

PURBANCHAL UNIVERSITY

2016

4 Years Bachelor of Computer Application (BCA)/Second Semester/Final
Time: 03:00 hrs.

Full Marks: 60/Pass Marks: 24

BCA176CO: Object Oriented Programming in C++

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions.

2×12=24

1. What is Object Oriented Programming? Explain main features of OOP? What are its advantage over structured programming. 1+5+6
2. Explain briefly about advantage of using templates? What is class template and function template, explain with syntax. 4+8
3. Write a program to store information of students which has features like studentID, name, roll number, address of n number of student in file. Display information about all the students stored in file in appropriate format in console. 6

Group B

Answer SIX questions.

6×6=36

4. Explain briefly about friend functions and friend class in C++ using appropriate example.
5. "Parameterized constructor of base class can be called by an object of derived class." Explain the statement with example.
6. Write a program to create a base class named "circle". Derive another class "cylinder" from it. The program should calculate total surface area of circle and cylinder using the concept of inheritance. Circle should have data fields- radius, area and a method getRadius() should take value of radius from user. Cylinder should have additional data field-height and an additional method getHeight() to assign value of height. Area() function calculates area and Display() function prints the final

Contd. ...

Scanned by CamScanner

(2)

Group B

Answer SIX questions.

6×6=36

- ✓ 4. Prove that full adder can be implemented using two half adder.
5. What are the applications of master slave flip flops? Explain with reference to JK flip flop.
- ✓ 6. What are the functions of decoder? Design a 3x8 decoder.
- ✓ 7. Simplify the Boolean Function using K-map
 $F(w, x, y, z) = \prod (1, 2, 3, 7, 8, 9, 10, 12, 14) + d(0, 11)$
- ✓ 8. Design 4:1 multiplexer.
- ✓ 9. What are the types of shift register? Draw the logic diagram of 4-bit PISO shift register with timing diagram.
10. Write short notes on (any TWO): **2×3=6**
 - (a) ASCII code
 - ✓ (b) EPROM
 - (c) Tri-state logic



PURBANCHAL UNIVERSITY

2017

4 Years Bachelor of Computer Application (BCA)/Second Semester/Final

Time: 03:00 hrs.

Full Marks: 80/Pass Marks: 32

BCA102SH: Mathematics-II

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group A

Answer TWO questions.

2×12=24

1(a) Find the volume of parallelepiped whose concurrent edges are represented by the vector $\vec{i} + 2\vec{j} + 3\vec{k}$, $3\vec{i} + 4\vec{j} - 5\vec{k}$ and $\vec{i} - 2\vec{j} + 3\vec{k}$.

(b) If $\phi = \log(x^2 + y^2 + z^2)$, find $\text{div}(\text{grad}\phi)$ and $\text{curl}(\text{grad}\phi)$.

2(a) What is exact differential equation? Solve the differential equation $\frac{d^2y}{dx^2} - 3\frac{dy}{dx} + 2y = e^x$.

(b) Solve the differential equation $x^2(1+y)\frac{dy}{dx} + (1-x)y^2 = 0$.

3(a) Obtain an equation of ellipse.

(b) Determine the vertices, foci, latus rectum directories of an ellipse.

$$9x^2 + 5y^2 - 30y = 0$$

Group B

Answer EIGHT questions.

8×7=56

4. Show that:
$$\begin{vmatrix} x & y & z \\ x^2 & y^2 & z^2 \\ yz & zx & xy \end{vmatrix} = (y-z)(z-x)(x-y)(yz + zx + xy)$$

Contd. ...

(2)

5. If $A = \begin{pmatrix} 1 & 2 & 3 \\ 0 & 1 & 4 \\ 2 & 3 & 0 \end{pmatrix}$ and $B = \begin{pmatrix} -1 & 2 & 1 \\ 3 & 0 & -1 \\ 2 & 1 & 0 \end{pmatrix}$

then determine $(AB)'$ and $B'A'$.

6. Solve the system:

$$2x - 3y - z = 4$$

$$x - 2y - z = 1$$

$$x - y + 2z = 9$$

by using Cramer's rule.

