**Resource Free Section – 8 min 1 min reading time [8 marks]**

**1. [2 marks]**

Determine the P/E (price to earnings ratio) of a company that has a share price of $2.00 and dividends in the last twelve months totalling $0.50 per share.

**2. [3 marks]**

|  |  |  |  |
| --- | --- | --- | --- |
| Description: Description: S:\AdminShared\All Staff\1 College Logo's\Baldivis_Logo_colour.jpgName: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | Date: *\_\_\_\_\_\_\_\_\_\_\_* |
|  | **Year 11 Applications**  **Test 2, 2019**  **Topics – Simple, Compound Interest and Other Financial Considerations** | | 46  = % |
| **Total Time:** | ***53*** *minutes* |  | |
| **Total Reading:** | *3**minutes* |
| **Total Working:** | *50 minutes* |
| **Weighting:** | *4% of the year* |
| **Equipment:** | *SCSA Formula Sheet; 1 page notes (A4 one side,* ***Unfolded****), CASIO ClassPad; Scientific Calculator* | | |

Determine the total to be repaid on a loan of $20,000 invested at 10% per annum simple interest for 2 years.

**3. [3 marks]**

Write down the calculation you would use to calculate the value of an investment of $6,700 after 8 years invested at 6.4% compounded bi-annually. (You do not need to solve it.)

**Resource Section – 41 min 2 min reading time [38 marks]**

**4. [2 marks]**

How much simple interest is due after 35 days for an investment of $24000 invested at 5% per annum. (Give your answer to the nearest cent)

**5. [2 marks]**

Eliza invested money in a superannuation fund that paid 6.5% p.a. compounded monthly. How much did she invest if her investment grew to $72,500 in 10 years? Answer to the nearest ten dollars.

**6. [4 marks: 2, 2 marks]**

If we assume that the average annual rate of inflation were to remain steady at 4.5%, and has remained at this rate for several years leading up to now, how much would an item currently valued at $50, be worth

a) in 7 years time?

b) two years ago?

**7. [2 marks]**

If it takes 3 years for $10000 to accumulate to $12600, find the compound interest rate when interest is compounded annually (correct to one decimal place)

**8. [8 marks: 2, 2, 4 marks]**

The following is Karens’s bank account statement from August to September.

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Debit** | **Credit** | **Balance** |
| Starting Balance |  |  | $740 |
| 3 Aug |  | $560 | $1,300 |
| 11 Aug | $60 |  | $1,240 |
| 12 Aug |  | $40 |  |
| 5 Sept | $100 |  |  |
| 17 Sept | $600 |  |  |
| 21 Sept |  | $520 |  |

**a** Complete the balance column.

**b** What is the minimum monthly balance for:

**i.** August (31 days)

**ii.** September (30 days)

**c** Calculate the total simple interest earned for both months if the interest paid is 4.5% p.a. on the minimum monthly balance

**9. [7 marks: 4, 3 marks ]**

The following information is from the Australian Stock Exchange. Prices are from the close of trade December 24th 2014. Use this information to answer the following questions.

Share Price/Value

|  |  |  |  |
| --- | --- | --- | --- |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Last Price |  |  | Change |  |  |  |
| ANZ | [ANZ BANK](http://www.asx.com.au/asx/research/companyInfo.do?by=asxCode&asxCode=ANZ) | $32.00 | arrow indicating upward movement |  | $0.13 |  |  | 0.41% |
| APA | [APA GROUP](http://www.asx.com.au/asx/research/companyInfo.do?by=asxCode&asxCode=APA) | $7.32 | arrow indicating downward movement |  | -$0.06 |  |  | -0.81% |
| ASX | [ASX](http://www.asx.com.au/asx/research/companyInfo.do?by=asxCode&asxCode=ASX) | $36.64 | arrow indicating upward movement |  | $0.03 |  |  | 0.08% |
| AZJ | [AURIZON](http://www.asx.com.au/asx/research/companyInfo.do?by=asxCode&asxCode=AZJ) | $4.62 | arrow indicating upward movement |  | $0.01 |  |  | 0.22% |
| BHP | [BHP BLT](http://www.asx.com.au/asx/research/companyInfo.do?by=asxCode&asxCode=BHP) | $28.97 | arrow indicating upward movement |  | $0.16 |  |  | 0.56% |

Company Value

|  |  |  |
| --- | --- | --- |
| BHP | [BHP BLT](http://www.asx.com.au/asx/research/companyInfo.do?by=asxCode&asxCode=BHP) | $184,635,538.52 |
| CBA | [CWLTH BANK](http://www.asx.com.au/asx/research/companyInfo.do?by=asxCode&asxCode=CBA) | $173,372,651.73 |
| WBC | [WESTPAC](http://www.asx.com.au/asx/research/companyInfo.do?by=asxCode&asxCode=WBC) | $115,057,631.04 |
| TLS | [TELSTRA](http://www.asx.com.au/asx/research/companyInfo.do?by=asxCode&asxCode=TLS) | $111,986,599.97 |
| NAB | [NAT. BANK](http://www.asx.com.au/asx/research/companyInfo.do?by=asxCode&asxCode=NAB) | $107,103,463.93 |

1. The share price at close of trade for ANZ and APA is $32.00 and $7.32 respectively. What was the previous share price for ANZ and APA?
2. Joshua owns 4500 shares in AURIZON, 1000 shares in ASX and 2900 shares in APA GROUP. What is the total value of Joshua’s share portfolio at close of trade December 24th 2014?

**10. [5 marks: 2, 3 marks]**

Amanda is a student studying to be a Vet.

She works part time as a waitress for 18 hours a week plus 4 hours of overtime where she gets paid time and a half. Her rate of pay is $20/hr.

Amanda works 40 weeks of the year.

She lives with a friend and pays $150 per week in rent and this covers her utility bills.

She has a car and it costs $80 to fill up with petrol once a month. She puts $200 aside each year to cover the maintenance of her car for that year.

Her other fixed expenses are her mobile phone which costs $50/month.

Amanda is creating a budget. Working on the approximation of 4 weeks in a month and 52 weeks in a year;

a) What is the total of her annual fixed expenses?

b) How much money does she have left annually after all her fixed expenses?

**11. [4 marks]**

Consider the following table outlining the family tax benefit payable to families with 1 child, based on their level of income.

|  |  |
| --- | --- |
| Families with 1 child meeting the criteria | |
| Combined annual income | Family Tax Benefit for the year |
| Up to $48000 | $5100 |
| $48001 to $63000 | $5100 less 20 cents for each $1 annual income exceeds $48000 |
| $63001 to $95000 | $2100 |
| $95001 to $102000 | $2100 less 30 cents for each $1 that annual income exceeds $95000 |
| Over $102000 | Nil |

Determine the annual Family Tax Benefit (FTB) paid to a family with one child meeting the FTB requirements and with a combined annual income of $96,000.

**12. [4 marks: 2, 2, ]**

Josh has an annual salary of $55,000. Inflation is rising on average 2.6% p.a. His Salary is rising at the same rate to keep pace with inflation. Josh wants to calculate what his salary will be in 3 years time so he performs the following calculations:

2.6% of $55,000 = 0.026 × 55000

= $1,430

Salary in 3 years = $55,000 + $1,430 + $1,430 + $1,430

= $59,290

a. Explain why this is incorrect

b. Calculate Josh’s salary in 3 years.

* End of Test -