

Shahjalal University of Science and Technology
4th Year 1st Semester
BMB-421, Cell Biology
Term Test- 2

Time- 1hr

Full marks- 10

1. Write the following statements true or false. If false write the correct statement. **0.5×6=3**
- a) Temperature sensitive cdc mutant cannot pass the G1 phase which implies there is a the normal gene product is required to get the cell past this point.
 - b) The cell cycle checkpoints generally operate through positive intracellular system.
 - c) Sister chromatid separation is triggered by a Ubiquitin dependent degradation mechanism.
 - d) Sex is not absolutely necessary for reproduction.
 - e) Strong autocrine signaling not necessary for a group of cell to respond coordinately.
 - f) The concentration of Ca^{2+} in the cytosol is kept high by pumping Ca^{2+} in the ER and mitochondria.
2. How cAMP activates PKA? **2**
3. 'Different cells can respond differently to the same extracellular signal molecule'-
explain with example. **2**
4. What will happen if there is no machinery to start DNA replication once per cycle? **1**
5. What is your opinion- higher organism uses meiotic division for gamete production? **2**