S6 BAFS Practice Paper 3 | Partnerships, suspense, working capital, inventory, standard costing and appraisal

Senior Secondary BAFS

S6 BAFS practice paper 3 with worked answers: partnership, goodwill, suspense, accruals, depreciation, receivables, working capital, EOQ, inventory, NPV and profits tax.

1. Partnership accounts (18 marks)

Give amounts in dollars and show working.

#	Question	Answer and marking notes
1	(a) A and B are partners with capital of $200,000 and $120,000, sharing profits 3:2. Annual profit is $150,000. Find each partner share.	A = 150,000 x 3/5 = $90,000; B = 150,000 x 2/5 = $60,000.
2	(b) Existing partners capital totals $300,000. C brings $120,000 cash for a one-quarter share. Find C capital credit and goodwill.	C capital credit = ($300,000 + $120,000) x 1/4 = $105,000; goodwill = $120,000 - $105,000 = $15,000.
3	(c) On dissolution a loss of $60,000 arises from the sale of assets, shared 3:2. Find each partner share of the loss.	A = 60,000 x 3/5 = $36,000; B = 60,000 x 2/5 = $24,000.
4	(d) B lends $80,000 to the partnership at 6% per annum for 9 months. Find the interest payable.	Interest = $80,000 x 6% x 9/12 = $3,600.

2. Trial balance difference, adjustments and depreciation (16 marks)

Use the straight-line method; give amounts in dollars.

#	Question	Answer and marking notes
5	(a) A trial balance shows debits of $486,300 and credits of $485,040. Find the difference and state whether the suspense account carries a debit or credit balance.	Difference = $486,300 - $485,040 = $1,260; debits exceed credits, so the suspense account has a credit balance of $1,260.
6	(b) Insurance of $2,400 was paid, of which $900 relates to next year. Find this year insurance expense and the prepayment.	Prepayment $900; this year expense = $2,400 - $900 = $1,500.
7	(c) A machine costs $480,000 with residual value $30,000 and a 4-year life, straight-line. Find annual depreciation and net book value after 2 years.	Annual depreciation = ($480,000 - $30,000) / 4 = $112,500; NBV after 2 years = $480,000 - 2 x $112,500 = $255,000.
8	(d) Accrued wages of $12,000 are unrecorded at year end. State the effect on profit and liabilities.	Profit is overstated by $12,000 before adjustment (profit falls by $12,000); liabilities are understated by $12,000.

3. Receivables and working capital (16 marks)

Use 365 days a year; ratios to 2 decimal places.

#	Question	Answer and marking notes
9	(a) Annual sales are $1,200,000, 75% on credit, average receivables $180,000. Find receivables turnover and average collection period.	Credit sales = $1,200,000 x 75% = $900,000; turnover = $900,000 / $180,000 = 5 times; collection period = 365 / 5 = 73 days.
10	(b) An invoice of $40,000 carries terms 2/10, n/30 and is paid on day 9. Find the amount paid.	Discount = $40,000 x 2% = $800; amount paid = $40,000 - $800 = $39,200.
11	(c) Receivables are $500,000; the allowance for doubtful debts is 3% and the existing credit balance is $4,000. Find the closing allowance and this year charge.	Closing allowance = $500,000 x 3% = $15,000; charge = $15,000 - $4,000 = $11,000.
12	(d) Current assets are $860,000 and current liabilities $430,000. Find working capital and the current ratio.	Working capital = $860,000 - $430,000 = $430,000; current ratio = $860,000 / $430,000 = 2.00.

4. Inventory management and contribution (18 marks)

Round EOQ to the nearest unit; other answers to 2 decimal places.

#	Question	Answer and marking notes
13	(a) Annual demand is 36,000 units, ordering cost $250 per order and holding cost $5 per unit per year. Find the EOQ.	EOQ = sqrt(2 x 36,000 x 250 / 5) = sqrt(3,600,000) = 1897.37, i.e. about 1897 units.
14	(b) Lead time is 12 days, average daily usage 100 units and safety stock 400 units. Find the reorder point.	Reorder point = 12 x 100 + 400 = 1600 units.
15	(c) Opening stock is 200 units at $20; 300 units are bought at $24. Under weighted average, 350 units are sold. Find unit cost, cost of sales and closing stock value.	Unit cost = (200 x 20 + 300 x 24) / 500 = $22.40; cost of sales = 350 x $22.40 = $7,840.00; closing stock = 150 x $22.40 = $3,360.00.
16	(d) Selling price is $80, unit variable cost $48 and fixed costs $256,000. Find unit contribution, contribution margin ratio and break-even units.	Contribution = $80 - $48 = $32; CM ratio = 32 / 80 = 40%; break-even = $256,000 / 32 = 8,000 units.

5. Standard costing variances (16 marks)

State each variance as favourable (F) or adverse (A).

#	Question	Answer and marking notes
17	(a) Standard material price is $12/kg, actual price $13/kg and actual usage 4,200 kg. Find the material price variance.	($12 - $13) x 4,200 = $-4,200 (adverse).
18	(b) Output is 1,000 units at a standard usage of 4 kg each; actual usage is 4,200 kg at the standard price of $12. Find the material usage variance.	Standard usage = 1,000 x 4 = 4,000 kg; (4,000 - 4,200) x $12 = $-2,400 (adverse).

#	Question	Answer and marking notes
19	(c) Standard wage rate is $18/hour, actual rate $17.5/hour and actual hours 1,900. Find the labour rate variance.	($18 - $17.5) x 1,900 = $950 (favourable).
20	(d) Output is 1,000 units at a standard 2 hours each; actual hours are 1,900 at the standard rate of $18. Find the labour efficiency variance.	Standard hours = 1,000 x 2 = 2,000; (2,000 - 1,900) x $18 = $1,800 (favourable).

6. Investment appraisal and profits tax (16 marks)

Use an annuity factor of 3.1699 (10%, 4 years); amounts to the nearest dollar.

#	Question	Answer and marking notes
21	(a) An investment of $500,000 yields $160,000 net cash flow a year for 4 years at a 10% discount rate. Find the present value and NPV.	PV = $160,000 x 3.1699 = $507,178; NPV = $507,178 - $500,000 = $7,178.
22	(b) Using (a), find the payback period in years to 3 decimal places.	Payback = $500,000 / $160,000 = 3.125 years.
23	(c) Using (a), find the profitability index and state whether the project should be accepted.	PI = $507,178 / $500,000 = 1.014; PI above 1 and positive NPV, so accept the project.
24	(d) A limited company has assessable profits of $1,800,000 at a profits tax rate of 16.5%. Find the tax payable.	Profits tax = $1,800,000 x 16.5% = $297,000.