The midterm questions could come in three forms:

- multiple choice
- fill in blank
- longer questions such as the ones in the homework

Here is an example of the multiple choice question:

1. Which of the following is true about the lipid bilayer in cell membrane?
   a) is semipermeable
   b) serves as attachment site for cytoskeleton
   c) plays an important role in attaching cell to the extracellular matrix
   d) exhibits an inherent resistance to deformations that cause shape changes
   e) all of the above

Here is an example of how the fill in blank question:

2. The cell’s shape is maintained by (                           )
3. The eukaryotic cells contain three major classes of cytoskeletal filaments. They are (                        ). And their building blocks are (                        ) respectively.

Here is an example of the longer questions:

4. A white blood cell with an initial diameter of 8 \( \mu m \) in resting suspension culture is completely drawn into a pipette with an inner diameter of 2.5 \( \mu m \).

   a) What is the change in the apparent surface area of the cell before and after aspiration?
   b) How can the micropipette technique be used to measure the amount of excess membrane area in the white blood cell?