

KINGDOM OF BAHRAIN
MINISTRY OF EDUCATION
DIRECTORATE OF EXAMINATIONS / CENTRAL EXAMINATION SECTION
SECONDARY EDUCATION

MODEL ANSWERS

RESIT SEMESER EXAM 2022/2023

COURSE NAME: Financial Mathematics – 1
COURSE CODE : 111 مال

TRACK: توحيد مسارات
TIME : 2 Hours

QUESTION ONE:

11

1- Write the number in **letters** or **numbers** for the following:

NO	<u>Numbers</u>	Number in <u>letters</u>
a	88	Eighty- eight //
b	3000,000	Three-million //
c	0.001	Thousandths //
d	512.627 //	Five hundred twelve and six hundred twenty-seven thousandths.
e	BD 20.825 //	Twenty dinar and eight hundred twenty -five fils

2- Find the place value of the number 1,345,287,369,521 :

Trillions			Billions			Millions			Thousands			Units		
Hundred Trillion	Ten Trillion	Trillion	Hundred Billion	Ten Billion	Billion	Hundred Million	Ten Million	Million	Hundred Thousand	Ten Thousand	Thousand	Hundred	Ten	One
0	0	1 ^¼	3 ^¼	4 ^¼	5 ^¼	2 ^¼	8 ^¼	7 ^¼	3 ^¼	6 ^¼	9 ^¼	5 ^¼	2 ^¼	1

3- Round the following numbers:

a- Round 2657 to the nearest hundred. ...2700 //

b- Round 17.3204 to the nearest hundredths. ...17.32 //.....

c- BD 1,235.25024 to the nearest fils.1235.250 //


 ابراهيم بن علي السعيد

QUESTION TWO:

20 x ½

10

Use the currency exchange table below to convert the following currencies:

Foreign Currency		Selling BHD	Buying BHD
USA Dollar	USD	0.378000	0.375000
Euro	EUR	0.449100	0.466600
Saudi Arabian Riyal	SAR	0.100650	0.100000
Emirati Dirham	AED	0.103900	0.101400
Egyptian Pound	EGP	0.024041	0.0220521
Jordanian Dinar	JOD	0.541800	0.531800

- a- You have BHD 2000 Bahraini Dinars and would like to convert it to USA Dollar.

$$= 2000 // \div // 0.378 // = \$ 5291.01 // \quad \text{or}$$

BHD	USD
0.378 //	1
2000 //	??

الإسلام حسن العباد

- b- After you return from travel, you have JOD 1500 Jordanian dinar and you want to get the Bahraini dinar.

$$= 1500 // \times // 0.531800 // = \text{BHD } 797.700 // \quad \text{or}$$

BHD	JOD
0.531800 //	1
1500 //	??

QUESTION THREE:

26 x ½

13

- a- An employee is engaged for 48 hours during the week at a basic rate of BD 4.000 per hour.

Calculate the gross wage received during the period.

DAYS	SAT	SUN	MON	TUE	WED	THU
Hours	8	8	8	8	8	8
O.T during the day	4	0	3	0	2	0

- Regular Wage = $(8/ + 8/ + 8/ + 8/ + 8/ + 8/) \times 4/ = \text{BHD}192.000/$
- Over Time of during the day = $(4/ + 3/ + 2/) \times 4/ \times 1.25/ = \text{BHD} 45.000/$
- Total Wages = $192.000/ + 45.000/ = \text{BHD} 237.000/$

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الإسلام هبة حسنة للعالم

- b- Ali works as a salesman in a company for a basic salary of BHD 500 per month plus a commission 5% of sales. If he has made sales of BHD 6000 .

What is the gross salary for this month ?

$$\text{Commission} = 5\% \times 6000 = \text{BHD} 300/$$


$$\text{Total gross wage} = \text{Basic wage} + \text{Commission}$$

$$= 500/ + 300/ = \text{BHD} 800/$$

QUESTION FOUR:

26 x 1/2
13

A- Complete the following invoice, showing the steps of the solution below:

Gulf Co.		10		
Vat Invoice NO: 25001		TRN: 220045212133401	Date : 11/11/2022	
Name: MOD H.J CPR: 854111245XX				
Qty	Item	Unit Price (BHD)	Total (BHD)	
2	Mobile iPhone 14	500.000	(a)1000/
Trade Discount 10%			(b)	... (100)/
Net Price			(c)	... 900/
Vat 10%			(d) 90 /
Payment amount			(e)990/

(a) := 500/ x 2/ =1000 /.....

(b):= 1000/ x 10%/ =100/.....

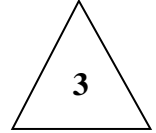
(c) :1000/ - 100/ = 900/.....

(d): 900/x 10%/ = 90 /.....

(e) : 900/+ 90/ = 990/

B- A retailer's cost for a Microwave Oven is BHD 80. The retailer wants 60% mark-up based on cost. What is the selling price?

$$\begin{aligned} \text{selling price} &= (80/ \times 60\% /) \quad +/ 80/ = \\ &= \quad 48/ \quad + 80 \quad = \text{BD } 128/ \end{aligned}$$



26 x 1/2

13

QUESTION FIVE:

Find the unknown factors of the following, showing the steps of solution below:

NO	Principal	Interest Rate	Time / Period	Simple Interest
a	BD 1000	7%	5 years	??
b	BD ???	6.5%	10 months	BD 81.250
c	KWD 2000	??%	135 days	KWD 59.178

a- $SI = 1000/ \times 7\% // \times 5// = \text{BD } 350//$

b- $P = 81.250 // \div // (6.5\% // \times 10 / \div 12/) = \text{BD } 1500//$

c- $i = 59.178 // \div // (2000 / \times 135/ \div 365/) = 7.99\% \text{ or } 8\%//$

الإمام حسين (عليه السلام)

END OF ANSWER