1. Explain how a bank run can turn into a bank panic.

Bank runs occur when people fear that their bank has become insolvent. Depositors rush to their bank to withdraw their funds. Depositors at other banks become concerned about their own bank’s solvency, so they also hurry to withdraw their funds. Bank runs can turn into system-wide bank panics because customers have a difficult time distinguishing insolvent banks from solvent ones.

2. Current technology allows large bank depositors to withdraw their funds electronically at a moment’s notice. They can do so all at the same time, without anyone’s knowledge, in what is called a silent run. When might a silent run happen, and why?

Depositors may have their accounts set up so that funds are automatically withdrawn under certain conditions. If the value of the depositors’ other assets decreases (because of a fall in the stock market, for example), the depositors may have difficulty meeting their liabilities and will need to have funds withdrawn from their deposit accounts. Depositors are likely to need to withdraw funds at the same time, leading to a silent run.

3. In analyzing data from around the world, a researcher observes that countries whose governments offer deposit insurance are more likely to have financial crises than other countries. Why?

When depositors’ funds are insured by the government, depositors do not care about risks being taken by the bank’s managers, because they know that no matter what happens they will be able to get their funds back. Because they are not being monitored by depositors, bank managers take on additional risk; if the risky investments are profitable, the bank gets the benefits, while if the investments fail, the government assumes the costs. The additional risk means that individual institutions are more likely to fail, increasing the likelihood of a financial crisis.

4. Discuss the regulations that are designed to reduce the moral hazard created by deposit insurance.

Regulators can restrict competition so that banks are not under as much pressure to engage in risky investments. They can also prohibit banks from making certain types of risky loans and from purchasing particular securities. U.S. banks are not allowed to hold common stock or bonds that are below investment grade. Their bond holdings from a single issuer cannot exceed 25 percent of their capital. Likewise, they cannot make loans to single borrowers that exceed 25 percent of their capital. Regulators have also developed minimum capital requirements.

5. How does the lender of last resort create moral hazard?

Because bank managers know that the government will lend to them if they need it, they are more likely to take on additional risk.

6. Why do regulators insist that banks hold a minimum level of capital?

Capital cushions banks against a decline in the value of their assets, and also reduces the problem of moral hazard by ensuring that owners have an interest in the bank remaining solvent.
7. Why is the banking system much more heavily regulated than other areas of the economy?
The banking system, by its nature, is fragile, and banks play a crucial role in the economy. Therefore, the government provides a safety net to banking customers to ensure the smooth functioning of this part of the economy. The provision of the safety net, however, compounds moral hazard problems and so heavy regulation and supervision is required to prevent bank managers from assuming excessive risk.

8. How might the existence of the Government safety net lead to increased concentration in the banking industry?
In an effort to avoid financial crisis, large institutions realize that the government would not allow them to fail. This too-big-to-fail policy adds to moral hazard problems and allows large banks to engage in extremely risky behavior. This, in turn, puts small banks at a competitive disadvantage and may drive these smaller institutions out of the market, leading to an increase in concentration.

9. If banks’ fragility arises from the fact that they provide liquidity to depositors, as a bank manager, how might you reduce the fragility of your institution?
You could reduce the risk of large-scale unexpected withdrawals by increasing the portion of your liabilities accounted for by deposits that have restrictions on withdrawals – such as time deposits and reducing demand deposits as a percentage of liabilities. You could increase the excess reserves you hold on the asset side of the balance sheet so that you are prepared in the event of unexpected withdrawals. You could also hold a higher portion of assets in the form of liquid securities that could be sold easily to meet withdrawals.

10. Why do you think bank managers are not always willing to pursue strategies to reduce the fragility of their institutions?
Question 9 identified ways to reduce a bank’s vulnerability to sudden withdrawals. These methods, however, are likely to adversely affect the bank’s profits. Demand deposits often pay zero or very low rates of interest and so represent and relatively inexpensive source of funds for banks. On the asset side of the balance sheet, holding excess reserves that do not bear interest or liquid assets that pay relatively low rates of interest are also likely to reduce profit margins.

11. You are the lender of last resort and an institution approaches you for a loan. You assess that the institution has $800 million in assets, mostly in long-term loans, and $600 million in liabilities. It is experiencing usually high withdrawal rates on its demand deposits and is requesting a loan to tide it over. Would you grant the loan?
Based on the information given, you should grant the loan. The institution has positive net worth (assets are greater than liabilities) and so is solvent. It appears to be experiencing a short-term liquidity problem and a loan could prevent this otherwise healthy institution from failing.