7. Find the inverse of the matrix

$$\begin{pmatrix} 1 & 2 & -2 \\ -1 & 3 & 0 \\ 0 & -2 & 1 \end{pmatrix}$$

8. Solve the differential equation: $\frac{dy}{dx} = \frac{2xy}{x^2 - y^2}$.

9. Find the unit vector normal to the surface $x^2y + 2xz = 4$ at the point $(2, -2, 3)$.

10. If \vec{a} is a constant vector, prove that $\nabla \times (\vec{a} \times \vec{r}) = 2\vec{a}$.

11. Transform the equation $(x+2)^2 + (y-3)^2 + (z-5)^2 = 25$ into cylindrical and spherical coordinates system.

12. What is parabola? Find the equation of the parabola with vertex at $V(-2, -2)$ and directrix $y = -3$.

Years
ime:
ICAI
Janu

PURBANCHAL UNIVERSITY

2018

4 Years Bachelor of Computer Application (BCA)/Second Semester/Final

Time: 03:00 hrs.

Full Marks: 80/Pass Marks: 32

BCA102SH: Mathematics-II

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group A

Answer TWO questions.

2×12=24

- 1(a) Define circle. Obtain an equation of circle.
- (b) Find the centre, vertices, foci and equation of the directrices of the ellipse $x^2 + 5y^2 + 4x = 1$.
- 2(a) In any triangle, prove by vector method $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$.
- (b) If $\vec{A} = 5t^2\vec{i} + t\vec{j} - t^3\vec{k}$ and $\vec{B} = \sin t\vec{i} - \cos t\vec{j}$, find
- (i) $\frac{d}{dt}(\vec{A} \cdot \vec{B})$. (ii) $\frac{d}{dt}(\vec{A} \times \vec{B})$.
- 3(a) Solve the differential equation $x(x - y)dy = y(x + y)dx$.
- (b) Solve the second order differential equation: $\frac{d^2y}{dx^2} - 2\frac{dy}{dx} + 4y = 0$.

Group B

Answer EIGHT questions.

8×7=56

4. Solve the differential equation: $x\frac{dy}{dx} + 2y = x^2 \log x$.
5. Solve the second order differential equation:
- $$\frac{d^2y}{dx^2} - \frac{dy}{dx} - 2y = \sin 2x + e^x.$$
6. Find the center, foci, vertices, equation of directrices and asymptotes of the hyperbola $x^2 - y^2 - 2x + 4y = 4$.

Contd. ...

(2)

7/ If $A = \begin{pmatrix} 1 & 0 & 1 \\ -1 & 2 & 3 \\ 5 & -6 & 7 \end{pmatrix}$, then find the value of $A^3 - 5A + 2I$.

8, Evaluate: $\begin{vmatrix} a & b & c \\ a^2 & b^2 & c^2 \\ a^3 & b^3 & c^3 \end{vmatrix}$.

9/ Test the consistency for the following system of linear equations and if possible solve the system by Cramer's rule.

$$x - y + z = 3$$

$$2x + y - z = 2$$

$$x + 2y - 2z = -1$$

10/ Show that the vectors $5\vec{a} + 6\vec{b} + 7\vec{c}$, $7\vec{a} - 8\vec{b} + 9\vec{c}$ and $3\vec{a} + 20\vec{b} + 5\vec{c}$ are coplanar.

11/ If $A = x^2y\vec{i} - 2xz\vec{j} + 2yz\vec{k}$, find $\nabla \times (\nabla \times \vec{A})$.

12. Find the unit vector perpendicular to each of the vectors $\vec{i} + 3\vec{j} + 2\vec{k}$ and $2\vec{i} - 4\vec{j} + \vec{k}$. Also find the Sine of the angle between them.

13/ Prove that: $[\vec{a} \times \vec{b}, \vec{b} \times \vec{c}, \vec{c} \times \vec{a}] = [\vec{a} \vec{b} \vec{c}]^2$.

≡

PURBANCHAL UNIVERSITY

2017

4 Years Bachelor of Computer Application (BCA)/Second Semester/Final

Time: 03:00 hrs.

Full Marks: 60/Pass Marks: 24

BCA172CO: Microprocessor & Assembly Language

Candidates are required to give their answers in their own words as far as possible.

Figures in the margin indicate full marks.

Group A

Answer TWO questions.

