

Chapter 3

Discovering Tut: the Saga Continues

Solutions of Questions on Page No 22:

Question 1:

Notice these expressions in the text. Infer their meaning from the context.

- ***forensic reconstruction***
- ***scudded across***
- ***casket grey***
- ***Resurrection***
- ***funerary treasures***
- ***Circumvented***
- **computed tomography**
- **eerie detail**

Answer:

- ***Forensic reconstruction***– It refers to the process of creating a face on the skull and see how the owner of the skull looked like. Here, it refers to the construction of the bust of King Tut based on the data received from CT scan.
- ***Scudded across***– It refers to moving quickly. The phrase is used with reference to the movement of the 'dark-bellied clouds'.
- ***Casket grey***– The words point out to the covering of the stars by the dark-bellied clouds', the way jewels are kept in a casket (a jewel box).
- ***Resurrection***– It refers to a new beginning for something which is old and long forgotten. Here, it refers to the new life after death.
- ***Funerary treasures***– The valuable things with which the king was buried were no less than treasures as most of the items were made of pure gold. They are, thus, referred to as

‘funerary treasures’.

- *Circumvented*– The thieves would easily bypass the guards with artfulness and rip the mummy apart to remove the gold.
- *Computed tomography*– Also known as CT scan, it provides X-ray image of a body in cross section. It is used for diagnostic purposes.
- *Eerie detail*– Uncanny description of the resulting image of the head of Tut visible through the CT scan.

Solutions of Questions on Page No 28:

Question 1(i):

King Tut’s body has been subjected to repeated scrutiny.

Answer:

Since the time King Tut’s body was first discovered in 1922, it has been subjected to repeated scrutiny. This is due to the fact that King Tut died at a very young age. He died as a “boyish pharaoh” leaving behind numerous mysteries associated with his death.

Various investigations, from discovering his remains to excavating his body and studying it under the CT scan, have been done just to find out the medical mysteries of his death.

Question 1(ii):

Howard Carter’s investigation was resented.

Answer:

Howard Carter, a British archaeologist, was the first archaeologist to discover King Tut’s tomb in the year 1922. His was a great discovery but during the investigation process, he damaged the mummy to a great extent. As the body was found cemented to its gold coffin, it was impossible to move it. Finally, to separate the mummy from its adornments, Carter decided to remove its head and break nearly every

major joint. Due to this his investigation was resented.

Question 1(iii):

Carter had to chisel away the solidified resins to raise the king's remains.

Answer:

Due to the hardened resins, the King's body was found cemented to the solid gold-bottom of the coffin such that "no amount of legitimate force could move them". The mummy had to be separated as the thieves would escape the eyes of guards and rip the mummy apart to steal away the gold. He even tried to loosen the resins by putting the mummy under the blazing sun. However, every effort went in vain. The only way left for him was to "chisel" it "beneath the limbs and trunk". Thus, Carter decided to remove the mummy's head and break the major joints to separate it from its coffin.

Question 1(iv):

Tut's body was buried along with gilded treasures.

Answer:

King Tut was buried in a coffin made of pure gold "lavished with glittering goods". The gilded treasures found included precious collars, inland necklaces and bracelets, rings, amulets, a ceremonial apron, sandals, sheaths for his fingers and toes. In those times, the royals believed in the idea of taking their wealth with them. Tut was adorned with all such riches for his journey after life. It also gives the idea of the Egyptian belief in resurrection.

Question 1(v):

The boy king changed his name from Tutankhaten to Tutankhamun.

Answer:

'Tutankhamun' means the 'living image of Amun'. Amun was the major god in the ancient Egyptian society whose temples and images were destroyed by a preceding ruler named Akhenaten. He destroyed the ancient religious order of the Egyptians. Tut's changing of his name represents his efforts in the restoration of the old ways that were once destroyed.

Question 2(i):

List the deeds that led Ray Johnson to describe Akhenaten as "wacky".

Answer:

The deeds that led Ray Johnson to describe Akhenaten as "wacky" and comment that "it must have been a horrific time" are listed below.

