Total: 100 Marks Duration: 3 Hours

Name ______________________________________ Reg No: _____________ Section:________

Question Number	Question I	Problem 1	Problem 2	Problem 3	Problem 4	Problem 5	Total
Full Marks	25	10	15	25	10	15	100
Marks Awarded							

No clarification will be provided during this closed book exam. Please write your answer with pen (not pencil) and show your working clearly in the space provided. Please use your time wisely. Good Luck.

Question I (25 marks)

Questions 1 – 12 carry 2 marks, Question 13 carries 1 mark. Fill in the blanks or circle the best option.

1. A machine costing $132,000 was destroyed when it caught fire. At the date of the fire, the accumulated depreciation on the machine was $60,000. An insurance cheque for $150,000 was received based on the replacement cost of the machine. The impact of these on the income statement is _____________ (gain / loss; pick one) of $ ________________ (fill in the blanks).

2. An entity has sold 200 pieces of a product at a price of Rs. 1,500 per piece with a right to return within 30 days. The cost per piece is Rs. 900 and the entity expects that 10% of the goods sold will return. The entity should recognize refund liability at Rs. _____________________ and right to return Rs. ________________________.

3. If a company has both an inflow and outflow of cash related to property, plant, and equipment, the ______________ in the investing activities section.

   a. two cash effects must be netted and presented as one item
   b. cash inflow and cash outflow must be reported separately
   c. cash outflow is only is presented
   d. cash inflow and cash outflow can either be reported separately or presented as one item

4. APS Company issued 15,000 shares of $1 par common stock for $40 per share during 2014. The company paid dividends of $36,000 and issued long-term notes payable of $330,000 during the year. What amount of cash flows from financing activities will be reported on the statement of cash flows?

   a. $9,000 net cash inflow.
   b. $264,000 net cash inflow.
   c. $705,000 net cash outflow.
   d. $894,000 net cash inflow.

5. Indicate the respective effects of the declaration of a cash dividend on the following balance sheet sections:

	Total Assets	Total Liabilities	Total Stockholders' Equity
a.	Increase	Decrease	No change
b.	No change	Increase	Decrease
c.	Decrease	Increase	Decrease
d.	Decrease	No change	Increase

6. The balance in the Accumulated Depreciation account represents the
   a. cash fund to be used to replace plant assets.
   b. amount to be deducted from the cost of the plant asset to arrive at its fair market value.
   c. amount charged to expense in the current period.
   d. amount charged to expense since the acquisition of the plant asset.

7. Goodwill can be recorded
   a. when customers keep returning because they are satisfied with the company's products.
   b. when the company acquires a good location for its business.
   c. when the company has exceptional management.
   d. only when there is an exchange transaction involving the purchase of an entire business.

8. An entity sells a restaurant with a non-recourse financing arrangement. Here "non-recourse" means that:

   a) The customer can enter into any other financing arrangement without the consent of the entity.
   b) The customer cannot enter into any other financing arrangement without the consent of the entity.
   c) In case of a default by the customer, the entity can repossess the restaurant and cannot seek further compensation from the customer.
   d) In case of a default by the customer, the entity can repossess the restaurant and seek further compensation from the customer.

9. Which of the following statements is true?
   a) Goods and services taxes are excluded when determining transaction price.
   b) Customer loyalty programmes might include a significant financing component depending on the period over which the award points can be used.
   c) Variable consideration promised in a contract is always allocated to all products in the contract.
   d) Consideration payable to customer is added to the transaction price.

10. Which of the following statements is false?
   a) An expenditure that increases the productive capacity of an equipment is capitalized.
   b) Insurance premium on a motor car paid at the time of purchase of the car is capitalized.
   c) Maintenance expenditure on an equipment is expensed.
   d) Depreciation is charged once an equipment is ready to use.

11. Which <u>one</u> of the following types of firms do you expect to have

High Asset Turnover	Low Operating Margin
a. Pharmaceutical company	a. IT & Software company
b. Supermarket	b. Supermarket
c. Cement	c. Oil refinery
d. Power utility	d. Aluminium products company

12. After a thorough physical inventory check, Hero Company determined that it had inventory worth \$320,000 at December 31, 2015. This count did not take into consideration the following facts: Sahib Consignment currently has goods worth \$47,000 on its sales floor that belong to Hero but are being sold on consignment by Sahib. The selling price of these goods is \$75,000. Hero purchased \$22,000 of goods that were shipped on December 27, FOB destination, that will be received by Hero on January 3. Hero also sold \$20,000 of goods that were shipped on December 28, FOB Shipping point, that will be received by the buyer on January 5. Determine the correct amount of inventory that Hero should report.
   a. \$320,000.
   b. \$340,000.
   c. \$367,000.
   d. \$387,000.

