

BCA, 2nd Semester

Subject: CAEN 153: English II

Time: 3hrs.

F.M.: 60

P.M.: 24

Candidates are required to answer the questions in their own words as far as possible. Figure in the margin indicates full marks.

Group B:

Attempt any SIX questions:

[6X5=30]

11. How do flaws appear in reasoning? Do they deceive the readers? How?
12. Lists are used in letters, e-mail, fax messages and memos. What are the major objectives and advantages of using lists and bullets? Explain
13. What are the components of arguments? Explain with appropriate examples.
14. What is the central idea of the story "The Burning Chrome"?
15. Can human be replaced by machine according to Brian Aldiss in his story "Who Can Replace a Man"?
16. Identify the flaws in following pieces of reasoning.

A fantastic basketball team could be created if the best player from each of the best teams formed a new club. Basketball would then become an exciting game for fans everywhere.

17. For each of the following, write a conclusion you can draw from the statements:
 - a. There is a 'flu epidemic sweeping through the school. Gita, one of the pupils, has a very high temperature and aching muscles, both of which are symptoms of 'flu.
 - b. The winter has been very severe. When we have a severe winter, the daffodils usually come into flower late.
 - c. Jane arrived before Jim, although they set off at the same time, and they were both travelling by car.

Group C:

Attempt any TWO questions:

[2X10=20]

18. What is oral communication? How does technology help in making oral communication effective? Write your answer with different kinds of oral communication modules.
19. Write an essay on a tourist destination that you think is specially beautiful, historic or significant. In the essay, specifically mention the location, ways to reach there, and unique experience tourists likely to experience upon the visit.
20. The story "The Metal Man" shows technology does not only reduce human efforts, but also can be dangerous to human existence too. Explain your answer with reference to the text

B.E. A, 2nd semester

Subject: C.A.C. 152: Financial Accounting

Time: 3hrs

F.M.: 60

P.M.: 24

Candidates are required to answer the questions in their own words as far as possible. Figure in the margin indicates full marks.

Group B:

Attempt any SIX questions:

[6X5=30]

11. The following transactions of Kavya Traders are given below-

- July 1 Purchase goods from Khimal Stores, Patna
50 pcs Water bottle @ Rs. 100 each
60 pcs Thermos @ Rs. 800 each
- July 5 Purchase goods from Varun Stores, Bhaktapur
200 pcs water bottle @ Rs. 200 each
100 pcs Thermos @ Rs. 500 each Trade discount @ 5%
- July 10 Purchase goods from Surya Stores, Banepa
150 pcs Thermos @ Rs. 550 each
100 pcs Water bottle @ Rs. 250 each
Trade discount @ 10%
- July 15 Purchase 2 pcs laptop from Computer Bazar, Kathmandu @ Rs. 75,000 each

Required: Purchase Book and Purchase Account

12. Define Generally Accepted Accounting Principles (GAAP). Briefly explain any three principles.
13. On April 1, 2022 Balaju Company Purchase equipment for 4 years at cost price Rs. 250,000 and also incurred carriage inwards Rs. 20,000 and installation cost Rs. 30,000. On July 1, 2023 the company purchase another equipment at a price of Rs. 100,000. On 30 September 2024 the company sold the equipment at Rs. 200,000 which was purchase on April 1, 2022.

Balaju company closed the account every end of December. The company follow Diminishing Balance method of depreciation at 20% per annum.

Required: Equipment Account for first 3 years.

14. Who are the users of accounting information. Why do they need accounting information?
15. Pokhara Ltd received its bank statement for the month of April, which showed a credit balance of Rs. 25,000. The following reconciling items were identified:
- a. Cheque issued Rs. 12,000 during the month of April but not cashed
 - b. The bank statement included Rs. 2500 for bank service charges for the month.
 - c. Interest on investment Rs. 7,000 directly collected by bank.
 - d. Two cheques of Rs. 5,000 and Rs. 10,000 were sent for collection into bank in the month of April but not credited by the bank in the month of April.
 - e. The bank statement rejects a deposit of Rs. 13,000 due to not sufficient funds and charges the company a Rs. 100 fees associated with the rejection.
 - f. A check issued to suppliers in the amount of Rs. 5500 was recorded by the company erroneously as a check for Rs. 5,000.