2×12=24

1. / Draw an internal Architecture of 8086 Microprocessor and explain each block. 6+6
- 2(a) Discuss various modes of operation of 8255 Programmable Peripheral Interface. 6
- (b) What is an interrupt service routine? Explain the types of interrupts available in 8085 and 8086 Microprocessor. 2+4
- 3(a) / Depict how physical address is generated in 8086 microprocessor. 3
- (b) / What is Address Decoding? Interface 8K13 of RAM and 4 KB of ROM with 8085 microprocessor showing the range of starting and ending address of both RAM and ROM. 1+8

Group B

Answer SIX questions.

6×6=36

4. / What is DMA? Explain basic DMA operation.
5. / With example list out the various addressing modes available in 8085 processor.
6. What are the instruction associated with multiplication and Division in 8086 processor. Write 8085 instructions to perform the multiplication 08H X 06H.

Contd. ...

(2)

- 7/ Discuss briefly about parallel communication.
8. Draw the timing diagram for an instruction MOV A, M.
- 9/ Write a program in 8086 to transfer block of 20 bytes of data from one memory location to another.
10. Compare different intel Processors in terms of buswidth, operating frequency, Architecture and other features.

=

PURBANCHAL UNIVERSITY

2019

4 Years Bachelor of Computer Application (BCA)/Second Semester/Final

Time: 03:00 hrs.

Full Marks: 60/Pass Marks: 24

BCA172CO: Microprocessor & Assembly Language

Candidates are required to give their answers in their own words as far as possible.

Figures in the margin indicate full marks.

Group A

2×12=24

Answer TWO questions.

- 1/ Draw the internal architecture of 8085 microprocessor and explain briefly the various functional blocks.
- 2/ Draw the block diagram of 8255 programmable peripheral interface. Explain briefly the function of each block.
3. Explain the block diagram of microcomputer system. Write applications of microprocessor.

Group B

6×6=36

Answer SIX questions.

- 4/ Explain the operation of DMA.
- 5/ What do you mean by addressing mode? Discuss different types of addressing modes of 8085 microprocessor with example.
- 6/ Differentiate between synchronous and asynchronous mode of serial data transmission.
7. Draw and explain the timing diagram for a instruction OUT 02H.
8. Write a program to find the largest number from a series of numbers. The hexadecimal numbers of a series are 22, 52, 9B, 3C, 4D, A2, F6, DA, 65, 9A, FC. The count is stored in memory location C500H. The numbers are stored in the memory location C501H to C50AH. Store the result in memory location C020H.
- 9/ What do you understand by address decoding in the case of memory interface? Explain address decoding using Simple NAND Gate Decoder.
- 10/ Write short notes on any TWO: 2×3=6
(a) Assembler (b) Parallel communication (c) Pending interrupt.

==

PURBANCHAL UNIVERSITY

2018

4 Years Bachelor of Computer Application (BCA)/Second Semester/Final
Time: 03:00 hrs.

Full Marks: 60/Pass Marks: 24

BCA172CO: Microprocessor & Assembly Language

Candidates are required to give their answers in their own words as far as possible.

Figures in the margin indicate full marks.

Group A

Answer TWO questions.

- 1/ Draw and explain the block diagram of 8085 microprocessor. 2×12=24
2. Draw the block diagram and explain various modes of operations of 8255 PPI. 12
3(a) What is DMA? Draw a block diagram to show its relation with MP and I/O devices. 12
(b) Explain in short about DMA operations. 2+4
6

Group B

Answer SIX questions.

- 4/ Differentiate between microprocessor and microcomputer system. 6×6=36
5/ Explain different types of interrupt in 8085 MP.
6/ Explain about serial data transfer.
7/ What is flag register? Explain each flag bit of 8085 microprocessor.
8/ Explain various addressing mode in 8085 MP.
9/ What are various types of instructions in 8085 MP about data transfer group.
10. Write a program to add six data bytes starting from location FC00 to FC05 and store the result at location FC06.
11. Write short notes on any TWO: 2×3=6
(a) Dynamic RAM (b) Square of a number
(c) Pentium computers

PURBANCHAL UNIVERSITY

2017

4 Years Bachelor of Computer Application (BCA)/Second Semester/Final

Time: 03:00 hrs.

