Question 38 **(12 marks)**

**(a) (8 marks)**

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|  | **Cell mediated immunity** | **Humoral immunity** |
| **Type of lymphocyte involved** | **T cells (1)** | **B cells (1)** |
| **Where the lymphocyte matures** | **Thymus (1)** | **Bone marrow or spleen (1)** |
| **What is produced in response to an antigen** | **Killer T cells and memory T cells (1)** | **Plasma cells, antibodies and memory cells (1)** |
| **Type of antigen it is most effective against** | **Intercellular phase of bacteria / virus / fungi / parasites (1)** | **Bacteria / virus / toxins / chemicals (1)** |

**(b) (4 marks) No it is not correct (1)**

**The mother may not have come into contact with that particular antigen / only boy exposed to this antigen (1)**

**Breastfeeding passes on antibodies to antigens the mother was exposed to (1)**

**Boy develops natural active not natural passive immunity (1)**