CUET English: 10 Steps to Understand a Factual Passage for Comprehension. Download PDF for CUET English 2025

Understanding a factual passage, like the one on **gene-modified pig liver transplantation**, requires a structured approach. Here are **10 steps** to master comprehension effectively:

## **Step 1: Read the Passage Thoroughly**

- Read the passage slowly to get an **overall understanding** of the topic.
- Avoid rushing; focus on the main idea and key details.

**Example:** The passage discusses **gene-modified pig liver transplantation** and its potential for human use.

## Step 2: Identify the Main Idea

- Ask yourself: What is this passage about?
- Find the central theme or purpose of the passage.

Example: The main idea is that scientists transplanted a gene-modified pig liver into a human and observed its performance over 10 days.

# **Step 3: Highlight Key Points & Facts**

- Underline or note important facts, statistics, and findings.
- Identify the who, what, when, where, why, and how of the passage.

#### **Example:**

- Who? Researchers from Fourth Military Medical University, China
- What? Transplanted a gene-modified pig liver
- Why? To evaluate its performance in a human body

# **Step 4: Understand Difficult Vocabulary**

- Identify technical or unfamiliar words and find their meanings.
- Use context clues to understand words without a dictionary.

### Example:

- **Xenotransplantation** → Transplantation between different species
- Porcine → Related to pigs
- **Rejection** → The immune system attacking the transplanted organ

## **Step 5: Identify Supporting Details**

- Find evidence that supports the main idea.
- Look for examples, experiments, and results.

**Example:** The pig liver functioned **without rejection** for **10 days**, producing **bile and porcine albumin**.

## **Step 6: Determine the Passage Type**

- Decide whether the passage is factual, narrative, or literary.
- A factual passage provides real-world information with research-based evidence.

**Example:** This passage is **factual** because it presents **scientific research findings**.

## **Step 7: Break Down Complex Sentences**

- If a sentence is too long, break it into smaller parts for clarity.
- Identify **subject**, **verb**, **and object** in difficult sentences.

#### **Example:**

"Although the xenograft could secrete bile and produce porcine albumin in this study, it is unlikely that the production of bile and porcine albumin was enough to support the human body for a long period."

• **Simplified:** The xenograft **produced bile**, but it **wasn't enough** for long-term survival.

## **Step 8: Infer Hidden Meanings**

- Read between the lines and **draw logical conclusions** from the text.
- Think about implications, future research, or practical applications.

**Example:** The passage suggests that **pig liver transplantation is promising but requires** further research for long-term use.

## **Step 9: Answer Questions Based on the Passage**

- Attempt factual, inference-based, and vocabulary-based MCQs.
- Use **elimination techniques** for multiple-choice questions.

#### **Example Question:**

What was the main limitation of the study?

- a) The pig liver did not function properly.
- b) The observation period was short.
- c) The study was conducted on an animal, not a human.
- d) The pig liver failed immediately.

Correct Answer: b) The observation period was short (only 10 days).

## **Step 10: Summarize the Passage in Your Own Words**

- Write a brief summary covering the main idea and key points.
- Avoid copying sentences; express in your own words.

#### **Example Summary:**

The passage discusses a study on **transplanting a gene-modified pig liver into a human**. Scientists observed its function over **10 days**, noting **stable blood flow and bile production**. However, long-term viability is still uncertain, requiring **further research**.

## **Final Thoughts**

By following these **10 steps**, students can improve **reading comprehension skills** and avoid **cramming**. This method helps in **analyzing factual passages efficiently** and preparing for exams like **CUET UG English 2025** with confidence.

The passage "Transplantation of a gene-modified pig liver shows promise" is a factual passage because it presents real-world scientific findings regarding gene-modified pig liver transplantation. It includes research details, experimental observations, and results published in the journal *Nature*, making it an informative, evidence-based article rather than a fictional or opinion-based narrative.

