# QUIZ 2

- **Question 1**

2 out of 2 points

The major components of DNA repair mechanism does not include this;

Selected Answer: Translocation of the damaged DNA

- **Question 2**

2 out of 2 points

Which of these protein/function combinations in the DNA repair regulation pathways is not correct?

Selected Answer: PP2A/Activates DNA damage response

- **Question 3**

2 out of 2 points

In a patient diagnosed with a Squamous cell carcinoma that exhibits high Base Excision Repair activity, you can predict that the tumor will be very sensitive to PARP1 Inhibitors.

Selected Answer: True

- **Question 4**

2 out of 2 points

Which of these pairs of clinical applications of DNA repair mechanisms is not accurate?

Selected Answer: Loss of BRCA2 correlates to decreased sensitivity of Breast cancer cells to DNA-damaging agents

- **Question 5**

2 out of 2 points

A transcriptionally active chromatin is described as a "closed chromatin".

Selected Answer: False

- **Question 6**

2 out of 2 points

The amino acid that is most significant in the posttranslational modification of histones is_____?

Selected Answer: Lysine

- **Question 7**

2 out of 2 points

The role of epigenetics in cancer describes the non-heritable changes in gene expression in somatic cells that do not arise from alterations to primary base sequence of DNA.

Selected Answer: False

- **Question 8**

2 out of 2 points

The Mismatch Repair mechanism of DNA repair employs MSH2, MLH1 and PMS2 in removing DNA adducts from the genome of affected cells.

Selected Answer: Tru e

## Question 9

2 out of 2 points

Which of these events do you think is likely to promote tumorigenesis in affected cells?

Selected Answer: All of these

## Question 10

0 out of 2 points

A deficiency of ATM in the DNA damage response results in Radiosensitive DNA synthesis.

Selected Answer: Tru e

## Question 11

2 out of 2 points

You are studying tumor cells excised from a patient with suspected Colorectal cancer and you will like to evaluate the status of the DNA repair mechanisms in the tissues. Which of these will be helpful in estimating the functional status of the DNA repair mechanisms in this tissue?

Selected Answer: All of these

## Question 12

0 out of 2 points

DNA methylation at CpG dinucleotides is a mechanism of epigenetic regulation of gene expression and is mediated by this enzyme;

Selected Answer: Histone methyltransfe rase

## Question 13

2 out of 2 points

Cancer cells are generally characterized by genomic and chromosomal stability with an efficient DNA repair network.

Selected Answer: Fals e

## Question 14

2 out of 2 points

In evaluating the integrity of a cancer cells genomic DNA, which of these is least likely to result in DNA damage?

Selected Answer: Deamination of Cytarabine

## Question 15

2 out of 2 points

Which of the mechanisms of DNA repair is very active in the genome of immune cells and produces a diversity of T-cell receptors and Immunoglobulins?

Selected Answer: Nonhomologous End Joining

## Question 16

2 out of 2 points

The tumor suppressor gene p16 is frequently methylated on in Breast cancer cells.

Selected Answer: True

## Question 17

2 out of 2 points

Which of these diseases is incorrectly paired with the corresponding defect in DNA repair?

Selected Answer: Mismatch repair - Breast cancer

## Question 18

2 out of 2 points

Malignant cells may be characterized by these except;

Selected Answer: Hyperactivity of tumor suppressor genes

## Question 19

2 out of 2 points

The basic molecular unit of DNA packaging is describe as_____?

Selected Answer: Nucleosome

## Question 20

2 out of 2 points

Which of these is a mechanism of DNA damage that can result in oncogenesis?

Selected Answer: All of these