- Amenhotep IV (later known by the name of Akhenaten) led to one of the aberrant periods in the history of ancient Egypt.
- He made many unpleasant changes in the social and political order of the country.
- He promoted the worship of the Aten, the sun disk, and changed his name to Akhenaten or 'the servant of the Aten'.
- He moved the religious capital from the old city of Thebes to the new city of Akhetaten.
- He destroyed the images and temples of Amun, a major god.

Question 2(ii):

What were the results of the CT scan?

Answer:

King Tut is one of the first mummies to undergo a CT scan. The CT scan came up with some new clues about the life and death of King Tut. It provided precise data for an accurate forensic reconstruction of King Tut. The CT scan displayed the mummy from head to toe creating 1,700 digital X-ray images in cross section. It showed a grey head, neck vertebrae, a hand, several images of rib cages and a transection of the skull.

Question 2(iii):

List the advances in technology that have improved forensic analysis.

Answer:

Technology has been making a rapid development. The advancements in technology are responsible for improvements in the field of forensic sciences. From the use of X-rays, technology has advanced to the use of advanced Computed Tomography (commonly known as CT scan). In a CT scan, hundreds of X-rays are created in cross-section, like slices. They create a three-dimensional virtual body and with intricate structures. This change in forensic analysis has helped in discovering the mysteries behind Egyptian mummies.

Question 2(iv):

Explain the statement, "King Tut is one of the first mummies to be scanned – in death, as in life ..."

Answer:

The above line indicates that King Tut's body was the first to be scanned under a computer tomography machine. Just like King Tut might have led his kingdom when alive, he led the experience of being scanned among the mummies.

Question 1:

Scientific intervention is necessary to unearth buried mysteries.

Answer:

For:

- Science helps determine the facts related to the past even in the absence of any living evidences.
- It leads to good amount of knowledge about the past events without which things would go in mere speculations.
- It helps determine information about ancient cultures, tradition, and people.
- The use of advanced scientific tools helps in extracting important facts related to past events.
- It helps in determining the time and place of the event.
- It gives us important information about the unsolved mysteries.

Against:

- There is no use of digging the past.
- Present is valuable and we must live in the present.
- Delving into the past is waste of time and energy.
- It is the job of the historians and not scientists.
- It is always better to invest one's resources on the development of living rather than investigating the dead.

Question 2:

Advanced technology gives us conclusive evidence of past events.

Answer:

For:

- With advanced technology such as CT scan, it is possible to solve medical mysteries related to deaths.
- It is possible to create a 3-D view of the various body parts.
- It provides intricate details through forensics, radiology and anatomy.
- It helps find new clues related to life and death.
- It provides data for forensic reconstruction.
- Technology such as satellite imaging helps find buried sites.
- Date and time of an event can be confirmed through advanced technology.

Against:

- No use of gathering facts about the past.
- It's important to focus on the present issues and events rather than investigating the past.
- Even with the help of CT scan, no conclusive evidence could be constructed about Tut.

Question 3:

Traditions, rituals and funerary practices must be respected.

Answer:

For:

- Traditions, rituals and funerary practices are born out of the sentiments and feelings of a community.
- They provide identity to a community.
- They maintain continuity of a culture.
- They help in transferring the values of ancestors to the new

generation.

- They add to our knowledge the progress of human civilisation.

Against:

- Traditions, customs and funerary practices may encourage superstition.
- They may hamper the development of the society.
- They affect unity.
- They could lead to violence and friction between people belonging to different cultures.

Question 4:

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

Answer:

(Such questions are to be done by the students on their own. However, pointers have been provided for the students' help.) For:

- Past acts as a mirror to our mistakes and teaches us lessons.
- Present is the outcome of past.
- It helps us understand the progress of the events down the history.
- It builds foundation for our present and future.

Against:

- One must live in the present.

- Past is infinite and should be left as it is.
- Past should not affect our present life.
- Past should not be delved in and must be considered as a gone phase.

Solutions of Questions on Page No 29:

Question 2:

What do you think are the reasons for the extinction of languages?

Answer:

Below are listed a few reasons for the extinction of languages.

- Migration of people to other lands
- Influence of the rulers
- Evolution of language due to cultural fusion
- Limitation of vocabulary
- Absence of written script along with prevalence of oral tradition
- Constant changes in the society
- Globalisation, as it has led to the use of only dominant languages

Question 3:

Do you think it is important to preserve languages?

