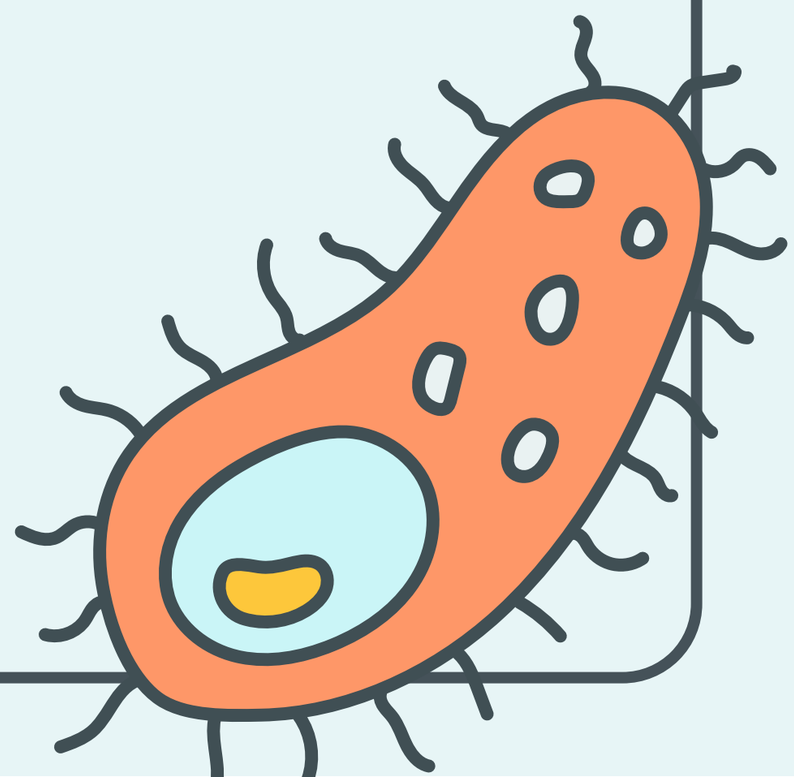
لجنة طب الأسنان
جامعة مؤتة

Quiz time
Lec 9

BIOLOGY



Which of the following best describes a major function of the cytoskeleton?
A. Synthesis of ATP inside mitochondria
B. Determining cell shape and enabling cellular movement
C. Packaging proteins into secretory vesicles
D. Storing genetic material for cell division

Answer: B

Which of the following is TRUE regarding microfilaments (actin filaments)?
A. They are the thickest cytoskeletal filaments, composed of tubulin dimers.
B. They polymerize from G-actin to form a double-stranded F-actin helix and have plus and minus ends.
C. They are found only in muscle cells where they form microvilli.
D. Their only function is forming the mitotic spindle during cell division.

Answer: B

Which of the following statements correctly describes intermediate filaments?
A. They have distinct plus and minus ends and are highly dynamic.
B. They are stable structures with no polarity (neither plus nor minus ends).
C. They are composed of tubulin and form microtubules.
D. They are responsible for muscle contraction only.

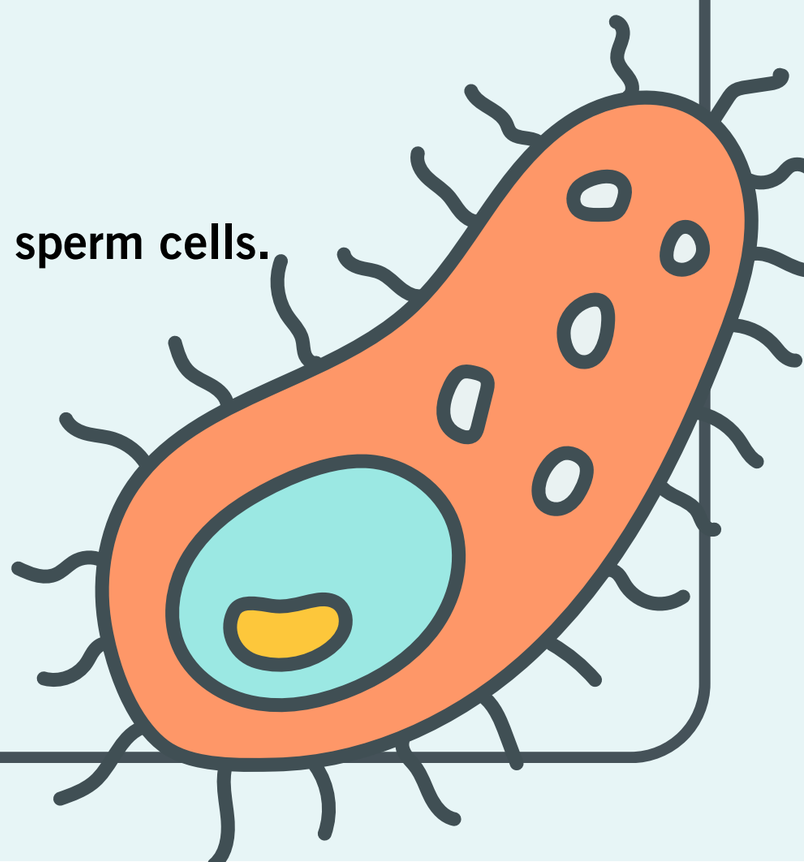
Answer: B

What is the protein that forms Microtubules?
A.Myosin.
B.Tubulin.
C.keratin
D.Dynein.

Answer:B

Which of the following statements about flagella in humans is TRUE?
A. They are shorter than cilia and present in many cell types.
B. They have a different internal structure than cilia.
C. They are identical in structure to cilia but much longer, and found only in sperm cells.
D. Each human cell contains multiple long flagella.

Answer: C



The thinnest components of the cytoskeleton are:

A. Actin filaments

B. Intermediate filaments

C. Microtubules

D. Microvilli

Answer: A

Which part of cilia is identical in structure to a centriole?

A. The axoneme

B. Shaft

C. Basal body

D. Rootlets of cilia

Answer: C