Assignment-5

The due date for submitting this assignment has passed. Due on 2018-03-14, 23:59 IST.

Submitted assignment

1) True or false?

The connectivity of $G$, written $\kappa(G)$, is the minimum size of a vertex set $S$ such that $G - S$ is disconnected or has only one vertex.

- [ ] True
- [x] False

No, the answer is incorrect.

Score: 0

Accepted Answers: True

2) Apply the Ford Fulkerson Algorithm to determine the value of maximum flow from the source $x$ to the sink $y$.

Scores:

- [ ] 1
- [ ] 3
- [ ] 5
- [ ] 7
4) Find the edge and vertex connectivity of given graphs?

- 1-connected, 2-connected
- 1-connected, 1-connected
- 2-connected, 1-connected
- 2-connected, 3-connected

No, the answer is incorrect.
Score: 0
Accepted Answers:
2-connected, 1-connected

5) A ________ is a minimal nonempty edge cut and a ________ is a maximal nonseparable subgraph.

- Block, Bond
- Bond, Block
- Block, End-blocks
- Bond, End-bonds

No, the answer is incorrect.
Score: 0
Accepted Answers:
Bond, Block

6) Let $\kappa(x, y)$ be the minimum size of an $x, y$-cut.
Let $\lambda(x, y)$ be the maximum size of a set of pairwise internally disjoint $x, y$-paths. Then $\kappa(x, y) \leq \lambda(x, y)$. 

0 points
7) Deletion of an edge reduces connectivity by _____________

- Atleast 1
- Atmost 1
- More than 1
- None of these

No, the answer is incorrect.
Score: 0
Accepted Answers:
False

8) True or false?

In the given graphs, L(G) is a line graph of G

No, the answer is incorrect.
Score: 0
Accepted Answers:
True

9) If P is an f-augmenting path with tolerance z, then changing flow by +z on edges followed forward by P and by –z on edges followed backward by P produces a feasible flow f' with val(f') =

- val(f)
- val(f)-z
- val(f)+z
- val(f)*z

No, the answer is incorrect.
Score: 0
Accepted Answers:
val(f)+z

10) Apply the Ford Fulkerson Algorithm to determine the value of maximum flow from the source x to the sink y.
No, the answer is incorrect.
Score: 0
Accepted Answers: 0