# 10 Steps to Understand a Factual Passage for Comprehension Transplantation of a gene-modified pig liver shows promise

#### The Hindu Bureau

Transplantation of a genemodified pig liver to a person diagnosed with brain death was carried out to evaluate the performance of the transplanted organ over a 10-day observation period.

Researchers from the Fourth Military Medical University, Xi'an, China, transplanted a liver from a Bama miniature pig in which six genes had been edited into a human recipient who was diagnosed with brain death, under the strict supervision of their hospital ethics committee.

The gene edits included removal of genes that mediate rejection and the insertion of human transgenes to facilitate compatibility.

The authors monitored graft function, blood flow, and immune and inflammatory responses over a period of 10 days. The porcine liver produced bile and porcine albumin, maintained stable blood flow and showed no signs of rejection. Immune responses were controlled with immunosuppressants. The results were published in the journal Nature.

#### 'Bridge therapy'

These findings suggest that gene-modified pig livers can survive and function in human bodies, potentially serving as a bridge therapy for patients with liver failure awaiting human donors, says a release. However, the study was limited to a IO-day observation period, and only basic liver functions were measured. Further research is needed to evaluate long-term outcomes and the full range of liver functions.

"Although the xenograft could secrete bile and produce porcine albumin in this study, it is unlikely that the production of bile and porcine albumin was enough to support the human body for a long period," they write. "However, this unique pig-to-human liver xenotransplantation can still provide critical information that cannot be provided by animal experiments alone."

Liver transplantation is the most effective treatment for end-stage liver

diseases, but the demand for donor livers far exceeds the supply. Pigs are being considered as an alternative source of organs owing to their compatible physiological functions and size. Advances in gene editing have made it possible to modify pig organs to reduce the risk of rejection and improve compatibility with human recipients. However, the complexity of liver function makes transplantation difficult.

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## 25 MCQs Based on the Passage

#### 1. Vocabulary & Synonyms/Antonyms

- 1. What does the word **"porcine"** mean in the context of the passage?
  - a) Related to cattle
  - b) Related to pigs
  - c) Related to humans
  - d) Related to birds

**Answer:** b) Related to pigs

- 2. Choose the correct **synonym** for **"compatible"** as used in the passage.
  - a) Opposing
  - b) Adaptable
  - c) Incompatible
  - d) Resistant

**Answer:** b) Adaptable

- 3. What is the opposite of "rejection" in the passage's context?
  - a) Acceptance
  - b) Denial
  - c) Resistance
  - d) Dismissal

Answer: a) Acceptance

- 4. What does "xenograft" mean in the passage?
  - a) A transplant from one human to another
  - b) A transplant between different species
  - c) A transplant using artificial organs
  - d) A self-transplant from one part of the body to another

Answer: b) A transplant between different species

- 5. The word **"evaluate"** in the passage can be best replaced with:
  - a) Ignore
  - b) Assess
  - c) Reject
  - d) Compare

Answer: b) Assess

#### 2. One-Word Substitutions

- 6. A surgical operation of transferring an organ from one species to another is called:
  - a) Autograft

- b) Xenotransplantation
- c) Biopsy
- d) Transfusion

**Answer:** b) Xenotransplantation

- 7. What is the term for medical treatment that temporarily helps patients while they wait for a permanent solution?
  - a) Permanent cure
  - b) Primary aid
  - c) Bridge therapy
  - d) Alternative therapy

**Answer:** c) Bridge therapy

- 8. The term used for modifying genes to enhance compatibility is:
  - a) Genetic adaptation
  - b) Gene therapy
  - c) Gene editing
  - d) Artificial mutation

Answer: c) Gene editing

#### 3. Reading Comprehension MCQs

- 9. What was the main objective of transplanting the gene-modified pig liver?
  - a) To permanently replace human liver with pig liver
  - b) To evaluate the transplanted liver's performance over a period of time
  - c) To test if pig livers can function without immunosuppressants
  - d) To compare human and pig liver structures

