Note: Please note these solutions are for guidance purpose only.

Answer to Question No. 1

Source - Exhibit 1

<table>
<thead>
<tr>
<th>Risk Scenario Title</th>
<th>Fraud Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario description</td>
<td>The system of the Bank can be hacked to create may face a claim for money when a foreign bank tries to recover its money released against an LC.</td>
</tr>
<tr>
<td>Impact of scenario</td>
<td>Huge loss to bank if the number of LC transactions is large.</td>
</tr>
<tr>
<td>Current measures to manage risks</td>
<td>Bank should have in place a system of detecting any unusual activity and how the staff shall respond when such an untoward event happens. Some measures must be taken to prevent such reoccurrences in future. Firstly, physical access to the system must be controlled. Secondly, strong password and multi-layer authentication policy should be there. And, lastly, identity and token management policies are needed to control who has access to data.</td>
</tr>
</tbody>
</table>

Source - Exhibit 2

<table>
<thead>
<tr>
<th>Risk Scenario Title</th>
<th>Governance or Reputation Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario description</td>
<td>Using name of bank to customers for higher returns and opening fictitious accounts.</td>
</tr>
<tr>
<td>Impact of scenario</td>
<td>Bank may lose its reputation and may face unwarranted litigations.</td>
</tr>
<tr>
<td>Current measures to manage risks</td>
<td>Proper internal control system should be set up to combat frauds and to take pro-active fraud control and enforcement measures.</td>
</tr>
</tbody>
</table>

Source - Exhibit 3

<table>
<thead>
<tr>
<th>Risk Scenario Title</th>
<th>Natural Hazardous Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario description</td>
<td>Small businesses are generally affected by a storm, earthquake or extreme weather.</td>
</tr>
<tr>
<td>Impact of scenario</td>
<td>The business of a bank may also be impacted by the natural disaster by which the physical office from which it conducts its business is also being affected by the calamity.</td>
</tr>
<tr>
<td>Current measures to manage risks</td>
<td>It can insure itself from any natural calamity.</td>
</tr>
</tbody>
</table>
Source - Exhibit 4

<table>
<thead>
<tr>
<th>Risk Scenario Title</th>
<th>Regulatory or Governance Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario description</td>
<td>The company is yet to draft a suitable policy for training and performance evaluation of directors and it has not appointed any committees.</td>
</tr>
<tr>
<td>Impact of scenario</td>
<td>This may invite penalties from the court and wrath of the investors.</td>
</tr>
<tr>
<td>Current measures to manage risks</td>
<td>Constitute an audit committee and shall have atleast two independent directors. Further, it is required to appoint a Nomination and Remuneration Committee and draft a suitable policy for training and performance evaluation of directors. Even though, the Companies Act, 2013 do not contain any compulsory provision for constitution of a Risk Management Committee, but it is in the interest of bank to constitute a Risk Management Committee.</td>
</tr>
</tbody>
</table>

Source - Exhibit 5

<table>
<thead>
<tr>
<th>Risk Scenario Title</th>
<th>Finance or Forex and Interest Rate Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario description</td>
<td>As banks can issue the Forex Card there may be some variation in the rates at which same has been acquired and disposed of. Since the rate of interest offered by the bank on its deposit is higher in comparison to the traditional banking and the fund shall be deposited in Govt. Securities instead of Commercial lending, the spread between receipt and payment of interest will be marginalized. Hence any change in the market interest rate shall lead to erosion in the spread.</td>
</tr>
<tr>
<td>Impact of scenario</td>
<td>Loss on account of Forex exchange rate volatility and squeezing of Interest Spread Gains.</td>
</tr>
<tr>
<td>Current measures to manage risks</td>
<td>Hedging the forex and interest rate using various techniques such as Forward, Futures and Option contracts.</td>
</tr>
</tbody>
</table>

(2)

