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DCBC215

SEP

Reg. No.

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II Semester B.Com. Degree Examination, June/July - 2026

COMMERCE

Quantitative Aptitude

(SEP Scheme)

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

Answers should be written in English only.

SECTION - A

Answer any FIVE of the following sub-questions. Each sub-question carries 2 marks.
(5×2=10)

1. a) Find the H.C.F 60 and 72.
b) What percentage of 64 is 16?
c) If $3x - 25 = x + 45$, find x .
d) Evaluate $\begin{vmatrix} 2 & 4 \\ 5 & 1 \end{vmatrix}$.
e) Find compound interest if amount is Rs. 8,427 and principal is Rs. 7,500.
f) If CAT = DBU in certain code, What will be DOG = ?
g) Pointing to a girl, Ramesh says, "she is the daughter of my father's only son". What is she to Ramesh?
h) Write the formula to calculate true discount.

SECTION - B

Answer any FOUR of the following questions. Each question carries 5 marks.

(4×5=20)

2. Evaluate $\begin{bmatrix} 1 & 3 & 5 \\ 2 & 4 & 6 \end{bmatrix} + 2 \begin{bmatrix} 0 & 1 & 2 \\ 3 & 4 & 5 \end{bmatrix} - 3 \begin{bmatrix} 9 & 8 & 7 \\ 6 & 5 & 4 \end{bmatrix}$.

[P.T.O.]



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3. A person walks 10km North, then turns right and walk 5km, then turns right again and walks 10km.
- a) Which direction is he facing now?
- b) How far is he from the starting point?
4. Find Lcm of 32 and 48 and hence find their HCF using formula.

5. Find x if, $\begin{vmatrix} x & 2 & 1 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{vmatrix} = -12.$

6. Calculate the compound interest accrued on Rs. 6,000 in 3 years, Compounded yearly at 8% of compound interest.
7. Solve using elimination method.
- $$2x - 3y = 19.$$
- $$3x + 2y = 9.$$

SECTION - C

Answer any **THREE** of the following questions. Each question carries 15 marks.

(3×15=45)

8. a) Solve the following equations by Cramer's rule.
- $$10x + 5y = 125$$
- $$9x + 12y = 150$$
- b) Find the H.C.F using division method for 42, 182, and 216.
9. a) Find true discount, bankers discount and bankers gain on Rs. 600 due 4 years hence @ 5%P.A.
- b) $\frac{x+4}{4} + \frac{x-5}{3} = 11.$
10. a) Eight persons A, B, C, D, E, F, G, H are sitting in a row.
- A is second to the left of D.
 - B is @ one end.
 - C is between A and E.





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- F is to the right of E.
- G is not @ the end.
- H is next to B.

Find the complete arrangement.

b) Find AB: If $A = \begin{bmatrix} 2 & 3 & 4 \\ 1 & 2 & 3 \\ 1 & 1 & 1 \end{bmatrix}$ $B = \begin{bmatrix} 1 & 3 & 0 \\ 1 & 2 & 1 \\ 0 & 0 & 2 \end{bmatrix}$

11. a) Divide Rs. 1,600 between A, B and C so that B may have 100 more than A and C Rs. 200 more than B.
- b) A person borrowed Rs. 6,400. After 2 years he paid Rs. 6,136 in cash with a horse and cleared the amount. The rate of interest was 4% P.A. Find the value of the horse.
12. a) If the wages of 6 men for 15 days be Rs. 2,100, then find the wages of 9 men for 12 days (Solve using proportions).
- b) Find the least number which, when divided by 18, 24 and 56 leaves a remainder 2?

SECTION - D

Answer the following question, which carries 5 marks.

(1×5=5)

13. Give the formula for calculating present value of single cash inflow series of cash in flow, annuity and perpetuity.
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