Required: Bank reconciliation statement for KTM Ltd as at 30 April

16. Butwal Traders provide the following trading information.

Date	Particular
June 1	Beginning inventory 2,500 units at Rs. 5 per unit
June 5	✓ Purchases 2,000 units at Rs. 6 per unit
June 8	Sales 1,800 units at Rs. 20 per unit
June 15	✓ Purchases 3,000 units at Rs. 8 per unit 24000
June 20	Sales 2,800 units at Rs. 20 per unit
June 25	✓ Purchases 2,500 units at Rs. 10 per unit
June 30	Sales 2,200 units at Rs. 25 per unit

The company follow the perpetual system of recording inventory.

Required: Cost of Goods Sold and value of ending inventory using FIFO methods.

17. The following transaction of Zenith Traders are given below:

- June 1 Balance in hand Rs. 25,000 and Bank balance Rs. 50,000
- June 2 Deposited in to bank Rs. 10,000
- June 6 Received two cheque from Ram each of Rs. 50,000.
- June 9 Received cash from Mr. Krishna for good sold in May Rs. 19,000 in full settlement of Rs. 6,000
- June 10 Purchase equipment on credit from Gopal Traders Rs. 35,000
- June 15 One cheque received from Ram on June 8, endorsed to Hari in full settlement of Rs. 51,000
- June 20 Drew from the bank for personal expenses Rs. 5,000 and for office use Rs. 20,000
- June 27 Issue cheque Rs. 34,000 in full settlement for the payment of equipment purchased.

Required: Triple column cash book

Group C:

Attempt any TWO questions:

[2X10=20]

18. JOJO Company was organized on June 1, 2024, for trading businesses. The following transactions occurred during the first month of business.

- June 2: Received contributions of Rs. 500,000 from each of the two owners of the business in exchange for share of stock.
- June 5: Purchase goods Rs. 200,000 and partial payment made Rs. 70,000.
- June 7: Purchased Officer equipment for Rs. 300,000. The agreement with the vendor requires a down payment of Rs. 100,000 and rest on account.
- June 10: Paid rent for the month Rs. 40,000 still payable Rs. 10,000.
- June 16: Sold goods Rs. 250,000 (Costing Rs. 220,000) and received cash partially Rs. 150,000.
- June 14: Paid salaries to the staff for the month Rs. 40,000 including Rs. 10,000 for next month.
- June 28: Received gas, electric, and water bills. The total amount is Rs. 10,000.
- June 29: Received Cash from customer in full settlement after providing 10% discount.

Required: Journal entries, T account and Trial balance.

19. Explain the qualitative characteristic of accounting information.

20. The Trial Balance of Jumbo Company as on December 31, 2024 is given below:

Particulars	Debit (Rs.)	Particulars	Credit (Rs.)
Beginning inventory	1,20,000	Sales	13,70,000
Purchase	8,45,000	Account payable	80,000
Carriage inward	25,000	Retained earnings	60,000
Rent expenses	40,000	Capital stock	7,00,000
Account receivable	1,05,000	Notes payable	1,00,000
Land and building	5,00,000	Commission received	60,000
Plant and machinery	3,50,000	10% debentures	40,000
Cash	50,000		
Wages expenses	20,000		
Bad debt expenses	20,000		
5% Investment	60,000		
Prepaid advertisement	40,000		
Salary expenses	1,95,000		
Commission expenses	25,000		
Dividend paid	15,000		
	24,10,000		24,10,000

Additional information:

- i. Ending inventory Rs. 150,000.
- ii. Salary due Rs. 20,000
- iii. Depreciation on land and building Rs. 25,000 and plant and machinery Rs. 35,000.
- iv. Prepaid advertisement Rs 35,000 was expired

Required:

- a. Trading and Profit and loss account
- b. Balance sheet



INTERNATIONAL COLLEGE OF
ENGINEERING & MANAGEMENT

Pre-Board Examination - 2024 (2081)

SET A

9761791235
for S i e Resuability
false; code

BCA, 2nd Semester

Subject: CACS 151: C Programming

Time: 3hrs.

F.M.: 60

P.M.: 24

Candidates are required to answer the questions in their own words as far as possible. Figure in the margin indicates full marks.

