Please read the below context very carefully and answer the following questions in just one to two words only on the basis of context. If you can't find the answer from the given context just answer with "Not in the context" and nothing else.

**Context**: Inside cells, glucose is swiftly transformed into glucose-6-phosphate, creating a gradient that favors glucose entry into cells. Insulin facilitates glucose storage as glycogen in liver and muscle cells and promotes protein synthesis in muscles. It also enables muscle protein breakdown for energy during starvation. Post-meal, dietary fats and sugars are used for immediate energy, with excess glucose stored as glycogen or fat, and dietary fat stored as triglycerides in adipose tissue. This process is depicted in Figure 24.21 during the absorptive state.

**Question**: What type of tissue is used to store the triglycerides?

**Answer**:

**Question**: What is the role of Insulin?

**Answer**:

**Question**: What is the process called where the glucose is converted to glucose-6-phosphate?

**Answer**:

**Gemini generated response** -

**Answer**: Adipose (for question 1)   --> Correctly answered (Mentioned in the original context as well)

**Answer**: Storage/Synthesis (for question 2)  --> Correctly answered (Mentioned in the original context as well)

**Answer**: Not in the context (for question 3)   --> Correctly answered (The answer for this question is glycolysis, but it is not mentioned in the context so it didnt answer. This was not mentioned in the original context also.)

**Answer**: Adipose (for question 1)

**Answer**: Storage/Synthesis (for question 2)

**Answer**: Not in the context (for question 3)

**For optimised\_prompt\_response\_re-write:**

Please read the below context very carefully and answer the following questions in just one to two words only on the basis of context. If you can't find the answer from the given context just answer with "Not in the context" and nothing else.

**Context**: Inside cells, glucose is swiftly changed into glucose-6-phosphate. This creates a gradient, with higher glucose in blood than cells, enabling glucose to flow into cells. Insulin triggers glucose storage as glycogen in liver and muscle cells for future energy. It also boosts muscle protein synthesis. Muscle protein can be broken down for energy during starvation. Dietary fats and sugars are processed for immediate energy post-meal. Unused glucose is stored as glycogen or fat, and excess dietary fat as triglycerides in fat tissues. Figure 24.21 illustrates these metabolic processes during the absorptive state.

**Question**: What type of tissue is used to store the triglycerides?

**Answer**:

**Question**: What is the role of Insulin?

**Answer**:

**Question**: What is the process called where the glucose is converted to glucose-6-phosphate?

**Answer**:

**Gemini generated response** -

Answer: Fat (for question 1)

Answer: Storage (for question 2)

Answer: Not in the context (for question 3)