### **SECTION A**

#### QUESTION 1.

Columbia Co is the parent of a listed group which operates within the telecommunications industry. During the year ended 31 December 20X5 Columbia Co acquired a new subsidiary and made adjustments to its pension scheme. The group's current year end is 31 December 20X5.

The following exhibits, available on the left-hand side of the screen, provide information relevant to the question:

- 1. Acquisition of Peru Co contains information relating to the acquisition and consideration paid for Peru Co.
- 2. Peru Co: net assets at 1 July 20X5 describes the valuation of the assets of Peru Co at the date of acquisition.
- 3. Columbia Co: pension scheme explains the defined benefit and the defined contribution pension schemes available to the employees of Columbia Co.

### **EXHIBIT 1. Acquisition of Peru Co**

Brazil Co is a competitor of Columbia Co. On 1 July 20X5 both Brazil Co and Columbia Co acquired 50% of the 5 million ordinary \$1 shares of Peru Co. The consideration paid by Columbia Co consisted of cash of \$8 per share and also a 1 for 20 share exchange when the market price of Columbia Co's shares was \$10 each. Brazil Co also paid \$8 per share for their interest but did not issue any shares to the original shareholders of Peru Co. The ordinary shares of Peru Co have one voting right each.

Following the acquisition, Columbia Co had the contractual right to appoint 60% of the board of Peru Co with the remaining 40% appointed by Brazil Co. Brazil Co has veto rights over any amendments to the articles of incorporation and also over the appointment of auditors. Brazil Co and Columbia Co each appointed one member to Peru Co's senior management team. It is the senior manager appointed by Columbia Co who makes the key decisions regarding the development of Peru Co's new technologies, it's principle revenue stream, the markets that it will operate in and how it is financed. The senior manager appointed by Columbia Co also provides a supervisory role and has the right to request that significant activities get board approval, such as imposing restrictions on Peru Co from undertaking activities that would significantly increase credit risk.

### EXHIBIT 2. Peru Co: net assets at 1 July 20X5

The net assets of Peru Co reported in the individual financial statements had a carrying amount of \$32 million on 1 July 20X5. However, on the acquisition of Peru Co, the directors of Columbia Co discovered the following:

On 1 January 20X5 Peru Co acquired 6 million 6% coupon bonds for \$6 million in an unquoted company at par (\$1). Bond interest is paid annually on 31 December. Due to a premium on redemption the effective rate of interest was 8%. Peru Co has a business model to collect the contractual cash-flows from the bonds and therefore measures them at amortised cost. Columbia Co holds similar unquoted assets but has a business model whereby they may either collect the contractual cash-flows or sell the asset. Bonds with a similar risk profile for a similar quoted company were trading at \$2 per bond on 1 July 20X5. A discount of 30% is considered reasonable to reflect the difference in liquidity of the two types of bonds.

One of the identifiable intangible assets of Peru Co at acquisition was a brand. The brand had a carrying amount of \$4 million on 1 July 20X5. Columbia Co has a similar branded product and is therefore planning to discontinue the trade of Peru Co's branded product with immediate effect. The future cash-flows from the Peru Co's product post-acquisition are therefore considered to be \$nil. If the trade of the branded product were to be sold to a competitor in order to continue the trade, it is estimated that it could be sold for around \$5 million.

Peru Co has several technical support service contracts for which there are outstanding performance obligations at 1 July 20X5. Included in contract liability (deferred income) at this date is a balance of \$2.8 million in respect of these contracts. It is estimated that these contracts will cost \$1.7 million for Peru co (and any other market participants) to complete. A mark-up of 30% is considered reasonable for this type of contract.

Columbia Co has a policy of measuring the non-controlling interest at fair value.

### EXHIBIT 3. Columbia Co: pension scheme

Columbia Co has, for many years, operated a defined benefit pension scheme. At 1 January 20X5 the fair value of the pension scheme assets were estimated to be \$260 million and the present value of the pension scheme liabilities were \$200 million. The total of the present value of future refunds and reductions in future contributions (asset ceiling) was \$20 million at 1 January 20X5.

This table provides details of the scheme for the year ended 31 December 20X5 when there was a curtailment to the scheme.

Discount rate on good quality	v corporate bonds	5%

Current service cost	\$(millions)
Current Service Cost	30
Cash contributions	21
Benefits paid during the year	25
Scheme curtailment (31 December 20X5)	28
Payment to employees as settlement for curtailment (paid 31 December 20X5)	16

At 31 December 20X5 the fair value of the pension scheme assets were estimated to be \$242 million and the present value of the pension scheme liabilities were \$195 million. The total of the present value of future refunds and reductions in future contributions (asset ceiling) was \$25 million at 31 December 20X5.