To: The Board
From: ABC, Risk Consultant
Date: 6th April 2018
Subject: Risk Management

Introduction
This report covers
(i) Bucketing of above identified risks
(ii) Likelihood Scale of above identified risks

(i) Bucketing of above identified risks

<table>
<thead>
<tr>
<th>Risk No.</th>
<th>Risk Scenario Title</th>
<th>Bucketing of identified risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fraud Risk</td>
<td>Severe</td>
</tr>
<tr>
<td>2</td>
<td>Governance or Reputation Risk</td>
<td>Major</td>
</tr>
<tr>
<td>3</td>
<td>Natural Hazardous Risk</td>
<td>Severe</td>
</tr>
</tbody>
</table>
(ii) Likelihood Scale

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>Risk Scenario Title</th>
<th>Likelihood Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fraud Risk</td>
<td>Unlikely</td>
</tr>
<tr>
<td>2</td>
<td>Governance or Reputation Risk</td>
<td>Likely</td>
</tr>
<tr>
<td>3</td>
<td>Natural Hazardous Risk</td>
<td>Unlikely</td>
</tr>
<tr>
<td>4</td>
<td>Regulatory or Governance Risk</td>
<td>Likely</td>
</tr>
<tr>
<td>5</td>
<td>Finance or Forex and Interest Rate Risk</td>
<td>Very likely</td>
</tr>
</tbody>
</table>

Conclusion

As a small bank, some of the risk which especially Risk Nos. 2 and 4 needs special attention.

(3) Answers to Multiple Choice Questions

(i) (a)  
(ii) (a)  
(iii) (c)  
(iv) (d)  
(v) (a)  
(vi) (d)  
(vii) (d)  
(viii) (b)  
(ix) (c)  
(x) (c)  

Answer to Question No. 2 (A)

To: The Board  
From: ABC, Risk Consultant  
Date: 6th April 2018  
Subject: Risk Management

Our Report on the various issues raised is as follows:

(i) The possible Risks and their nature are as follows:

- **Financial risk** - These risks are associated with the financial assets, structure and transactions of the particular industry. In other words, these risks are related specifically to the processes, techniques and instruments utilised to manage the finances of the enterprise, as well as those processes involved in sustaining effective financial relationships with customers and third parties.
- **Operational Risk** - These risks are associated with the on-going, day-to-day operations of the enterprise. In other words, these risks associated with the operations of an organization. It is the risk of loss resulting from failure of people employed in the organization, internal process, systems or external factors acting upon it to the detriment of the organization. It includes Legal Risk and excludes strategic and Reputational Risks as they are not quantifiable.

(ii) Scaling of Risk as identified above:

- **Measurement of the likelihood of risk**
  
  Financial Risk – Likely (score 4)
  Operational Risk – Likely (score 4)

- **Risk Consequences**
  
  Financial Risk – Major
  Operational Risk – Major

(iii) Four approaches are suggested to identify and assess the risk as below:

- **Analysis of processes** – Under this technique, material or significant business processes are flow chartered. This will facilitate identification of process level operational risks. An approach that helps improves the performance of business activities by analysing current processes and making decisions on new improvements.

- **Brainstorming** – Under brainstorming a group of employees put forward their ideas or sensation of risk. The employees estimate the risk based on their past experience or intuition involves a focused group of managers working together to identify potential risks, concerns, root causes, failure modes, hazards, opportunities and criteria for decisions and/or options for treatment. Brainstorming should stimulate and encourage free-flowing conversation amongst a group of knowledgeable and focussed people with a fair/objective outlook. The group should not be biased or critical. It is one of the best and most popular ways to identify both risks and key controls and is the basis for most successful risk workshops.

- **Questionnaires & Interviews** - Focused on detecting the concerns of staff with respect to the risks or threats that they perceive in their operating environment. During a Structured interview, interviewees are asked through a set of prepared questions to encourage the interviewee to present their own perspective and thus identify risks. Structured interviews are frequently used during consultation with key stakeholders when designing the risk management framework. Structured interviews are good to assess risk appetite and tolerance when developing risk appetite statements. A specialist in risk prepares interviews with various management level members of the company in order to elicit the concerns.

