the secrets lying buried in Tut's grave with his body.

**Question 4. AR Williams says, "King Tut is in death, as in life moving regally ahead, of his countrymen, How far do you agree with the assertion and why?"**

**Answer:** Perhaps no other Pharaoh of Egypt has fascinated the public mind so greatly as the boyish king Tutankhamun. Although he died in his teens and ruled for about nine years only, he introduced certain changes during his brief rule. These were significant as they marked restoration of the old ways of worship of Amun. The unanswered questions about the causes and modes of his death as well as his age at the time of death kept public curiosity alive. After his death, his dead body has been a centre of scientific examination. Howard Carter, the British archaeologist discovered Tut's tomb in 1922. In 1968, an anatomy Professor X-rayed the mummy. The Egyptian Mummy Project began an inventory in late 2003. It has so far recorded 600 and is still continuing. The next phase of CT scanning with a portable CT machine began on 5 January 2005. The pride of place went to King Tut, whose mummy was the first to undergo C.T. scan. Thus I fully endorse the aforesaid assertion.