Columbia Co intends all new employees to be offered a defined contribution rather than a defined benefit pension scheme. Contributions of \$0.5 million were paid into a defined contribution scheme for new employees over the last 3 months of the year.

## **REQUIREMENTS (30 MARKS)**

Draft an explanatory note to the directors of Columbia Co to address the following issues:

(a)(i) whether Columbia Co should be considered the acquirer in a business combination with Peru Co;

(9 marks)

(a)(ii) a calculation of goodwill at 1 July 20X5, explaining how fair values of both the consideration and the net assets have been determined; and

(11 marks)

(b) how the defined benefit and the defined contribution pension schemes should be accounted for in the year ended 31 December 20X5.

(10 marks)

#### QUESTION 2.

Bismuth Co is a mining company. Investors in Bismuth Co receive earnings from mining projects as a return on their investment. The year end is 31 December 20X7.

The following exhibits, available on the left-hand side of the screen, provide information relevant to the question:

- 1. Impairment testing of mines describes the decommissioning provision associated with Bismuth Co's mines and its potential impact on the impairment of the mines.
- 2. Class A and B shares explains the sale of Class A and B shares in exchange for Bitcoin, a cryptocurrency.
- Blockchain technology provides information about the ethical issues created by the implementation of Blockchain technology.

#### EXHIBIT 1. Impairment testing of mines

At 31 December 20X7, Bismuth Co owns mines which have a carrying amount of \$200 million. The company has committed itself to decommissioning its mines at the end of their useful life (five years or less) and has created a decommissioning provision of \$53 million. However, the directors are unsure how the decommissioning provision will impact on the impairment testing of the mines. At the end of the useful life of a mine, its reusable components will be dismantled and sold.

The following information relates to the decommissioning of the mines at 31 December 20X7:

	\$ million
Carrying amount of decommissioning provision	53
Present value of future cash inflows from:	
sale of reusable components at decommission date (inflows)	20
sale of mining output from 31 December 20X7 to decommission date (inflows)	203
operating costs from 31 December 20X7 to decommission date (outflows)	48

#### **EXHIBIT 2. Class A and B shares**

Bismuth Co has issued two classes of shares, class A and class B, in exchange for a cryptocurrency, Bitcoin. Both types of shares permit the holder to vote and give an entitlement to 'rewards'. Bismuth Co has discretion over whether 'rewards' are payable on class A and class B shares. Bitcoin can be readily converted into cash in Bismuth Co's jurisdiction.

Class A shares are redeemable at par in the event of Bismuth Co obtaining a listing on a formal stock exchange which is highly probable. On listing, Bismuth Co has a choice as to the method of redemption either:

- (i) cash to the value of 1 Bitcoin per 1000 class A shares, or
- (ii) shares to the value of 2 Bitcoins per 1000 class A shares.

Note: 1 Bitcoin equates to approximately \$12,000

The share settlement option, option (ii) above, would involve exchanging class A shares for the equivalent number of class B shares. Class B shares have never fluctuated in value.

Bismuth Co is not compelled to redeem the class B shares but these shares do contain an option allowing Bismuth Co to repurchase them. However, if within two years, Bismuth Co fails to exercise its call option on the class B shares, it must pay an additional reward to the holders of class B shares.

### **EXHIBIT 3. Blockchain technology**

Bismuth Co plans to implement Blockchain technology to store all of its data relating to its mines, trading and to certify the ethical sourcing of all its raw materials. The chief accountant, Ms Pleasant, is currently developing a blockchain technology that will be filed for patent. Ms Pleasant has only recently taken up the post and has discovered that work done at her previous employer, Gypsam Co, is relevant to the project. If Ms Pleasant discloses this information, it will compromise a patent process at Gypsam Co but will consolidate her position as chief accountant in Bismuth Co. When she left the employment of Gypsam Co, she signed a confidentiality agreement but the clauses were not clear or specific about what information could be shared and with whom.

Ms Pleasant has significant knowledge of Blockchain technology but the finance director, Mr Fricklin has limited knowledge of it or the new business model that Bismuth Co is trying to develop. Mr Fricklin has told her that there is no need to spend a significant amount of time creating a technology to ethically source materials. Ms Pleasant is worried about Mr Fricklin's lack of technical and legal knowledge as she feels that it will affect the development of the technology. In addition, some of the data concerning ethically sourced materials has gone missing and she thinks that Mr Fricklin has erased the data to try and sabotage the project. Mr Fricklin has told the Board of Directors that he has an 'in depth knowledge' of the technology.

