1. What prevents Blue FS from eliminating all inconsistencies between the copies of files stored on the client and those stored on the server? (10 points)

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2. According to the authors of Blue FS, what is the main advantage of **bursty device access patterns**? (10 points)

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3. How is the FAWN **datastore** organized? (10 points) _______________________________________________________________

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Why? (10 points) _______________________________________________________________

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What is the purpose of allocating several randomly selected **virtual nodes** to each FAWN node? (10 points)

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4. Assuming we want to build a FARSITE system that would tolerate the failure of two arbitrary nodes,
   a) What would be the minimum number of nodes in each directory group? (5 points) ________________________________ nodes
   b) On how many nodes should each file be replicated? (5 points) ________________________________ nodes

5. A recent study seems to indicate that nearly all irrecoverable read errors are the result of incorrect writes and can be detected and corrected by reading each block just after it has been written. Assuming this conclusion is true,
   a) How would it affect disk scrubbing procedures in archival storage systems? (10 points)? ________________________________

   b) Which feature of Pergamum would become much less necessary? (10 points) ________________________________

6. How do LBFS use chunks to reduce its data bandwidth? (10 points) ________________________________

   What criterion does LBFS use to define chunk boundaries? (10 points) ________________________________
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2. What prevents Blue FS from eliminating all inconsistencies between the copies of files stored on the client and those stored on the server? (10 points)

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3. How is the FAWN *datastore* organized? (10 points)?

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Why? (10 points)  

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What is the purpose of allocating several randomly selected *virtual nodes* to each FAWN node? (10 points)

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Total: _______/50
4. Assuming we want to build a FARSITE system that would tolerate the failure of three arbitrary nodes,
   a) What would be the minimum number of nodes in each directory group? (5 points) ________________________ nodes

   b) On how many nodes should each file be replicated? (5 points) ________________________ nodes

5. How does LBFS use chunks to reduce its data bandwidth? (10 points)

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