Answer:

Yes, it is important to preserve languages as they are responsible for the development of culture of the community. It helps in preservation of

one's heritage and traditions. Language preservation ensures contact with one's history and literature.

Question 4:

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

Answer:

Extinction of languages and dialects can be prevented through the following reasons.

- Transferring the vocabulary and dialects of the language to the next generation
- Teaching the languages in colleges and universities and encouraging students to specialise in the same
- Teaching children to use mother-tongue
- Remaining connected to one's cultural roots
- Respecting one's language which will help in taking it forward to the coming generations

Question 1(i):

ghostly dust devils

Answer:

ghostly dust devils- it points out to the devilish or frightful movement of the dusty winds. It reflects the anger of the winds for disturbing the king from his resting place.

Question 1(ii):

desert sky

Answer:

desert sky- it refers to the dusty sky of the desert. The barren sky spread over the vast desert region portrays a sad and dry picture.

Question 1 (iii):

stunning artefacts

Answer:

stunning artefacts- items found in the tomb were extremely beautiful. Usage of both the words together explains the 'eternal brilliance' of the objects.

Question 1 (iv):

funerary treasures

Answer:

funerary treasures- reference is to the fact that king was buried with numerous things which were no less than treasures as most of the items were made of pure gold.

Question 1 (v):

scientific detachment

Answer:

scientific detachment- it refers to an indifference towards science.

Question 1 (vi):

dark-bellied clouds

Answer:

dark-bellied clouds– it refers to the dark clouds containing rain.

Question 1(vii):

casket grey

Answer:

casket grey- the words point out to the stars being covered by the 'dark-bellied clouds', the way jewels are kept in a casket (a jewel box).

Question 1(viii):

eternal brilliance

Answer:

eternal brilliance- eternal refers to something that is timeless. Thus, eternal brilliance refers to timeless lustre and shine of the jewels and valuables of the king.

Question 1(ix):

ritual resins

Answer:

ritual resins- resins are used as a customary duty in the process of burying a body.

Question 1(x):

virtual body

Answer:

virtual body- a body created through electronic images or CT scan. It resembles a real body and provides a very clear view.

Question 2:

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

CT scan MRI tomography

Autopsy dialysis ECG

Post mortem angiography biopsy

Answer:

CT scan- It refers to Computed Tomography. It provides X-ray image of a body in cross section. It is used for diagnostic purposes.

MRI- MRI is the short form of magnetic resonance imaging. It is a diagnostic tool.

Tomography- It refers to taking pictures of various sections of a human body in a three-dimensional view.

Autopsy- It refers to the post-mortem examination.

Dialysis- It is the process of filtration of bloodstream usually during kidney failure.

ECG- The electrocardiogram is a diagnostic tool that measures and records the electrical activity of the heart in exquisite detail.

Post mortem- It refers to the medical examination and dissection of a

dead body to determine the cause of death

Angiography- Angiography is the examination of the blood vessels using x-rays and injecting of a radiopaque substance.

Biopsy- The removal and examination of a sample of tissue from a living body for diagnostic purposes is known as biopsy.

Question 1:

The constellation Orion is associated with the legend of Osiris, the god of the afterlife. Find out the astronomical 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)- Ursa major is also known by the name of "Great Bear". In Hinduism, Ursa Major is known as 'saptarishi' or the 'seven sages'.

(ii) Polaris (Dhruva tara)- It is the brightest star in the constellation Ursa Minor. It is the current northern pole star.

(iii) Pegasus (winged horse)- It is the constellation in the northern sky. It is named after the winged horse Pegasus in Greek mythology.

(iv) Sirius (Dog star)- Sirius is the brightest star in the night sky. It is called the "Dog Star". It is classically depicted as Orion's dog.

(v) Gemini (Mithuna)- It is a zodiacal constellation in the northern hemisphere. In Greek mythology it is associated with twins, Castor and

Pollux.

Question 2:

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:

Lotus is a common flower in India.

Question 3:

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

Answer:

Rose, Orchid, Lily, etc. are some flowers used as adornments in our country.