Section 1
General comments

This examination consists of single case study with financial and industry data. Considering the nature of topics examined in this module, the question paper was divided into two sections of equal weight.

The case study company was a large energy company listed on the Singapore Exchange whose core business was the generation of electric power and selling it to consumers – retail and wholesale. The company planned to refinance its debt to invest in wind farms, launch a new marketing campaign and invest in smart meters to attract new customers.

Governance & Risk component – Questions 1 and 2 (50 marks)

Question 1 covered risk management while Question 2 covered corporate governance. Generally, Candidates fared better in Question 1 as compared to Question 2.

Business Value Component – Questions 3 and 4 (50 marks)

Question 3 tested Candidates on determining the net asset valuation for Power Company Ltd (PC) and comment on whether the directors should pursue the refinancing strategy. Furthermore, Candidates are required to prepare a five-year forecast and analyse if PC is able to generate sufficient cash flows to repay the new investor loan.

Question 4 required Candidates to calculate the ungeared cost of equity followed by determining the adjusted present value.

Candidates performed better in Question 3 compared to Question 4. It was observed that Candidates were unfamiliar with the Adjusted Present Value (APV) techniques tested in Question 4.

Section 2
Analysis of individual questions

Question 1

The question is to determine Candidates’ understanding of risks generically as well as specifically based on the case information. The case presented covered risks encountered over different phases of the company’s investment initiatives.
Furthermore, Candidates are tested on their understanding of risk mitigation and assessment.

There were 3 parts to this question covering risk identification, mitigation measures to be applied on identified risks as well as a section on identifying advantages and disadvantages of another project scenario included in the write up.

Candidates performed very well for Part (a). Most Candidates could identify the various categories of risks with a majority of the Candidates providing detailed explanation of how the risks arose. However, risks attributed specifically to the initiative were not well developed by Candidates.

Part (b) was reasonably well attempted by Candidates as Candidates suggested good risks mitigation initiatives although most of the answers provided were suggestions to mitigate risks at the early stage of the project.

Part (c) was also well attempted by the Candidates which could have been the result of the substantial amount of case information that was incorporated in the case.

**Question 2**

The question tested Candidates on governance at the management and Board level. Candidates were required to appreciate that a company is a separate entity from its various stakeholders. Within the stakeholders, there should be independence in decision making such that no stakeholder is prejudiced to decisions made by another.

This question has 3 parts whereby the first part pertained to the due diligence exercised by the board. The second part of the question covered on the Board member’s independence especially in relation to investments or initiatives that they are required to approve. The third part required Candidates to discuss ways which management should adopt to handle related party scenarios.

Part (a) Candidates generally obtained a pass for this question. Only a few Candidates managed to come up with all the key areas of due diligence.

Candidates were generally able to identify generic areas (e.g. Market, Regulatory) of essential due diligence. However, some Candidates gave generic statements such as PC should identify strategic, operation and financial risks to the company but did not elaborate on the specific due diligence required.

Most Candidates did not perform well for part (b). There are 2 sub-parts to this question part and most Candidates could identify the applicable provisions of the Singapore Code of Corporate Governance 2018. However, Candidates were unable to give practical examples for management to demonstrate compliance. The quality of answers provided by Candidate varied. Some Candidates gave very good differentiated answers. However, some Candidates did not answer the question and quoted provisions of the Code of Corporate Governance that were not relevant to the question. In contrast, only a few Candidates gave good recommendations on
how PC should comply with the relevant principles, such as the abstention of vote or recuse from the involvement by the Board Audit Committee Chairman. Many Candidates’ answers were impractical, for example suggesting for the resignation of the director or the sale of his shares in the consulting company.

**Part (c)** is not well attempted by Candidates. Most of the Candidates mentioned that the proposal could lead to a related party transaction with companies within a same group. Candidates did not elaborate nor mention how PC’s Board should deal with Investment Corp. This could be due to Candidates’ weak understanding of the requirement of the question. Most of the Candidates did not mention that there should be an open and fair dissemination of information to all parties or potential vendors. Some Candidates managed to point out that there should be a fair and transparent selection process of vendors and this could take place via an open tender process.

### Question 3

This question was generally well answered. **Part (a)** required Candidates to provide a net asset valuation of PC by adjusting book values to realisable values, followed by commenting on the valuation in comparison to its current quoted market value. The numerical computation was generally well done. However, Candidates did not answer well on the requirement to analyse the net asset valuation with the scenario and advise whether the proposed refinancing was a good idea because many Candidates did not make the analysis that PC was more valuable as a trading company than if it ceased trading.

**Part (b)** required Candidates to create a five-years profit after tax forecast and **part (c)** required Candidates to convert profit and tax forecast to a cash flow forecast by adjusting for depreciation and capital expenditure. The profit after tax forecast was generally well done. However, common errors were noted in the forecasting of the revenue and expenses based on the respective growth rates, depreciation and future interest costs based on the new, refinanced debt level.

**Part (d)** required Candidates to demonstrate evaluation skills and determine whether the shareholders and the new investor would approve the new loan arrangement. Many Candidates did not consider this from both the perspective of the investor and the shareholders which was a key requirement. Overall, whilst the numerical computations were satisfactory, future Candidates are advised to focus on ensuring that they can discuss the impact of investment and financing decisions on the company according to the scenario and make a recommendation, if this is relevant.

### Question 4

This question required Candidates to evaluate an investment in smart meters using relevant costing principles to determine future cash flows and make a decision based on Adjusted Present Value (APV) techniques given the uncertainty of the future capital structure. **Part (a)** required an understanding of APV, as Candidates were required to calculate an ungeared cost of equity for use in **Part (b)**. Most
Candidates answered this part well. **Part (b)** required Candidates to calculate the net present value of the project and to determine the present value of the tax shield and loan subsidy benefit, which are key components of APV.

The investment appraisal of the smart meter technology, which should have been relatively straightforward, revealed a number of basic errors, which could have been avoided by explicitly following the assumptions given in the case. The common errors made by the Candidates were listed below.

1. Evaluated the revenue of the whole company, rather than the incremental revenue which resulted from the decision to proceed with smart meters. For example, in year 1, 25% of current revenue should have been used rather than 125%.
2. Did not apply compounded inflation to the current year figures.
3. Did not include variable cost of 70% of the revenue as the company was expected to generate an annual contribution of 30%.
4. Did not include the incremental change in working capital based on 10% of revenue. Instead, many Candidates simply included 10% of revenue as working capital.
5. Did not include tax saved in the calculation of cash flow for capital allowance. Instead, many Candidates included the whole capital allowance as a cash inflow.

As a note for future Candidates taking BG, we expect Candidates to be proficient in the above calculations as they are relevant to both investment appraisal and free cash flow valuation techniques, and are likely to be featured regularly in future exams.

It is clear that adjusted present value was not a familiar area of syllabus as many Candidates did not complete the calculation for the present value of the tax shield or present value of the post-tax loan subsidy. Often the tax adjustment was missing or not correctly calculated.

The final part of the question required Candidates to evaluate the appropriateness of using APV in this scenario. Many Candidates were able to state the generic benefits of APV. However, many Candidates did not apply this knowledge to the question and state why APV was particularly useful in the circumstance where a company is highly geared.