Full Marks: 60/Pass Marks: 24

BCA191MS: Financial Accounting

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions.

2×12=24

1. Consider the following information.

Liabilities	2070	2069	Assets	2070	2069
Account payable	130000	148000	cash & bank balance	52000	40000
Outstanding expenses	68000	63000	Account receivable	180000	130000
Sundry creditors	90000	110000	Inventories	230000	200000
Longterm Bank loan	350000	300000	Prepaid exp.	15000	25000
Equity share capital	550000	400000	Land	750000	500000
Retained Earnings	489000	324000	Plant & equipment	450000	450000

Additional Information:

- (a) Sales revenue Rs 12,50,000.
- (b) Cost of sales for the year Rs 7,00,000.
- (c) Operating exp. including depreciation Rs 50,000 but excluding interest Rs 25,000 was Rs 1,75,000.
- (d) Tax and dividend paid during the year respectively Rs 150,000 and Rs 60,000 respectively
- (e) During the year company purchased the plant worth Rs 50,000.

Required: Cash flow statement under direct method.

2. Define the term 'Accounting'. Explain the objectives & scope of financial accounting:

Contd. ...

(2)

3. The following is the trial balance of a trader as on 31-12-2016.

Debit	Rs.	Credit	Rs..
Beginning stock	1,50,000	Sales	7,00,000
Purchase	3,00,000	10% Loan	70,000
Debtors	1,50,000	Capital	4,00,000
Interest	6,000	Creditors	57,000
Carriage inward	15,000	Bills payable	10,000
Machinery	3,50,000	Commission	6,000
Rent	20,000		
Audit fees	2,000		
Cash at bank	1,03,000		
Goodwill	15,000		
Drawing	50,000		
Furniture	50,000		
Bad debt	2,000		
Wages	10,000		
Salaries	20,000		
Total	12,43,000		12,43,000

Additional Information:

- (a) Depreciation: machinery 10%, furniture Rs. 5,000
- (b) Provision for bad debt created 5%
- (c) Bad debt written off Rs. 20,000
- (d) Advance commission received Rs. 1,000
- (e) Outstanding expenses: Salary Rs. 5,000 and wages Rs. 3000
- (f) Closing stock Rs. 1,00,000

Required:

- (i) Trading Account
- (ii) Profit and loss Account
- (iii) Balance sheet as on 31st December 2016

Group B

Answer SIX questions.

6×6=36

4. The following cash and Banking transaction of ABC company are given;

Contd. ...

(3)

- 1st Nov 2015: Balance of Cash and Bank Rs.55, 000/- and 35,000/- respectively.
- 5th Nov. 2015: Bought office equipment and paid by cheque Rs. 15,000/-
- 10th Nov. 2015: Goods purchase on cash Rs. 10,000/-
- 15th Nov. 2015: Sales made to Puja Rs. 25,000/- on cash.
- 20th Nov. 2015: Cash deposited in to bank Rs 20,000/-
- 25th Nov 2015: Sales of goods to Dipesh amounting Rs. 15,000/- payment received by cheque Rs. 10,000/- only.
- 30th Nov 2015: Cash withdraw Rs. 15,000/- for office use.

Required: Cash Book, with cash and Bank column.

5. Following are the information relating to a firm:

Annual Requirement 60,000 units Ordering cost per order Rs.300

Cost per unit Rs.20 Carrying cost per unit 20% of inventory

Required: (i) EOQ ^{√2AO} (ii) No of Order ^{2AOC} (iii) Total cost of EOQ ^{2AOC}

6. Harshika and ~~father's~~ ^{2AO} Private Ltd. Purchased machinery for Rs.10,00,000/- on ft January, 2004. Additional machinery was purchased for Rs.600,000/- on 1st October 2004. On 30th June 2006 a machinery purchase on 1st January, 2004 was sold for Rs.6,82,500/- and same date another machinery purchase @ Rs. 5,00,000. The company written off depreciation @ 10% on Straight Line Method.

Required: Machinery A/C from 2004 to 2006.