13. One unit of R is required to produce one unit of Finished Goods FG. What is the amount at which R should be carried on the Balance sheet date under the following situations: (1 mark)

Situation	Details	R to be carried on the BS at
Situation A:	Cost of R is Rs 300 while its replacement cost is Rs 400	**Rs.**
Situation B :	Cost of R is Rs 300 while its replacement cost is Rs 250. FG, cost of which per unit is Rs 1,200, is expected to be sold at Rs 1000 per unit	**Rs.**

Problem 1 (10 marks)

You are provided with the following financial information and ratios for a company:

Balance Sheet as at 31-12-2017

Equity & Liabilities	Rs.
Owner's Funds:	
Equity Share capital	400,000
Other Equity	?
Non-Current Liabilities:	
Debentures	700,000
Other Non-current Liabilities	200,000
Current Liabilities:	
Trade Payables	200,000
Other Current Liabilities	?
Total	?

Assets	Rs.
Non-Current Assets:	
PPE	?
Intangible Assets	?
Non-Current Investments	350,000
Current Assets:	
Inventories	?
Trade Receivables	?
Cash	50,000
Other Current assets	50,000
Total	?

Income Statement
for the year ended 31-12-2017

	Rs.
Net Sales	?
Cost of Goods Sold	600,000
Gross Profit	?
Operating Expenses	100,000
Profit before Interest & Tax	?
Interest expenses	?
Profit before tax	?
Income tax	?
Net Profit	180,000

Additional Information:

- Opening stock of Inventories were Rs 100,000
- Opening Trade Receivables were Rs. 400,000
- Net Profit Margin is 18%
- Return on Assets is 8%
- Current Ratio is 2.8:1
- Inventory Turnover is 4 times
- Receivables Turnover is 2.5 times
- Sales was equal to the ending balance of PPE
- Interest Coverage ratio is 6
- There are no non-operating income, gain, or loss.

Compute in the missing information (cells with a question mark on the Income Statement and Balance Sheet given above) and use it to fill the cells with a question mark in the two statements given on the **next page**.

Fill up the cells with a question mark in the tables on this page:

Income Statement for the year ended 31-12-2017

	Rs Amount
Net Sales	?
Cost of Goods Sold	600,000
Gross Profit	?
Operating Expenses	100,000
Profit before Interest & Tax	?
Interest expenses	?
Profit before tax	?
Income tax	?
Net Profit	180,000

Balance Sheet as at 31-12-2017

Equity & Liabilities	Rs.
Owner's Funds:	
Equity Share capital	400,000
Other Equity	?
Non-Current Liabilities:	
Debentures	700,000
Other Non-current Liabilities	200,000
Current Liabilities:	
Trade Payables	200,000
Other Current Liabilities	?
Total	?

Assets	Rs.
Non-Current Assets:	
PPE	?
Intangible Assets	?
Non-Current Investments	350,000
Current Assets:	
Inventories	?
Trade Receivables	?
Cash	50,000
Other Current assets	50,000
Total	?

Problem 2 (15 marks)

Following are the partial bits of information available for Ayna Ltd (a merchandiser) for the year ended 31st March 2018 from its various financial statements:

From INCOME STATEMENT for the year ended 31st March 2018	(Rs)
Sales Revenue	9,00,000
Cost of goods sold	3,80,000
Operating Expenses (including Depreciation & Amortization)	213,000

From Balance sheet	Opening (Rs)	Closing (Rs)
Goodwill	10,000	2,000
Property, plant and equipment (PP&E)	12,00,000	14,50,000
Accumulated Depreciation – PP&E	(1,00,000)	(2,00,000)
Non-current Investments in bonds	60,000	1,60,000
Current Investments in bonds	2,00,000	1,00,000
Interest Receivable	5,000	0
Cash Balance	50,000	??
Equity Share Capital	10,00,000	10,16,000
Reserves & Surplus	75,000	3,00,000
Bonds Payable	2,38,000	2,19,000
Current tax liability	30,000	40,000
Interest Payable	27,000	30,000

From Indirect Method – **Cash Flow Statement** for the year ended 31st March 2018	
Cash flow from operating activities	
Profit Before Tax (PBT)	2,80,000
Adjustments for Non-cash, non-operating items and changes in working capital items	
Depreciation	??
Amortization of goodwill	8,000
Profit on sale of current investments	-20,000
Loss on sale of non-current investments	5,000
Loss on sale of Equipment	40,000
Interest Expenses	12,000
Interest income on non-current investments	-7,000
Interest income on current investments	-3,000
Trade receivables	20,000
Inventories	-50,000
Trade payables	-20,000
Accrued Expenses	8,000
Income tax paid	??
Cash flow from operating activities	??

