L-5/T-1/ARCH

Date: 15/12/2012

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

L-5/T-1 B. Arch. Examinations 2010-2011

Sub: HUM 313 (Principle of Accounting)

Full Marks: 140

Time: 3 Hours

The figures in the margin indicate full marks.

USE SEPARATE SCRIPTS FOR EACH SECTION

SECTION - A

There are FOUR questions in this Section. Answer any THREE.

| Tilei | e are FOOK questions in this bection. This were tary 1111-21. | |
|-------------------|---|------------------|
| . (a) What is Mo | netary Unit Assumption? Give an example. | $(3\frac{1}{3})$ |
| (b) Mr. Rahim | started his own consulting firm on May 1, 2010. The following transaction | • |
| | g the moth of May. | (20) |
| May 1: | Mr. Rahim invested Tk. 20,000 cash in the business. | |
| May 2: | Paid Tk. 800 for office rent for the month. | |
| May 3: | Performed Tk. 3,300 of service on account. | |
| May 9: | Purchase office equipment for Tk. 1,000 paying Tk. 400 in cash and balances on account. | |
| May 12: | Received a cash payment of Tk. 2,000 for service provided on account on May 3. | |
| May 15: | Withdrew Tk. 550 cash for personal use. | |
| May 26: | Borrowed Tk. 5,000 from AB bank on a note payable. | • |
| May 29: | Paid for the office equipment of accounts payable purchased on May 9 | |
| May 30: | Paid Tk. 1,000 for utilities. | |
| May 30: | Additional investment made by Mr. Rahim Tk. 10,000. | • |
| Required: | Show the effects of transaction on accounting equation. | |
| . (a) What are th | e advantages of using a journal in the recording process? | (3 1/3) |
| (b) Explain the | justification of preparing a trial balance. | (2) |
| | d, an interior decorator, in his first month of business has the following | |
| transactions. | | (18) |
| January 2: | Invested Tk. 150,000 in business. | |
| January 3: | Purchased car for Tk. 40,000 | |
| January 9: | Purchased supplies on account for Tk. 5,000 | |
| January 11: | Performed services on account for Tk. 18,000 | |
| January 16: | Paid Tk. 2,000 for advertising expense. | |
| January 20: | Received Tk. 7,000 cash from customer on January 11. | |
| January 23: | Paid creditor Tk. 3,000 cash. | |

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Contd ... Q. No. 2(c)

| January 28: | Withdrew Tk. 20,000 cash for personal use. |
|-------------|--|
| January 29: | Paid administrative assistant salary Tk. 2,000 cash. |

Required:

- (i) Journalize each transaction
- (ii) Prepare ledger of "Cash Account".
- 3. (a) Why do accrual basis financial statements provide more useful information than cash basis statements?
 - (b) The trial balance of Danish company at January 31, 2010. is given below:

Danish Company

Trail balance

January 31, 2010

| Accounts Title | Debit (Tk.) | Credit (Tk.) |
|---------------------|-------------|--------------|
| Prepaid Insurance | 6,000 | |
| Supplies | 2,000 | |
| Salaries | 4,400 | |
| Rent Expense | 2,000 | |
| Owners Equity | | 10,400 |
| Service Revenue | | 7,000 |
| Unearned Revenue | | 3,000 |
| Accounts payable | | 3,000 |
| Notes payable | | 1,000 |
| Accounts Receivable | 4,000 | |
| Machinery | 6,000 | |
| Total | 24,400 | 24,400 |

Analysis reveals the following additional data:

Supplies on hand Tk. 300.

Annual depreciation on machinery was 10%

Utility bill was not paid for the month Tk. 2,000

Insurance was expired Tk. 2,500

One third of unearned service revenue was earned during the period.

Required:

- (i) Journalize the adjusting entries
- (ii) Prepare adjusted trial balance for January.