7. Define Trial Balance. Explain it's objectives.

8. Following are the balance sheet of Sujit and Bros Ltd. As on 31st chaitra 2070.

Liabilities	Rs.	Assets	Rs.
Share capital	12,00,000	Plant & Machinery	10,00,000
10% Mortgage loan	8,00,000	Furniture	6,00,000
Capital reserves	2,00,000	Current assets	7,50,000
Current liabilities	3,00,000	Preliminary expenses	1,50,000
Total	25,00,000	Total	25,00,000

Contd. ...

(4)

Additional Information:

- (a) Capital employed turnover ratio for the year was 3 times
- (b) Gross profit margin was 20% of sales.
- (c) Net profit margin 10%.

Required :

- (a) Amount of sales
- (b) Amount of gross profit
- (c) Net profit
- (d) Fixed assets turnover ratio
- (e) Debt equity ratio

9. Write in short about VED analysis and ABC analysis

OR

From the following information calculate possible material variances:

Material	standard		Actual	
	Quantity	Unit Price Rs.	Quantity	Unit Price Rs.
A	10	2	5	3
B	20	3	10	6
C	20	6	15	6

10. A firm furnishes the following stores transaction for the month of January.

- January 1 Opening balance 550 units @ Rs. 5 per unit
- January 3 Receipts from vendor 1000 units @ 6 per unit
- January 5 Issued 750 units
- January 8 Purchased 1100 units @ Rs. 7 per unit
- January 10 Returned to vendor 50 units (purchased on 8th January)
- January 12 Issued 1,000 units
- January 15 Issued 200 units
- January 28 Shortage in stock takings 50 units

Required: Store ledger under LIFO method.

11. Write short note on any TWO.

- (a) Labour Variance
- (b) Payroll
- (c) Standard cost card
- (d) Capital and revenue

PURBANCHAL UNIVERSITY

2021

4 Years Bachelor of Computer Application (BCA)/Second Semester/Final

Time: 03:00 hrs.

Full Marks: 80/Pass Marks: 32

BCA102SH: Mathematics-II

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Group A

Answer TWO questions.

2×12=24

1(a) Define conic section. Find the equation of Hyperbola

$$\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1.$$

(b) Find the divergence and curl of \vec{F} , where $\vec{F} = \text{grad}(x^3 + y^3 + z^3 - 3xyz)$.

2(a) Transform the equation $x^2 + y^2 + (z-1/2)^2 = 1/4$ into spherical coordinate.

(b) $\vec{r}_1 = (2t+1)\vec{i} - t^2\vec{j} + 3t^3\vec{k}$ and $\vec{r}_2 = t^2\vec{i} + t\vec{j} - (t-1)\vec{k}$, then find

(i) $\frac{d}{dt}(\vec{r}_1 \cdot \vec{r}_2)$ and (ii) $\frac{d}{dt}(\vec{r}_1 \times \vec{r}_2)$.

3(a) Solve the differential equation.

$$x^2 \frac{d^2 y}{dx^2} + 4x \frac{dy}{dx} + 2y = e^x.$$

(b) When a differential is said to be exact? Solve the differential equation: $x dy - y dx - 2\sqrt{x^2 - y^2} dx = 0$.

Group B

Answer EIGHT questions.

8×7=56

4. Find the inverse matrix $\begin{pmatrix} 1 & 2 & 4 \\ 0 & 1 & 6 \\ 1 & 3 & 2 \end{pmatrix}$.

5. Use Gauss elimination method to solve the system of equations: $x-y-2z = -2$, $3x-y+z = 6$ and $x-3y-4z = -4$.

Contd. ...

(2)

6. If $A = \begin{pmatrix} 0 & 4 \\ 1 & 3 \end{pmatrix}$, $B = \begin{pmatrix} 1 & 1 \\ 3 & -5 \end{pmatrix}$, $C = \begin{pmatrix} 2 & 3 \\ 5 & 7 \end{pmatrix}$, find AB , BC , $(AB)^{-1}$, $(BC)^{-1}$.

7. Show that
$$\begin{vmatrix} a+b+2c & a & b \\ c & b+c+2a & b \\ c & a & c+a+2b \end{vmatrix} = 2(a+b+c)^3.$$

8. Find the constant a such that the vectors $2\vec{i} - \vec{j} + \vec{k}$, $\vec{i} + 2\vec{j} - 3\vec{k}$ and $3\vec{i} + a\vec{j} + 5\vec{k}$ are coplanar.