The company bought plant worth Rs 20,000 by issuing bonds payable. Equipment with a Gross book value of Rs.150,000 was sold for Rs60,000. It sold non-current investment in bonds whose cost price was Rs 40,000. No current investments were bought during the year. Tax Expense for the year was Rs 30,000.

You are required to prepare the Cash Flow Statement for Ayna Ltd for the year ended 31st March 2018, using Direct Method.

Cash Flow Statement for the year ended 31-3-2018

Cash flow from Operating Activities:		
Cash Flow from Investing Activities:		
Cash flow from Financing Activities:		
Net change in Cash & Cash Equivalent Opening Cash & Cash Equivalent Closing Cash & Cash Equivalent		

Problem 3 (25 marks)

Problem 3a (10 marks)

A company constructs a factory at a cost of Rs. 4,000 crores. It was ready for use on 1-4-2000. It expects to use the factory for 30 years. Thereafter, it will have to incur an expenditure of Rs. 200 crores to dismantle the factory and restore the factory site to its original condition.

At the risk-free rate 8% prevailing on 1-4-2000, the present value of Rupee 1 to be received after 15 years and 30 years is 0.3152 and 0.0994, respectively. The present value of Rupee 1 to be received after 12 years using a risk-free rate of 9% is 0.355, respectively.

Round off your answers to ***two decimal places*** after crore.

What is amount of asset retirement obligation on 1-4-2000? (2 marks)

	Rs.	crore

What is the interest on the asset retirement obligation for the year ended 31-3-2001? (1 mark)

	Rs.	crore

How much of the amount expected to be incurred at the time of retirement will be recovered over the useful life of the factory from the unwinding of discount rate and from depreciation? (1+1 =2 marks)

From depreciation:	Rs.	crore
From the unwinding of the discount rate:	Rs.	crore

What is the balance in the Asset Retirement Obligation on 31-3-2015? (2 marks)

	Rs.	crore

Suppose on 31-3-2015 the risk-free rate was 9%, the remaining useful life was estimated to be 12 years, and the expenditure upon retirement was estimated to be Rs 190 crore? What would be the revised ARO and the change in ARO on 31-3-2015? How much of this change would be taken to the income statement for the year ended on 31-3-2015? (1+1+1 = 3 marks)

Revised ARO:	Rs.	crore
Change in ARO:	Rs.	crore
Amount taken to Income Statement	Rs.	crore

Problem 3b (8 marks)

On April 1, 2018 (the beginning of the fiscal year), Durgapur Ltd leased a machinery for 5-years. The lease obligation will be paid in six equal amounts (including the down payment). The first payment is the down payment that will be made at the inception of the lease, whereas the remaining five payments will happen on March 31 of calendar years 2019 – 2023.

The company's incremental borrowing rate and the rate implicit in the lease is 20% p.a. For the year ended March 31, 2019, the income statement includes interest expense for the lease obligation Rs. 598 lakh and depreciation expense (using straight line method) for the leased asset Rs. 798 lakh.

Answer the following questions (each carries 1 mark; no part marking for these questions):

What is the carrying amount of the machinery at the lease inception?	Rs. lakh
What is the lease obligation after making the down payment?	Rs. lakh
What is the amount of the down payment?	Rs. lakh
What is the balance of the lease obligation at the end of March 31, 2019?	Rs. lakh
What is the interest expense for the year ended March 31, 2020?	Rs. lakh
What is the decrease in the lease obligation during the year ended 31-3-2021?	Rs. lakh
What is the total expense related to the lease for the year ended 31-3-2022?	Rs. lakh
What is the balance of the lease obligation on 31-3-2022?	Rs. lakh

Problem 3c (7 marks)

To diversify into shipping business, Global Cargo Ltd acquired 13 cargo ships at a price of Rs. 100 million each on 01-04-2000. The useful life of these cargo ships is 40 years and their estimated residual value is Rs. 100 million. The company decided to depreciate the ships using straight line method.

While the global shipping industry was booming, the company's shipping business was making a modest operating profit. Towards the end of year 10, the global shipping industry entered a downturn and the corporate management felt that the shipping business will incur losses in the foreseeable future. At the end of year 10 (31-3-2010), the company could either sell the ships for a gross consideration of Rs. 650 million, or it could continue operating the business at a loss. Brokerage of 2% will have to be paid if the ships were sold. To forecast the cash flows and ascertain their present value, the management hired a valuation expert who determined that the company would generate a total cash flow of Rs. 800 from the ships. The present value of these cash flows would be Rs. 611 million. The company lowered its estimate of residual value to Rs. 86 million and reduced the remaining useful life of ships to 19 years. Had there been no impairment, the residual value and useful life estimates would have remained unchanged.