Group B:

Attempt any SIX questions:

[6X5=30]

11. What is computer programming? Differentiate between top-down and bottom-up approaches of programming.
12. Define operator. Explain any four types of operators available in C.
13. Differentiate between iteration and recursion. Write a program to find biggest number among three numbers.
14. Differentiate between while loop and do while loop. Write a C program to find input number is prime or composite.
15. Why function is required in C programming? Write a program to find smallest number from the array using function.
16. What is difference between binary file and text file? Write a C program to write some text "Welcome to BCA program" in a file test.txt.
17. Explain the term "calling function by reference and by value".

Group C:

Attempt any TWO questions:

[2X10=20]

18. Define SDLC. Explain in details.
19. What is one dimensional array? How it is initialized? Write a C program to find the sum of two matrix.
20. What is the use of data file in C? write a C program to accept 100 numbers from user and store them in odd.txt file then display odd numbers reading from odd.txt file.

BCA, 2nd Semester

Subject: CAMT 152: Mathematics II

F.M.:

Time: 3hrs.

P.M.:

*Candidates are required to answer the questions in their own words as far as possible. Figure in the margin indicates full marks.***Group B:**

Attempt any SIX questions:

[6X5=30]

11. Find the derivatives of the functions (a) $e^{\sin x}$ (b) $(\sin x)^x$
12. Find the area of the region between the curves $y^2 = 4ax$ and $x^2 = 4ay$
13. Find the absolute maximum and absolute minimum values of $g(t) = 8t^2 - t^4$ on $[-2, 1]$
14. Using L' Hospital rule, evaluate $\lim_{x \rightarrow 0} \frac{e^x - \sin^{-1} x}{x^2}$
15. Verify Mean Value Theorem for the function $f(x) = x^3 + x^2 - 6x$ in $[-1, 4]$
16. Maximize and minimize the $F(x, y) = 10x + 12y$ for the feasible region defined by $4x + 3y \leq 24$, $x + 2y \geq 4$, $x \geq 0$, $y \geq 0$
17. Solve the following differential equations (i) $\frac{dy}{dx} + 1 = e^{x+y}$ (ii) $xdy - ydx = 0$

Group C:

Attempt any TWO questions:

[2X10=20]

18. (i) Find the volume of solid obtained by rotating about the x-axis the region bounded by the curve $y = \sqrt{x}$, $x = 0$, $x = 1$
(ii) Find the length of the graph of $f(x) = \frac{x^3}{12} + \frac{1}{x}$, $1 \leq x \leq 4$
19. Find $\frac{dy}{dx}$ of following function
(i) $x = t - 2t^2$ and $y = 2t - t^2$ (ii) $y = \log(x + \sqrt{x^2 + a^2})$ (iii) $y = x^x$
20. Solve the following equation by Gauss elimination methods
 $2x + 3y + 4z = 20$
 $3x + 4y + 5z = 26$
 $3x + 5y + 6z = 31$



INTERNATIONAL COLLEGE OF
ENGINEERING & MANAGEMENT

Pre-Board Examination – 2024 (2081)

BCA, 2nd Semester

Subject: CAAC 155: Microprocessor & Computer Architecture

Time: 3hrs.

Candidates are required to answer the questions in their own words as far as possible. Figure in the margin indicates marks.

Group B:

Attempt any SIX questions:

11. Explain the addressing modes of 8085 with suitable example. (5)
12. Define instruction cycle. Explain the opcode fetch machine cycle of MOV A, B with timing diagram. (5)
13. Define stack. Explain the stack organization. (1+4)
14. What is cache memory. Explain the elements of cache design. (5)
15. Explain the organization of microprogrammed control unit. (5)
16. What is pipeline? Explain four segments instruction pipeline. (5)
17. Write short notes on. (Any TWO): (2.5+2.5=5)
 - a. Accumulator
 - b. 8085 Interrupts
 - c. Structure of hard disk

Group C:

Attempt any TWO questions

18. Explain the internal architecture of 8085 Microprocessor.
19. For the expression
$$Y = (A + B) * (C + D)$$

Write down the code for one address, two address and three address instruction format.
20. Explain the organization of microprogram sequencer for control memory with suitable diagram.