WEEK 5 ASSIGNMENT 5

The due date for submitting this assignment has passed.

As per our records you have not submitted this assignment.

Due on 2021-03-24, 23:59 IST.

6. Pick the INCORRECT statement about the DNA polymerase enzymes involved in eukaryotic DNA replication. 1 point
   - Pol H synthesizes the lagging strand
   - Pol I appears to synthesize the leading strand
   - Pol II initiates the replication by the primase activity, making the RNA primer
   - None of the above

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   None of the above

5. Early prophase of a diploid cell has __ sets of chromosomes; telophase of a diploid cell has __ sets of chromosomes (Fill in the blanks) 1 point
   - 1, 1
   - 2, 2
   - 2, 1
   - 1, 2

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   2, 2

8. The absence of telomerase activity in a cell results in: 1 point
   - A progressive shortening of chromosome ends as the cell divides, thereby limiting the number of somatic cell divisions
   - A progressive lengthening of chromosome ends as the cell divides, thereby limiting the number of somatic cell divisions
   - No change in the cell division process
   - Stabilization of chromosome ends

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   A progressive shortening of chromosome ends as the cell divides, thereby limiting the number of somatic cell divisions

6. Which protein can catalyze the formation of phosphodiester bonds? 1 point
   - DNA ligase
   - DNA A protein
   - DNA B protein
   - Telomerase

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   DNA ligase

9. During DNA replication, single-stranded DNA is kept from reannealing due to the function of 1 point
   - DNA helicase
   - Topoisomerase
   - Pol A
   - Histones

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   Histones

6. The pro-RC is formed during which phase of the cell cycle? 1 point
   - G1
   - G2
   - S
   - Early M

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   G1

7. Which protein helps in tethering of DNA polymerase to the DNA? 1 point
   - SSB
   - Pol A
   - UCM
   - PCNA

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   PCNA

6. The catalytic part of the telomerase enzyme has 1 point
   - Reverse transcriptase activity
   - DNA dependent DNA polymerase activity
   - RNA dependent RNA polymerase activity
   - DNA dependent RNA polymerase activity

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   Reverse transcriptase activity

9. The site of attachment of spindle fibers to sister chromatids during mitosis is 1 point
   - Centrosome
   - Centromere
   - Nucleolus
   - Keratin

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   Centrosome

8. Which of the following events is not required for chromosome segregation during anaphase? 1 point
   - Activation of APC/C
   - Degradation of cohesin
   - Cleavage of cohesin
   - Inactivation of securin

   No, the answer is incorrect.
   Score: 0
   Accepted Answers:
   Inactivation of securin