



UNIVERSITY COLLEGE TATI (UC TATI)

FINAL EXAMINATION QUESTION BOOKLET

COURSE CODE	: DTG 1203
COURSE	: BUSINESS MATHEMATICS
SEMESTER/SESSION	: 1 - 2022/2023
DURATION	: 3 HOURS

Instructions:

1. This booklet contains 5 questions. Answer **ALL** questions.
2. All answers should be written in answer booklet.
3. Write legibly and draw sketches wherever required.
4. If in doubt, raise your hand and ask the invigilator.

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO

THIS BOOKLET CONTAINS 4 PRINTED PAGES INCLUDING COVER PAGE

QUESTION 1

a) Write the following into percent, fraction or decimal.

Percent	Fraction	Decimal
$33\frac{1}{2}$	(i)	(ii)
(iii)	(iv)	0.125
(v)	(vi)	0.8
(vii)	$\frac{2}{5}$	(viii)
50%	(ix)	(x)
$87\frac{1}{2}\%$	(xi)	(xii)

(6 marks)

b) Aali allocate RM33,000 for food, entertainment and saving in the ratio 8:1:5. Find how much Aali spent on each item.

(6 marks)

c) A soccer stadium in Manchester, England, has a capacity of 78,753 seats. If 67,388 seats were filled, find percent of the stadium seat were vacant.

(4 marks)

d) A cosmetics entrepreneur bought promotional calendars and planner to give to her customers at the of the year. The calendars cost RM0.75 each and the planner cost RM0.50 each. She ordered a total of 500 promotional items and spent RM300. How many of each item did she order?

(4 marks)

QUESTION 2

a) Find the trade discount or net price as indicated. Round to the nearest cent.

List Price	Single Discount Rate	Trade Discount	Complement	Net Price
RM48	10%	(i)		(ii)
RM100	12%	(iii)		(iv)
RM425	15%	(v)		(vi)
RM24.62		RM5.93		(vii)
RM0.89		RM0.12		(viii)
RM1,263	12%	(ix)		(x)
RM27.50	3%	(xi)		(xii)
RM8,952	18%	(xiii)		(xiv)
RM421	5%		(xv)	(xvi)
RM721.18	3%		(xvii)	(xviii)
RM3,983.00	8%		(xix)	(xx)

(10 marks)

b) The list price of Proton X50 is RM89,765. Glory Automobile Sdn Bhd can buy the car at the list price less 12%. Find the trade discount and the net price of the car.

(4 marks)

c) Find the net price of 100 sheets of display board that list for RM3.99 each, 40 pairs of scissors that list for RM1.89 each, and 20 boxes of paper clips that list RM3.99 if a trade discount is allowed. Page 267

(6 marks)

QUESTION 3

- a) Calculate the net price of a piano that has a list price of RM4,800 and a trade discount series of 10/5. (4 marks)
- b) Glass Furniture Sdn Bhd offers a play-a-around table and chairs at a list price of RM289.95 with a chain discount of 8/6/5. Compute the trade discount. (6 marks)
- c) Office Depot has an invoice for RM3,814 dated May 8, with terms of 3/10, 2/15, n/30. The invoice also has a 1% penalty per month for payment after 30 days.
- i) Calculate the amount due if paid on May 12
 - ii) Calculate the amount due if paid on May 25
 - iii) Calculate the amount due if paid on June 7
 - iv) Calculate the amount due if paid on June 13 (8 marks)
- d) The Gap Sdn Bhd has an invoice dated August 20 with terms 3/15, n/30. Find the date to get the discount. (2 marks)

QUESTION 4

- a) Find the percent of markup based on cost for a table that costs RM220 and sells for RM599. (2 marks)
- b) Aiman buys a pair of shoes at RM 50 and the markup is 20% of the selling price.
- i) Find the selling price
 - ii) Find the markup (4 marks)
- c) A paper cutter sells for RM39. The markup rate is 60% of the cost. Find the cost and the markup of the paper cutter. (4 marks)
- d) Koperasi UCTATI plan to mark up a package of 8 AAA batteries RM3.50 over cost. This will be a 50% markup based on cost. Find the cost and selling price of the batteries and the rate of the selling price. (5 marks)
- e) A Singer sewing machine costs RM127.59 and the Fabric Centre marks it up 23% of the selling price. Find the selling price and markup for the machine. (5 marks)

QUESTION 5

- a) Compute the rate of markup based on cost and based on selling price of a photostat machine that costs RM12,500 and sells for RM18,900 (5 marks)
- b) Glam Wedding paid RM189 for fern stand and marked it up 60% based on cost. Glam included it in a special promotional markdown of 30%. The stand was damaged during the sale and was marked down an additional 40%. Calculate the final selling price of the stand. (6 marks)
- c) Delicious Grocery buys tomatoes for RM0.27 per kilogram. On average 4% of the tomatoes must be discarded. Calculate the selling price per kilogram needed to obtain a 160% markup on cost for 2000 kilogram. (6 marks)
- d) AutoZone purchases tire cleaner for RM0.84 and sells it for RM2.39. Calculate the rate of markup based on selling price. (3 marks)

----- End of question -----