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Class 12th

Sub. Biology

Date:- 08.03.2021

ANSWER OF THE FOLLOWING QUESTIONS

Discuss with your teacher what does 'a suitable gene' means, in the context of DNA vaccines.

Ans: A DNA vaccine consists of a suitable gene encoding an antigenic protein, inserted into a plasmid, and then incorporated into the cells in a target animal. The plasmid vaccine carrying the DNA (gene) enters the nucleus of target cells and produces RNA, and in turn the specific antigenic protein, because these proteins are recognized as foreign. When they are processed by the host cells and displayed on their surface, the immune system is alerted, which then triggers a range of immune responses.

Name the primary and secondary lymphoid organs.

Ans: Primary lymphoid organs – Bone marrow and thymus.
Secondary lymphoid organs – Spleen, lymph nodes, tonsils.

The following are some well-known abbreviations, which have been used in this chapter. Expand each one to its full form:

- (a) MALT**
- (b) CMI**
- (c) AIDS**
- (d) NACO**
- (e) HIV**

Ans: (a) MALT – Mucosal Associated Lymphoid Tissue
(b) CMI-Cell-Mediated Immunity
(c) AIDS – Acquired Immuno Deficiency syndrome
(d) NACO – National AIDS Control Organization
(e) HIV – Human Immuno Deficiency Virus