## REQUIREMENTS (20 MARKS)

(a) Discuss, with suitable calculations	, whether Bismuth	Co should	recognise an
impairment loss for the mines.			

(5 marks)

(b) Discuss whether the class A and B shares should be classified as either equity or liability in accordance with IAS 32 Financial Instruments: Presentation.

(5 marks)

(c) Discuss the ethical issues raised by the implementation of the blockchain technology for both the chief accountant and the finance director, including any appropriate actions which should be considered to resolve these issues.

(8 marks)

Professional marks will be awarded in part (c) for the quality of the discussion.

(2 marks)

#### **SECTION B**

#### QUESTION 3.

Sitka Co is a software development company which operates in an industry where technologies change rapidly. Its customers use the cloud to access the software and Sitka Co generates revenue by charging customers for the software license and software updates. It has recently disposed of an interest in a subsidiary, Marlett Co, and purchased a controlling interest in Billing Co. The year end of the company is 31 December 20X7

The following **exhibits**, available on the left-hand side of the screen, provide information relevant to the question:

- Software contract and updates explains the contract to licence software and other related services to Cent Co.
- 2. Part-disposal of Marlett Co describes the accounting in Sitka Co's separate financial statements for the disposal of an interest in a subsidiary, Marlett Co.
- Acquisition of Billing Co provides information about the fair values of two assets acquired in a business combination with Billing Co.

### **EXHIIBIT 1. Software contract and updates**

On 1 January 20X7, Sitka Co agreed a four-year contract with Cent Co to provide access to licence Sitka Co's software including customer support in the form of monthly updates to the software.

The total contract price is \$3 million for both licensing the software and the monthly updates. Sitka Co licenses the software on a stand-alone basis for between \$1 million and \$2 million over a four-year period and regularly sells the monthly updates separately for \$2.5 million over the same period. The software can function on its own without the updates. Although, the monthly updates improve its effectiveness, they are not essential to its functionality. However, because of the rapidly changing technology in the industry, if Cent Co does not update the software regularly, the benefits of using the software would be significantly reduced. In the year to 31 December 20X7, Cent Co has only updated the software on two occasions. Cent Co must access the software via the cloud and does not own the rights to the software.

#### EXHIBIT 2. Part-disposal of Marlett Co

Sitka Co prepares separate financial statements in accordance with IAS 27 Separate Financial Statements. At 31 December 20X6, it held a 60% controlling equity interest in Marlett Co and accounted for Marlett Co as a subsidiary. In its separate financial statements, Sitka Co had elected to measure its investment in Marlett Co using the equity method. On 1 July 20X7, Sitka Co disposed of 45% of its equity interest in Marlett Co for \$10 million and lost control. At the date of disposal, the carrying amount of Marlett Co in its separate financial statements was \$12 million. After the partial disposal, Sitka Co does not have joint control of, or significant influence over Marlett Co and its retained interest of 15% is to be treated as an investment in an equity instrument.

At 1 July 20X7, the fair value of the retained interest of 15% in Marlett Co was \$3.5 million. Sitka Co wishes to recognise any profit or loss on the disposal of the 45% interest in other comprehensive income.

### EXHIBIT 3. Acquisition of Billing Co

Sitka Co has acquired two assets in a business combination with Billing Co. The first asset is 'Qbooks' which is an accounting system developed by Billing Co for use with the second asset which is 'Best Cloud' software. The directors of Sitka Co believe that the fair value of the assets is higher if valued together rather than individually. If the assets were to be sold, there are two types of buyers that would be interested in purchasing the assets. One buyer group would be those who operate in the same industry and have similar assets. This group of buyers would eventually replace Qbooks with their own accounting system which would enhance the value of their assets. The fair values of the individual assets in the industry buyer group would be \$30 million for Qbooks and \$200 million for 'Best Cloud', therefore being \$230 million in total.

Another type of buyer is the financial investor who would not have a substitute asset for Qbooks. They would licence Qbooks for its remaining life and commercialise the product. The indicated fair values for Qbooks and Best Cloud within the financial investor group are \$50 million and \$150 million, being \$200 million in total.

### **REQUIREMENTS (25 MARKS)**

(a)(i) Discuss whether the four-year software contract with Cent Co is a single performance obligation in accordance with IFRS 15 Revenue from Contracts with Customers including how the revenue from the contract would be accounted for in Sitka Co's financial statements for the year ended 31 December 20X7. Your answer should include whether the revenue should be recognised at a point in time or over time.

