

BEL412 Minor I (29 August, 2014)

Q1.

3

Patient- I am having high fever and rashes since last two days.

Doctor 1- Get blood tests done (Total and specific WBC count, platelet count and ESR) and take an anti-inflammatory drug (NSAID new age drug)

Doctor 2- Take antibiotics and anti-inflammatory drug

Doctor 3- Get blood tests done (Total and specific WBC count and ESR) and take any anti-inflammatory drug.

Please explain based on their prescriptions which doctor do you trust more and why. What would these tests tell the doctor and how these drugs would help.

Q2.

4

- Idiotypic determinants are located within _____
- If an individual was genetically unable to make J chains, which immunoglobulin(s) would be affected?
- Haematopoiesis occurs in which organ of the body?
- Phagocytic cells important in the body's defense against parasitic organisms are _____.
- _____ functions to remove old and defective red blood cells.
- Two enzymes involved in phagocytosis are _____ and _____.
- Leukocyte rolling involves interaction of which two molecules.
- Antibody most efficient in complement mediated lysis is _____.

Q3. Explain the roles of spleen cells, myeloma cells and hybridoma cells in the process of making monoclonal antibodies.

3

Q4. Persons living with LAD disease suffer from recurrent infections. Why?

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Q5. Prakash and Suraj have been asked to develop antibody against protein A. They take a peptide region of this protein to inject in mouse. Whose strategy is better? For each good strategy give 1 point and explain why.

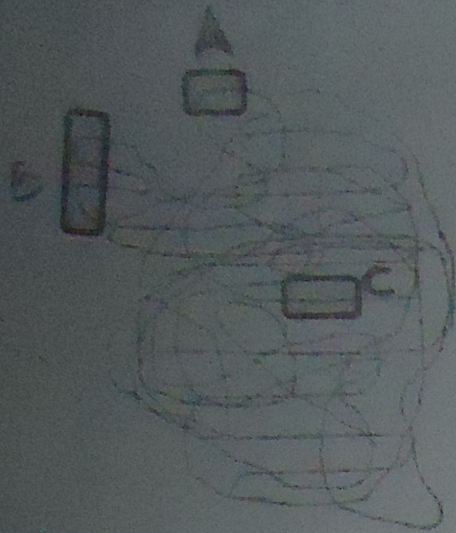
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Prakash	Suraj
S-P-S-A-A-G-A-A-	S-P-S-A-A-G-A-A-R-T-
Subcutaneous injection	Oral route
Without freunds adjuvant	With freunds adjuvant
Normal mice	Nude mice

Q6. Determine which epitopes will be most likely recognized by either B or T cell or both? The recognition of which epitope will be affected if the protein were to be denatured.

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(A.T.D.)



Q7. Antibodies help to protect us from various pathogens. How?

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Q8. What are NETS and what is their importance in innate immunity?

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