CS 232 Operating Systems – Fall 2023

Instructor: Dr. Muhammad Mobeen Movania

Quiz 4 - Solution

Name: _____   **Date:** 13 September 2023

Regn. No. : _____

Circle the correct answer.

Q1) Which level of RAID should be used to provide high fault tolerance without the high cost of completely duplicating data and without possible performance bottlenecks?   2 marks

(a)   RAID 1   (b)   RAID 2

(c)   RAID 4   (d)   RAID 5

Q2) RAIDs provide reliability through concurrency?   2 marks

(a)   True   (b)   False

Q3) Which RIAD level uses bit-interleaved parity?   2 marks

(a)   RAID 2   (b)   RAID 3

(c)   RAID 4   (d)   RAID 5

Q4) Assuming block-interleaved parity, there are three disks and a parity disk. Disk 2 becomes faulty and so its data is corrupted. The data for the other disks is shown in base 2, use it to recover the data in Disk 2?   2 marks

Disk 0	Disk 1	Disk 2	Parity Disk
01000000	00101010	?	10100111

(a)   00101101   (b)   10101010

(c)   11001101   (d)   Cannot be computed.

Q5) Which of the following inode fields stores pointers to data blocks?   2 marks

(a)   block   (b)   blocks

(c)   links_count   (d)   None of the options.