Contd P/3

 $(3\frac{1}{3})$

(20)

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4. The trial balance for Marsha Group are as follows-

 $(17\frac{1}{3})$

Marsha Group
Trial Balance
December 31, 2009

| December 31, 200 | Debit (Tk.) | Credit (Tk.) |
|-----------------------|-------------|--------------|
| | Deon (1k.) | Create (TR.) |
| Accounts Title | | |
| Cash | 30,000 | |
| Accounts Receivable | 20,500 | |
| Accounts Payable | | 11,000 |
| Marsha's Capital | | 50,800 |
| Office Equipment | 25,000 . | |
| Service Revenue | | 30,000 |
| Salaries | 12,000 | |
| Prepaid Rent | 4,000 | |
| Entertainment expense | 1,000 | |
| Audit expense | 3,000 | |
| Supplies | 700 | |
| Notes Payable | | 6,400 |
| Drawings | 2,000 | |
| | 98,200 | 98,200 |

Adjustments-

Supplies on hand at December 31, 2009 Tk. 350.

Salary was unpaid during the period Tk. 2,000.

Required:

- (a) Prepare -
 - (i) An income statement,
 - (ii) An owener's equity statement,
 - (iii) Classified Balance Sheet at December 31, 2009
- (b) Compute
 - (i) Current ratio,
 - (ii) Debt ratio,
 - (iii) Return on equity ratio.

SECTION - B

There are FOUR questions in this Section. Answer any THREE.

5. (a) "A variable cost is a cost that varies per unit of product. Where as a fixed cost is constant per unit of product". Do you agree? Explain with example.

(b) What do you understand by mixed cost and cost formula?

(3 1/3)

Contd P/4

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Contd ... Q. No. 6(b)

- (iii) Refer to the original data, the sales manager is thinking that a 10% reduction in the selling price, combined with an increase of Tk. 60,000 in the monthly advertising budget, will cause unit sales to double. What will be the new income statement look like if these changes are adopted?
- (iv) Refer to the original data, the marketing department thinks that a new attractive package would increase packaging costs by Tk. 0.75 per unit. Assuming no other changes, how many units would have to be sold to earn a target profit of Tk. 9500?
- 7. (a) What is degree of operating leverage? The degree of operating leverage for 'X' company is 5 times where as it is 7 times for 'Z' company. What does it imply?

 (b) What do you understand by cost structure? Company A's cost structure in the
 - (b) What do you understand by cost structure? Company A's cost structure includes costs that are mostly variable, where as company B's cost structure includes costs that are mostly fixed. Which company will tend to realize the most rapid increase in profits in the condition of increasing sales and decreasing sales. Explain with hypothetical example.

 (8 1/3)
 - (c) Listed below are a number of costs typically found in organizations. (10)
 - (i) Hamburger buns in Wendy's outlet;
 - (ii) Advertising by a dental office;
 - (iii) Apples processed and canned by Del Monte;
 - (iv) Boxes used for packing detergent produced by the company;
 - (v) Wages of workers assembling computers;
 - (vi) Microchips used in producing calculators;
 - (vii) Shipping cost s in merchandise sold;
 - (viii) Thread in a garment factory;
 - (ix) Billing costs;
 - (x) Advertising costs.

Required:

Indicate whether each cost would typically be treated as direct cost or an indirect cost with respect to units of product.

8. (a) Name the three types of inventories that appear on a manufacturer's balance sheet.

Define each of them with an example.

(13)

(5)

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(b) Various cost data and sales data for Stratford company for the just ended year are as

follows: $(18\frac{1}{3})$

| Selling expenses110,00Rent for show room30,00Beginning raw materials90,00Ending raw materials60,00 | |
|--|----|
| Beginning raw materials 90,00 | 00 |
| Degining tev materials | |
| | 00 |
| | 00 |
| Plant utilities 36,00 | 00 |
| Direct labour 300,00 | 00 |
| Depreciation, plant equipment . 162,00 | 00 |
| Purchase of raw materials 750,00 | 00 |
| Sales 30,00,00 | 00 |
| Insurance for factory 40,00 | 00 |
| Indirect labour 150,00 | 00 |
| Maintenance for plant equipment 87,00 | 00 |
| Legal fees 50,00 | 00 |
| Directors fees 130,00 | 00 |
| General expenses 40,00 | 00 |
| Advertisement expenses 45,00 | 00 |
| Sales managers salary 20,00 | 00 |
| Beginning work-in-process 180,00 | 00 |
| Ending work-in process 100,0 | 00 |
| Beginning finished goods 260,0 | |
| Ending finished goods 210,0 | 00 |
| Cleaning supplies, factory 7,0 | |
| Rent ($\frac{2}{3}$ for factory, $\frac{1}{3}$ for office) 120,0 | 00 |
| Gas and Water, factory 2,5 | 00 |
| Carriage outwards 6,0 | 00 |
| Carriage inwards 7,0 | 00 |

Required:

- (i) Prepare a cost of goods sold statement
- (ii) Prepare an income statement.