9. What is first order differential equation? Solve the differential equations: $xy \frac{dy}{dx} + y = e^x$

10. If $\phi = \log(x^2 + y^2 + z^2)$, find (i) $\text{div}(\text{grad} \phi)$ and $\text{curl}(\text{grad} \phi)$.

11. Define ellipse and determine an equation of ellipse.

12. Find the directional derivative of $\phi(x, y, z) = xy^2 + yz^2$ at the point $(2, -1, 1)$ in the direction of $\vec{i} + \vec{j} + 2\vec{k}$.

≡

4 Years Back
Time: 02:00

(AB) 2017

PURBANCHAL UNIVERSITY

2017

4 Years Bachelor of Computer Application (BCA)/Second Semester/Final

Time: 03:00 hrs.

Full Marks: 60/Pass Marks: 24

BCA176CO: Object Oriented Programming in C++

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions.

2×12=24

- 1(a) Define type conversion. Write a program to convert one class to another class type by writing conversion routine in source class. 1+7
- (b) Explain exception handling mechanism with an example. 4
- 2(a) What is visibility mode? What are different inheritance visibility mode are supported by C++? Discuss. 5
- ~~(b) Write a program to swap polar coordinate object and rectangular coordinate object using friend function. 7~~
- 3(a) Explain types of inheritance with their syntax. 4
- (b) Write a program to create a class EMP with data member (Id, Name, Address). Which allow the following operation: 8
 - (i) Enter the data of 5 employees
 - (ii) Store in file.
 - (iii) And Display in appropriate format

Group B

Answer SIX questions.

6×6=36

- 4. Differentiate between OOP and POP. 6
- 5. Write a program to find smaller of two integer, float and double numbers using function overloading. 6
- 6. Mention features of a constructor. Write a program to demonstrate copy constructor. 2+4
- 7. Describe the concept of Nesting of Classes. 6

Contd. ...

(2)

8. What is polymorphism? Describe virtual function with example. with
9. What is file handling? How can we use read and write function? 1+5
10. Define template. Write a program, using function template to find sum of elements of array of type int, float and double of size, N. 1+5
11. Write short notes on any TWO: 3+3
- ✓(a) Object oriented Design
 - (b) Abstract class
 - ✓(c) This pointer

4 Years B.Tech
T.Y.

≡

PURBANCHAL UNIVERSITY

2017

4 Years Bachelor of Computer Application (BCA)/Second Semester/Final
Time: 03:00 hrs.

Full Marks: 60/Pass Marks: 24

BCA191MS: Financial Accounting

Candidates are required to give their answers in their own words as far as practicable.

Figure in the margin indicate full marks.

Group A

Answer TWO questions.

2×12=24

1. Consider the following information.

Liabilities	2070	2069	Assets	2070	2069
Account payable	130000	148000	cash & bank balance	52000	40000
Outstanding expenses	68000	63000	Account receivable	180000	130000
Sundry creditors	90000	110000	Inventories	230000	200000
Longterm Bank loan	350000	300000	Prepaid exp.	15000	25000
Equity share capital	550000	400000	Land	750000	500000
Retained Earnings	489000	324000	Plant & equipment	450000	450000

Additional Information:

- (a) Sales revenue Rs 12,50,000.
- (b) Cost of sales for the year Rs 7,00,000.
- (c) Operating exp. including depreciation Rs 50,000 but excluding interest Rs 25,000 was Rs 1,75,000.
- (d) Tax and dividend paid during the year respectively Rs 150,000 and Rs 60,000 respectively
- (e) During the year company purchased the plant worth Rs 50,000.

Required: Cash flow statement under direct method.

2. Define the term 'Accounting'. Explain the objectives & scope of financial accounting:

Contd. ...

