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—Visionary IB Education—
Success in the IB Diploma

BUSINESS MANAGEMENT

HIGHER LEVEL

PAPER 1

Practice examination 2017 – **Mikumi Secondary School**

2 hours 15 minutes

INSTRUCTIONS TO CANDIDATES

- Do not open this examination paper until instructed to do so.
- A clean copy of the **IB Business Management case study – Mikumi Secondary School** is required for this examination paper.
- Read the case study carefully.
- A clean copy of the **IB Business Management formulae sheet** is required for this examination paper.
- Section A: answer two questions.
- Section B: answer question 4.
- Section C: answer question 5.
- A calculator is required for this examination paper.
- The maximum mark for this examination paper is **[60 marks]**.

SECTION A

Answer **two** questions from this section.

QUESTION ONE

- a. Outline the importance of market research (line 38) to Mikumi Secondary School in achieving growth in student numbers. **[4 marks]**
- b. Using information in the case study, prepare a SWOT analysis based on your assessment of the internal and external factors that may influence Mikumi Secondary School achieving its objectives. **[6 marks]**

QUESTION TWO

- a. Explain the importance to Mikumi Secondary School of having a unique selling point (USP; line 54). **[4 marks]**
- b. Using information in the case study, construct a fishbone diagram for Mikumi Secondary School and explain the root causes of its high labour turnover (line 42). **[6 marks]**

QUESTION THREE

- a. Using information in the case study, distinguish between capital expenditure and revenue expenditure (line 16). **[4 marks]**
- b. Analyse the potential economies of scale (line 36) that Mikumi Secondary School may experience from further expansion. **[6 marks]**

SECTION B

Answer the **compulsory** question from this section.

QUESTION FOUR

Jacob Wendo knows that the school must invest in new infrastructure if it is going to be able to grow and expand by being able to attract new students. He has decided to personally guarantee a bank loan of \$50,000 to the school for such a purpose.

One option Jacob is considering is updating and expanding the residential boarding house from its present 50 bed capacity to 100 beds. A smaller residential wing would be included to better accommodate some of the teachers and their families.

Jacob has further investigated costs and conducted market research to identify potential customers. He is concerned at how many of the 100 residential beds for girls could be filled for the venture to be worthwhile. He forecasts the following:

- Fixed costs: US\$1000 per month.
- Variable costs: US\$35 per residential student per month.
- Residential boarding fee: US\$50 per residential student per month.

A boarding house manager would need to be employed to cater for the increased number of students staying in the newly expanded residence. To help offset the cost of the new boarding house manager, the position of general manager would be disestablished.

Two new positions of responsibility would be created – a head of the upper school (Years 7-12) and a head of the lower school (kindergarten to Year 6).

In addition to these two organisational changes, Jacob is considering a change to the organisational structure at Mikumi Secondary School.

- a. Define the term word-of-mouth promotion. **[2 marks]**
- b. Using information above calculate:
- i. The forecasted break-even quantity (students per month) for the residential boarding house (*show all of your working*). **[2 marks]**
 - ii. The difference between the forecasted monthly surplus if Mikumi Secondary School is able to operate its boarding house at 100% capacity and 80% capacity (*show all of your working*). **[2 marks]**

- c. Using information in the case study, explain the importance of economic and ecological sustainability in operations management practices at Mikumi Secondary School. **[4 marks]**
- d. “Jacob is considering a change to the organisational structure.” Recommend an appropriate organisational structure for Mikumi Secondary School. **[10 marks]**

SECTION C

Answer the **compulsory** question from this section.

QUESTION FIVE

Besides using the bank loan to finance an expansion of the residential boarding house, Jacob is considering another option – building a dedicated IT centre for the school.

A portion of the bank loan would be used to enable the school to install a satellite receiver, allowing the school to qualify for the Tanzanian government's Rural Broadband Initiative, which is the government's initiative to provide fast broadband to areas outside the urban copper and fibre networks. It uses long range fixed wireless towers to provide broadband coverage over a relatively fast 4G network to homes, schools and businesses within range. However, the school would face upfront associated costs to implement the technology, as well as ongoing network usage and data costs.

Jacob has carefully analysed the expected costs of each option: **IT centre** versus **accommodation**. There is less certainty around the projected financial benefits as forecasting the additional revenue that could be gained from each option is difficult.

However, his market research has indicated that the following net cash flow figures are the best available estimates. Buildings and equipment would likely be written off after five years.

Year	Net Cash flow Option 1: Accommodation	Net Cash flow Option 2: IT Centre	Discount rate to be used (@6%)
0	(50,000)	(40,000)	-
1	\$14,000	\$10,000	0.9434
2	\$14,000	\$12,000	0.8900
3	\$14,000	\$12,000	0.8396
4	\$14,000	\$12,000	0.7921
5	\$14,000	\$12,000	0.7473

Using the case study and the additional information on pages 3 **and** 5, recommend whether Mikumi Secondary School should implement option 1 or option 2.

You will find it useful to calculate the payback period, average rate of return and the net present value at a discount rate of 6% for each option. **[20 marks]**