(8 marks)

(a)(ii) Discuss briefly why the right to receive access to Sitka Co's software is unlikely to be accounted for as an intangible asset or a lease in Cent Co's financial statements.

(4 marks)

(b) Discuss and demonstrate how the disposal of 45% interest and the retained interest of 15% in Marlett Co should be accounted for in the separate financial statements of Sitka Co at the date of disposal.

(9 marks)

(c) Discuss how the two assets acquired on the acquisition of Billing Co should be valued in accordance IFRS 13 Fair Value Measurement.

(4 marks)

#### QUESTION 4.

Colat Co manufactures aluminium products and operates in a region that has suffered a natural disaster on 1 November 20X7. There has been an increase in operating costs as the company had to replace a regional supplier with a more costly international supplier. The year-end of Colat Co is 31 December 20X7.

The following **exhibits**, available on the left-hand side of the screen, provide information relevant to the question:

- Non-current assets provides information about the non-current assets destroyed by the natural disaster including the effect on the decommissioning of a power plant.
- Other natural disaster consequences describes the potential costs of repairing the environmental damage
  and the associated government compensation, the nature of the hedge against a commodity price risk in
  aluminium and potential insurance policy proceeds.

#### **EXHIBIT 1. Non-current assets**

As a result of the natural disaster, the share price of Colat Co has declined as a significant amount of non-current assets were destroyed, including the manufacturing facility. In addition, Colat Co has suffered reputational damage resulting in a decline in customer demand.

The non-current assets of Colat Co that were destroyed had a carrying amount of \$250 million on 31 October 20X7 and the fair value of these non-current assets was \$280 million based on an independent appraisal shortly before that date. In addition, Colat Co determined that a power plant will have to be closed and decommissioned earlier than previously expected. The remaining useful life of the power plant has reduced from 25 years to 8 years. Non-current assets are valued using the cost model.

### EXHIBIT 2. Other natural disaster consequences

### Other natural disaster consequences

# Environmental damage and government compensation

Colat Co has, in the past, repaired minor environmental damage that it has caused but it has never suffered a natural disaster on this scale. There is no legal obligation for Colat Co to repair and restore damage caused by the disaster as this will be the responsibility of the government.

The government announced on 1 December 20X7 that there would be compensation of \$50 million available to repair the environmental damage only and that companies should apply for the compensation by 31 December 20X7. By 1 March 20X8, when the financial statements were approved, Colat Co had only received an acknowledgement of their application but no approval.

# Hedge of commodity price risk in aluminium

Colat Co hedges commodity price risk in aluminium and such transactions were classified as 'highly probable' in accordance with IFRS 9 Financial Instruments. However, the purchases which were considered highly probable prior to the natural disaster, are no longer expected to occur.

# Potential insurance policy proceeds

Colat Co's insurance policy provides compensation for losses based on the fair value of non-current assets, any temporary relocation costs estimated at \$2 million and any revenue lost during the two-month period from 1 November 20X7. At 31 December 20X7, it is unclear which events and costs are covered by insurance policies and significant uncertainty exists as to whether any compensation will be paid. Before the financial statements were approved, it was probable that the insurance claim for the loss of the non-current assets would be paid but no further information was available about other insured losses.

The insurance policy does not cover environmental damage which is the responsibility of the government.

# REQUIREMENTS (25 MARKS)

Investors need to understand a variety of factors when making an investment decision. The nature of the companies in which they are looking to invest is an important consideration, as is the need to incorporate sustainability factors into investment decisions.

(a) Discuss why sustainability has become an important aspect of the investors' analysis of

companies.	
Note: there is no requirement to refer to any exhibit when answering part (a).	
	(4 marks)
Professional marks will be awarded in part (a) for clarity and quality of discussion.	(2 marks)
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(b) Discuss any events affecting Colat Co which might indicate that an impairment test of be conducted in accordance with IAS 36 Impairment of Non-Current Assets.	ught to
	(3 marks)
(c) Discuss how the following should be accounted for in the financial statements for the ended 31 December 20X7:	e year
(i) the destruction of the non-current assets and decommissioning of the power plant;	W. Control of the Control
	(4 marks)
(ii) the cost of repairing the environmental damage and the potential receipt of government compensation;	
	(4 marks)
(iii) the hedge of the commodity price risk in aluminium; and	/4I>
	(4 marks)
(iv) the potential insurance policy proceeds.	(4 marks)