(2)

3. The following is the trial balance of a trader as on 31-12- 2016.

Debit	Rs.	Credit	Rs..
Beginning stock	1,50,000	Saes	7,00,000
Purchase	3,00,000	10% Loan	70,000
Debtors	1,50,000	Capital	4,00,000
Interest	6,000	Creditors	57,000
Carriage inward	15,000	Bills payable	10,000
Machinery	3,50,000	Commission	6,000
Rent	20,000		
Audit fees	2,000		
Cash at bank	1,03,000		
Goodwill	15,000		
Drawing	50,000		
Furniture	50,000		
Bad debt	2,000		
Wages	10,000		
Salaries	20,000		
Total	12,43,000		12,43,000

Additional Information:

- (a) Depreciation: machinery 10%, furniture Rs. 5,000
- (b) Provision for bad debt created 5%
- (c) Bad debt written off Rs. 20,000
- (d) Advance commission received Rs. 1,000
- (e) Outstanding expenses: Salary Rs. 5,000 and wages Rs. 3000
- (f) Closing stock Rs. 1,00,000



Required:

- (i) Trading Account
- (ii) Profit and loss Account
- (iii) Balance sheet as on 31st December 2016

Group B

Answer SIX questions.

6×6=36

4. The following cash and Banking transaction of ABC company are given;

Contd. ...

Scanned with CamScanner

- 1st Nov 2015: Balance of Cash and Bank Rs.55, 000/- and 35,000/- respectively.
- 5th Nov. 2015: Bought office equipment and paid by cheque Rs. 15,000/-
- 10th Nov. 2015: Goods purchase on cash Rs. 10,000/-
- 15th Nov. 2015: Sales made to Puja Rs. 25,000/- on cash.
- 20th Nov. 2015: Cash deposited in to bank Rs.20,000/-
- 25th Nov 2015: Sales of goods to Dipesh amounting Rs. 15,000/- payment received by cheque Rs. 10,000/- only.
- 30th Nov 2015: Cash withdraw Rs. 15,000/- for office use.

Required: Cash Book, with cash and Bank column.

5. Following are the information relating to a firm:

Annual Requirement 60,000 units Ordering cost per order Rs.300

Cost per unit Rs.20 Carrying cost per unit 20% of inventory

Required: (i) EOQ (ii) No of Order (iii) Total cost of EOQ.

6. Harshika and Father's Private Ltd. Purchased machinery for Rs.10,00,000/- on 1st January, 2004. Additional machinery was purchased for Rs.600,000/- on 1st October 2004. On 30th June 2006 a machinery purchase on 1st January, 2004 was sold for Rs.6,82,500/- and same date another machinery purchase @ Rs. 5,00,000. The company written off depreciation @ 10% on Straight Line Method.

Required: Machinery A/C from 2004 to 2006.

7. Define Trial Balance. Explain it's objectives.
8. Following are the balance sheet of Sujit and Bros Ltd. As on 31st chaitra 2070.

Liabilities	Rs.	Assets	Rs.
Share capital	12,00,000	Plant & Machinery	10,00,000
10% Mortgage loan	8,00,000	Furniture	6,00,000
Capital reserves	2,00,000	Current assets	7,50,000
Current liabilities	3,00,000	Preliminary expenses	1,50,000
Total	25,00,000	Total	25,00,000

Contd. ...

(4)

Additional Information:

- (a) Capital employed turnover ratio for the year was 3 times.
- (b) Gross profit margin was 20% of sales.
- (c) Net profit margin 10%.

Required :

- (a) Amount of sales
- (b) Amount of gross profit
- (c) Net profit
- (d) Fixed assets turnover ratio
- (e) Debt equity ratio

9. Write in short about VED analysis and ABC analysis

OR

From the following information calculate possible material variances:

Material	standard		Actual	
	Quantity	Unit Price Rs.	Quantity	Unit Price Rs.
A	10	2	5	3
B	20	3	10	6
C	20	6	15	5

10. A firm furnishes the following stores transaction for the month of January.

- January 1 Opening balance 550 units @ Rs. 5 per unit
- January 3 Receipts from vendor 1000 units @ 6 per unit
- January 5 Issued 750 units
- January 8 Purchased 1100 units @ Rs. 7 per unit
- January 10 Returned to vendor 50 units (purchased on 8th January)
- January 12 Issued 1,000 units
- January 15 Issued 200 units
- January 28 Shortage in stock takings 50 units

Required: Store ledger under LIFO method.

11

Write short note on any TWO.

- (a) Labour Variance
- (b) Payroll
- (c) Standard cost card
- (d) Capital and revenue