- **Checklists** are information aids to reduce the likelihood of failures from potential hazards, risks or controls that have been developed usually from past experience, either as a result of a previous risk assessment or as a result of past failures or incidents or history or industry learning. Auditors often prepare checklists of key controls to aid in their assessment of control effectiveness and the internal control environment. Checklists are good guiding tools; however, can lead to herd mentality and risk managers can miss out on fresh risk thinking and the big picture.

**Note:** Students can also mention any four techniques other than above.

(iv) Suggested course of action to reduce/ manage risk i.e. risk treatment is as follows:

- Strengthening of Internal Controls System
• Setting up limits for the sanction of amounts.
• Setting up operational risk management department.

**Note:** Students can also mention other course of action based on their work experience.

(v) The Risk Management (Governance) Framework should define a policy statement on the following matters:-

(i) Determining when to review the Risk Management Framework (RMF) and the frequency for undertaking the review.

(ii) Deciding who is responsible for the review. The RMF is generally reviewed by the Audit Committee or a team of Directors. Once in few years the RMF can be reviewed with external facilitation. This would provide fresh insights and benchmarking information to the Board.

(iii) Selecting the scope and method for a review. The scope and boundary of the RMF review can be clearly set out along with the most suited method for review.

(iv) Manner of circulation of results.

(vi) The risk maturity level of the company is “Risk Aware”. The reason is that the risks are identified within functions and not across processes. Also, risks are not communicated across the enterprise. It is basically a scattered silo based approach to risk management.

B. **Answers to Multiple Choice Questions**

1. (b)
2. (d)
3. (d)
4. (b)
5. (c)
6. (c)
7. (c)
8. (c)
9. (a)
10. (c)

**Answer to Question No. 3**

A. (1) SWOT Analysis of Sunshine Ltd. is as follows:

**Strength**

– Specialization in the software development for their clients.
– Providing unique solutions to the clients.
– IT professional employed with the company.
– Sound Internal Control system
– A major portion of revenue comes from fixed price projects which allow it the flexibility to determine the resources it deploys and use software tools to deliver services.

Weakness
– Derives a major portion of its revenues from customers discretionary spending which is linked to their business outlook.
– Three-fourth of the revenue of is from traditional services.
– Dependence on the people.

Opportunity
– More focus on software led services which coincide with newer areas such as digital and cloud.

Threat
– Restrictive visa policy by USA may affect the work of sunshine Ltd. and threaten the prospect of global mobility of people as distributed software development requires free movement of people.
– Appreciation of the rupee against any major currency results in the revenue denominated in that currency to appear lesser in reported terms.
– Clients cutting their budgets on such services and shifting their focus on newer areas such as digital and cloud.

(2) The first political risk is toughening of visa policies by present US Government. The new directive rescinds the previous guidance, which gave "deference" to previously approved visas as long as the key elements were unchanged and there was no evidence of a material error or fraud related to the prior determination. This may affect the free movement of IT people from India across USA thereby also affecting the work of Sunshine Ltd.

Secondly, the exit of Britain from European Union i.e. Brexit only added to the woes of the IT sector. Of the $108-billion of the IT industry's estimated exports in 2015-16, 17 per cent was to the UK and about 11.4 per cent to other nations within the EU. For large Indian IT companies, over a fourth of their revenues come from Europe, in particular from the UK. This may affect the profitability position of Sunshine because of the currency fluctuations.