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L-5/T-1/ARCH

Date: 17/11/2012

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

L-5/T-1 B. Arch. Examinations 2010-2011

Sub: ARCH 561 (Specification)

Full Marks: 140

Time: 3 Hours

The figures in the margin indicate full marks.

USE SEPARATE SCRIPTS FOR EACH SECTION

SECTION - A

There are FOUR questions in this section. Answer Q. No. 1 and any TWO from the rest.

- 1. What are the main purposes of specifications for a building construction project? Who is responsible for preparation of specification and how they are used in different phases of a (20)project? Discuss the importance of specification. 2. (a) Mention different schedules need to be included in a set of drawings. Briefly discuss (10)about the Finish schedule. (15)(b) What are the general rules for arrangement of drawings and specification? 3. (a) What is meant by specification paragraph? Discuss general and specific paragraph (10)mentioning related items of work. (15)(b) Discuss specification language under the following headings: (i) Sentences (ii) Pharaseology (iii) Capitalization (iv) Tense
- 4. Write short notes on the following (ANY Two):

(v) Abbreviations

 $(12\frac{1}{2}\times2)$

- (a) Supplemental documents
- (b) Instruction to bidders
- (c) Types of Contracts

Contd P/2

<u>ARCH 561</u>

SECTION - B

There are FOUR questions in this section. Answer Q. No. 5 and any TWO from the rest.

| 5. | Write detail specifications for the following items (any four): | (20) |
|----|---|------|
| | (a) Reinforcing steel | |
| | (b) Timber for door and window | |
| | (c) Cement | |
| | (d) Course and fine aggregates | |
| | (e) Aluminium for door and window | |
| | | |
| 6. | Explain the followings in relation to the general conditions of contract between a client | |
| | and a contractor (any five): | (25) |
| | (a) Inspection of work | |
| | (b) Claims for extra costs | |
| | (c) Delays and extension of time | |
| | (d) Correction of work before final payment | |
| | (e)Architects status | |
| | (f) Subcontracts | |
| | | |
| 7. | Discuss detail specification of Brickwork in superstructure on scope, materials, methods | |
| | of construction and precautions. | (25) |
| | | |
| 8. | Write short notes on the following schedule of items (any two): | (25) |
| | (a) Brick soling and mass concrete in foundation | • |
| | (b) Facing Brickwork in walls, floors and pavements | |
| | (c) Distempering and plastic paint | |
| | | |
| | | |
| | | |



(25)

L-5/T-1/ARCH

Date: 29/12/2012

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA L-5/T-1 B. Arch. Examinations 2010-2011

Sub: ARCH 597 (Educational Facilities Planning and Design)

Full Marks: 140

Time: 3 Hours

The figures in the margin indicate full marks.

USE SEPARATE SCRIPTS FOR EACH SECTION

SECTION - A

- There are FOUR questions in this section. Answer Q. No. 1 and any TWO from the rest. (20)1. Discuss the organizations of Professional education in Bangladesh. 2. What was the difference of educational systems between Athens and Sparta? Discuss (5+20)Plato's theory of Education. 3. Briefly describe the development of education during the 17th and 18th centuries in (25) Europe and western countries. 4. (a) What are the different types of dimension used in school building design? (15) $(5\times2=10)$ (b) Write short notes on: (i) Problems of education in Bangladesh. (ii) Community Schooling SECTION - B There are **FOUR** questions in this Section. Answer Q. No. 5 and any **TWO** from the rest. 5. Discuss the Factors to be considered and interpreted for developing and set of design (20)criteria for the rural and urban schools in Bangladesh. (25)6. Describe the different elements that make the spaces of school buildings flexible. 7. What factors to be considered for designing a general class room and a special class room for 48 places? Draw the plan and section of the general class room and special class room
- 8. (a) Discuss the design principles of Economy for the secondary schools. (25)
 - (b) Write short notes on:

showing all the dimensions.

- (i) School layout and planning
- (ii) Elements of economy.