By the middle of year 13, the shipping industry was out of recession and the company's shipping business turned profitable with a significant increase in the expected future cash inflows. At the end of year 13 (31-3-2013), the valuation expert ascertained the recoverable amount to be Rs. 1,000 million for the ships.

Obtain the following amounts:

Amount of impairment loss to be recognized on 31-3-2010 (4 marks)	Rs. million
Amount of impairment loss reversal to be recognized on 31-3-2013 (3 marks)	Rs. million

Problem 4 (10 marks)

Abhimaan Company uses Periodic Method of inventory. Following is the details about their purchases and sales for the period:

		Purchases		Sales	
Date		Units	Unit Cost	Units	Selling Price/Unit
03-Jan	Beginning inventory	100	$40		
03-Mar	Purchase	60	$50		
03-Apr	Sales			70	$80
03-Oct	Purchase	200	$55		
Mar-16	Sales			80	$90
Mar-19	Sales			60	$90
Mar-25	Sales			40	$90
Mar-30	Purchase	40	$60		

You are required to compute the following:

A) Calculate the amount charged to cost of goods sold for the period, if the company uses FIFO Method 3 Marks	$
B) Calculate the amount assigned to the inventory on hand on closing date if weighted average method was used 2 Marks	$
C) Calculate the Gross Profit for the period, if the company made LIFO assumption 3 Marks	$
D) Assume that the company uses FIFO Method and it overstated the ending inventory by $2000. 2 Marks What will be the incorrect Gross Profit he would report? Will it be overstated/understated?	$ Overstated / understate (circle any one)

Problem 5 (15 marks)

Problem 5a: (5 marks)

On 1-4-2014, HCC signed a contract to construct a 30-kilometer metro rail network from a municipal corporation. The construction company will retain the control of the metro rail network until it formally hands over the network to the municipal corporation. The agreed price inclusive of 18% sales tax is Rs. 4,130 crore. HCC received Rs. 3,500 crore (the amount excluding the sales tax) in advance on 1-4-2014. It could have issued debentures (15% p.a.) to raise this amount.

The construction began in April 2014. It was agreed in the contract that the rail network would be handed over to the municipal corporation in April 2018. Otherwise, for every month of delay in handing over of the network, HCC would have to pay Rs. 250 crore as penalty. HCC completed the work on 30-3-2017 and handed over the rail network to the municipal corporation on 1-4-2018. The network was inaugurated on 1-5-2018.

Answer the following questions based on Ind AS 115. Each question carries 1 mark. Total 5 marks

On what date can HCC recognize revenue from this contract?	
What is the transaction price for this contract (round off your answer to *nearest crore*)?	Rs. crore
What is the opening balance of the liability (associated with this contract) on 1-4-2015?	Rs. crore
What would be the expense (related to the liability associated with this contract) for the year ended on 31-3-2016?	Rs. crore
What is the balance of the liability on 31-3-2018 (round off your answer to *nearest crore*)?	Rs. crore

Problem 5b: (5 marks)

On 1-4-2017, FMCG Suppliers Ltd has entered into a contract with a customer (Joka Cooperative Store) to supply deodorants at a price of Rs. 120 each (10% sales tax extra) for a one-year period. If the customer purchases between 150 units and 250 units during the year, it will receive a rebate of Rs. 10 per unit on the purchase price for the entire quantity purchased during the year. If the customer buys more than 250 units, it is entitled to a rebate of Rs. 20 per unit on the purchase price for the entire quantity bought during the year.

At the inception, the customer assured to buy 30 units per quarter and the supplier had no reason to expect more quantity. The quantity purchased by the customer was 30 units in the first quarter and 121 units in the second quarter. At the end of the third quarter, the supplier anticipated that the customer will be eligible for a rebate of only Rs. 10 each during the rest of the contract period. The customer bought 30 units in the third quarter and 70 units in the fourth quarter. All amounts were received on the due date.

Determine the revenue to be recognized based on Ind AS. Each question carries 1 mark.

Revenue in Quarter 1	Rs.
Revenue in Quarter 2	Rs.
Revenue in Quarter 3	Rs.
Revenue in Quarter 4	Rs.
Revenue for the year	Rs.

Problem 5c: (5 marks)

Comp India Ltd sells laptops. Customers can buy a laptop with either one-year warranty for Rs. 110,000 or three-year warranty for Rs. 130,000.

Customers can also extend their warranty (after the initial one-year warranty) by two-years for Rs. 27,500. Customers are charged goods and services tax @ 18% on the price.

On 1-4-2018, Comp India sold 20 laptops with one-year warranty and 30 laptops with three-year warranty.

Revenue from 20 Laptops with one-year warranty (2 marks)	Rs. lakh
Revenue from 2-year extended warranty on the 30 Laptops that were sold with extended warranty (3 marks)	Rs. lakh