```
COS 454/554 Fall 2O22 Quiz 2 40 minutes; 40 pts.; 3 questions; }6\mathrm{ pgs. 2022-11-04 9:05 a.m.
0 2022 Sudarshan S. Chawathe
```

Name: $\qquad$

1. (1 pt.)

- Read all material carefully.
- If in doubt whether something is allowed, ask, don't assume.
- You may refer to your books, papers, and notes during this test.
- E-books may be used subject to the restrictions noted in class.
- Computers are not permitted, except when used strictly as e-books.
- Network access of any kind (cell, voice, text, data, ...) is not permitted.
- Write, and draw, carefully. Ambiguous or cryptic answers receive zero credit.
- Use class and textbook conventions for notation, algorithmic options, etc.

Write your name in the space provided above.

## WAIT UNTIL INSTRUCTED TO CONTINUE TO REMAINING QUESTIONS.

Do not write on this page below this point.

| Q | Full | Score |
| ---: | ---: | ---: |
| 1 | 1 |  |
| 2 | 20 |  |
| 3 | 19 |  |
| total | 40 |  |

2. (20 pts.) Trace the execution of the textbook's FASTER-APSP algorithm (p. 653) on the following graph. Depict all intermediate matrices. Order vertices lexicographically (alphabetically).

[additional space for earlier material]
3. (19 pts.) Repeat Question 2 with the textbook's Floyd-Warshall algorithm (p. 657), using Figure 23.4 (p. 658) as a model.
[additional space for earlier material]
[additional space for earlier material]