**Answer:** b) To evaluate the transplanted liver's performance over a period of time

- 10. What genes were removed from the pig liver before transplantation?
  - a) Genes that improve immune response
  - b) Genes that cause rejection
  - c) Genes that increase organ failure
  - d) Genes that boost metabolism

**Answer:** b) Genes that cause rejection

- 11. According to the passage, what was one **limitation** of the study?
  - a) The pig liver did not function properly
  - b) The observation period was only 10 days
  - c) The immune system rejected the liver
  - d) The experiment was not conducted on a human

Answer: b) The observation period was only 10 days

- 12. What publication reported the findings of this study?
  - a) The Hindu
  - b) The Lancet
  - c) Nature

d) Science Today **Answer:** c) Nature

- 13. According to the passage, pigs are considered for transplantation because:
  - a) Their organs are large and resistant to diseases
  - b) Their organs are physiologically compatible with humans
  - c) Pigs have an unlimited supply of donor organs
  - d) Pigs have similar genetic structures to humans

**Answer:** b) Their organs are physiologically compatible with humans

#### 4. Grammar: Voices & Narration

14. Choose the correct **passive voice** for:

"The researchers transplanted a gene-modified pig liver into a human."

- a) A gene-modified pig liver was transplanted into a human by the researchers.
- b) A human was transplanted into a pig liver by the researchers.
- c) The pig liver researchers modified a human transplant.
- d) A transplant was modified by the researchers into a pig liver.

**Answer:** a) A gene-modified pig liver was transplanted into a human by the researchers.

15. Convert into **indirect speech**:

The researchers said, "The pig liver produced bile and showed no signs of rejection."

- a) The researchers said that the pig liver produced bile and showed no signs of rejection.
- b) The researchers said that the pig liver is producing bile and will show no signs of rejection.
- c) The researchers say that the pig liver has produced bile and shows no signs of rejection.
- d) The researchers said that the pig liver produces bile and shows no signs of rejection.

**Answer:** a) The researchers said that the pig liver produced bile and showed no signs of rejection.

#### 5. Sentence Correction

- 16. Identify the grammatically correct sentence:
  - a) The pig liver transplantation results published in the journal *Nature*.
  - b) The pig liver transplantation's results was published in the journal *Nature*.
  - c) The pig liver transplantation results were published in the journal *Nature*.
  - d) The pig liver transplantation result were published in journal *Nature*.

**Answer:** c) The pig liver transplantation results were published in the journal *Nature*.

#### 6. Idioms & Phrases

- 17. What does "shows promise" in the title mean?
  - a) It guarantees success
  - b) It indicates potential success
  - c) It has already failed
  - d) It needs immediate attention

Answer: b) It indicates potential success

### 7. Adverbs & Adjectives

18. Identify the **adjective** in the sentence:

"Liver transplantation is the most effective treatment for end-stage liver diseases."

- a) transplantation
- b) effective
- c) treatment
- d) diseases

Answer: b) effective

19. Identify the **adverb** in the sentence:

"The researchers closely monitored the immune responses of the recipient."

- a) researchers
- b) closely
- c) immune
- d) recipient

Answer: b) closely

## 8. General Science & Application

- 20. What is the **primary function** of the liver?
  - a) Pumping blood
  - b) Digesting food and detoxifying the body
  - c) Producing red blood cells
  - d) Supporting brain function

Answer: b) Digesting food and detoxifying the body

- 21. Which scientific field is most closely related to gene modification?
  - a) Quantum Physics
  - b) Biotechnology
  - c) Organic Chemistry
  - d) Astrobiology

Answer: b) Biotechnology

These 25 MCQs prove that understanding concepts through editorials and critical reading is more beneficial than cramming, as the questions test interpretation, vocabulary, grammar, and comprehension skills rather than memorization.