(3) The types of exposures risks to be encountered by Sunshine Ltd. are discussed as below:

Transaction Exposure - It measures the effect of an exchange rate change on outstanding obligations that existed before exchange rates changed but were settled after the exchange rate changes. Thus, it deals with cash flows that result from existing contractual obligations. For example, in the case of Sunshine Ltd. if services are exported to USA for $10,00,000 due in one month and if the dollar depreciates relative to the rupee, a cash loss occurs. Conversely, if the dollar appreciates relative to the rupee, a cash gain occurs.

Further, domestic ratings agency ICRA has highlighted that the appreciation in the rupee is aggravating the troubles of the Indian IT sector, which is already hit by a change in the market landscape and compressing revenue growth.

Economic Exposure – It refers to the extent to which the economic value of a company can decline due to changes in exchange rate. ICRA has said that despite an 8.1 per cent growth in USD revenue, IT players have registered a growth of only three per cent in the second quarter of the current fiscal, due to the rupee appreciation of four per cent during the quarter.
It also pointed out that IT Services players profitability also remains sensitive to rupee depreciation vis-à-vis major currencies such as USD, GBP and Euro and the same too will have an impact.

(4) The company tackle the exposure of difference in exchange rates when sale took place and when invoice is collected through hedging currency risks which are explained as below:

(i) **Internal Techniques:** These techniques explicitly do not involve transaction costs and can be used to completely or partially offset the exposure. The techniques relevant to Sunshine Ltd. can be further classified as follows:

   - **Invoicing in Domestic Currency:** Should the seller (exporter) i.e. Sunshine Ltd. elect to invoice in foreign currency, perhaps because the prospective customer prefers it that way or because sellers tend to follow market leader, then the seller should choose only a major currency in which there is an active forward market for maturities at least as long as the payment period. Currencies, which are of limited convertibility, chronically weak, or with only a limited forward market, should not be considered.
   
   - The seller’s ideal currency is either his own, or one which is stable relative to it. But often the seller is forced to choose the market leader’s currency. Whatever the chosen currency, it should certainly be one with a deep forward market.
   
   - **Price Variation:** Price variation involves increasing selling prices to counter the adverse effects of exchange rate change. This tactic raises the question as to why the company has not already raised prices if it is able to do so. In some countries, price increases are the only legally available tactic of exposure management.
   
   - **Asset and Liability Management:** This technique can be used to manage cash flow exposures. In essence, asset and liability management can involve aggressive or defensive postures. In the aggressive attitude, the firm simply increases exposed cash inflows denominated in currencies expected to be strong or increases exposed cash outflows denominated in weak currencies. By contrast, the defensive approach involves matching cash inflows and outflows according to their currency of denomination, irrespective of whether they are in strong or weak currencies.

(ii) **External Techniques:** Under this category range of various financial products are used which can be categorized as follows:

   - **Money Market Hedging:** At its simplest, a money market hedge is an agreement to exchange a certain amount of one currency for a fixed amount of another currency, at a particular date. For example, suppose a business owner in India expects to receive 1 Million USD in six months. This Owner could create an agreement now (today) to exchange 1Million USD for INR at roughly the current exchange rate. Thus, if the USD dropped in value by the time the business owner got the payment, he would still be able to exchange the payment for the original quantity of U.S. dollars specified.

   - **Derivative Instruments:** A variety of derivative instruments such as Forward, Futures, Options and Swap are available to hedge the exposure of foreign exchange.

(5) The Internal Financial Control System of the Sunshine Ltd. is more or less efficient. The reasons are given as below:

- Recording and providing reliable financial and operation information.
- Safeguarding assets.
- Ensuring compliance with corporate policies.
- Well defined delegation of power.
- Efficient ERP system.
- Internal audit by one of the big audit firm.
- Periodic audit by specialized third party consultants.

And, finally Audit Committee found internal financial control adequate which shows that Sunshine Ltd. has a good Internal Financial Control System.

B. Answers to Multiple Choice Questions

1. (a)
2. (a)
3. (c)
4. (a)
5. (d)
6. (c)
7. (d)
8. (c)
9. (c)
10. (c)