

**THIRD SEMESTER (CUCBCSS—UG) DEGREE EXAMINATION
NOVEMBER 2021**

Economics

ECO 3B 04—MODERN BANKING AND INSURANCE

(2014—2018 Admissions)

Time : Three Hours

Maximum : 80 Marks

Part A (Objective Type Questions)

Answer all questions.

Each question carries ½ mark.

1. General Insurance Business (Nationalization) Act was passed in :
 - a) 1938.
 - b) 1972.
 - c) 1986.
 - d) 1991.
2. Services offered by retail banks include :
 - a) Consumer lending.
 - b) Provision of credit and debit cards.
 - c) E-banking services.
 - d) All the above.
3. The Local Area Bank Scheme was introduced in :
 - a) 1934.
 - b) 1949.
 - c) 1991.
 - d) 1996.
4. GIC stands for :
 - a) General Insurance Company.
 - b) Group Insurance Company.
 - c) Gender Insurance Company.
 - d) General Information Company.
5. _____ is the operation of storefront locations away from the institution's home office for the convenience of customers:
 - a) Unit banking.
 - b) Branch banking.
 - c) Mixed banking.
 - d) Tele banking.

Turn over

6. Insurance for insurance companies is :

- a) General insurance.
- b) E- purse.
- c) Reinsurance.
- d) Risk management.

7. Identify the correct statement/s related to commercial papers :

Statement I Commercial papers can be compared to an unsecured short-term promissory note which is issued by top rated companies with a purpose of raising capital to meet requirements directly from the market.

Statement II : They usually have a fixed maturity period

Statement III : They offer higher returns as compared to treasury bills.

- a) Statement I and II are correct.
- b) Statements I and III are correct.
- c) Statements II and III are correct.
- d) Statements I, II and III are correct.

8. The document that promises future payment which is guaranteed by a commercial bank is :

- a) Banker's Acceptance.
- b) Commercial Paper.
- c) Certificate of Deposits.
- d) Repurchase Agreement.

9. Which is the largest commercial bank in India ?

- a) Reserve Bank of India.
- b) Axis Bank.
- c) State Bank of India.
- d) HDFC.

10. Total number of nationalized banks in India as of July 2020 is :

- a) 11.
- b) 12.
- c) 16.
- d) 22.

11. _____ is not a quantitative credit control measure :

- a) Bank rate policy.
- b) Open market operations.
- c) Cash reserve ratio.
- d) Moral suasion.

12. Risk management can be done by :

- a) Insurance.
- b) Hedging.
- c) Derivatives.
- d) All the above.

(12 × ½ = 6 marks)

Part B (Very Short Answer Type Questions)

Answer any ten questions.

Each question carries 2 marks.

13. Define promissory note.
14. Prepare a note on fidelity guarantee.
15. What is the difference between prime rate and interest rate ?
16. What is an insurance premium ?
17. Distinguish between risk and uncertainty.
18. Write a note on mediclaim.
19. Define mixed banking.
20. What is meant by third party claim ?
21. Distinguish between surrender value and paid-up value.
22. What is meant by burglary insurance ?
23. What do you mean by NPA ?
24. What is meant by Electronic Funds Transfer ?

(10 × 2 = 20 marks)

Part C (Short Essay Type Questions)

Answer any six questions.

Each question carries 5 marks.

25. Explain the meaning and types of annuity.
26. Compare insurance and reinsurance.
27. Explain the meaning and significance of consortium banking.
28. Explain the benefits of motor insurance policies.
29. Evaluate the features of IRDA Act.
30. Prepare a note on Development Banks in India.
31. Explain the meaning and features of cheque truncation system.
32. What are the instruments of money market ?

(6 × 5 = 30 marks)

Turn over

Part D (Essay Type Questions)

Answer any two questions.

Each question carries 12 marks.

33. Explain important types of insurance. Discuss the procedure in settlement of an insurance claim.
34. Explain the meaning, significance and principles of risk management.
35. Examine the structure of commercial banks in India. Discuss the functions of commercial banks.
36. Narrate recent trends in banking.

(2 × 12 = 24 marks)

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**THIRD SEMESTER (CUCBCSS—UG) DEGREE EXAMINATION
NOVEMBER 2021**

Economics

ECO 3B 03—QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS—I
(2014—2018 Admissions)

Time : Three Hours

Maximum : 80 Marks

Section A (Objective Type)

*Answer all questions.
Each question carries $\frac{1}{2}$ mark.*

1. The value of $(0.0001)^{\frac{1}{4}}$ is:
(a) 0.001. (b) 0.01.
(c) 0.1. (d) 1.
2. The logarithm of 243 to the base 3 is :
(a) 3. (b) 4.
(c) 5. (d) 6.
3. If $\log 3 = 0.4771$, find the number of digits in 3^{62} :
(a) 27. (b) 28.
(c) 29. (d) 30.
4. The degree of a quadratic equation is :
(a) 1. (b) 2.
(c) 3. (d) 4.
5. Let the matrix A is of order 2×4 and another matrix B is of order 4×5 , then the product AB is of order :
(a) 2×4 . (b) 2×5
(c) 4×4 . (d) 4×5 .

Turn over

6. Let A be a matrix such that $|A| \neq 0$, then A is said to be :
- (a) Orthogonal. (b) Symmetric.
(c) Singular. (d) Non-singular.
7. Pie-chart represents the components of a factor by :
- (a) Percentages. (b) Angles.
(c) Sectors. (d) Circles.
8. Sum of squares of the deviations about mean is :
- (a) Zero. (b) Minimum.
(c) Maximum. (d) One.
9. The percentage of items in a frequency distribution lying between upper and lower quartiles is :
- (a) 80 %. (b) 40 %.
(c) 50 %. (d) 25 %.
10. Mean deviation is minimum when deviations are taken from :
- (a) Mean. (b) Median.
(c) Mode. (d) Zero.
11. If the correlation co-efficient $r = 1$, the angle between the two lines of regression is :
- (a) 0. (b) 90.
(c) 60. (d) 30.
12. The term 'regression' was introduced by :
- (a) R.A. Fisher. (b) Karl Pearson.
(c) Sir Francis Galton. (d) Pascal.

(12 × ½ = 6 marks)

Section B (Short Answer Type)

*Answer any ten questions.
Each question carries 2 marks.*

13. Simplify $15x^7y^3 \div \frac{5}{3}x^3y^{-1}$.

14. Simplify $\frac{(3)^5 (27)^3 (9)^4}{3(81)^4}$.
15. Give the rules of logarithm.
16. If $\log 2 = 0.3010$ and $\log 3 = 0.4771$, find $\log 45$.
17. Find the equilibrium price and the quantity exchanged at the equilibrium price, if supply and demand functions are given by $S = 20 + 3p$ and $D = 160 - 2p$ where p is the price charged.
18. Define square matrix with an example.
19. Define minor and co-factor.
20. Show that the matrix $A = \begin{bmatrix} 5 & 7 & 2 \\ 2 & 3 & 1 \\ 4 & 6 & 2 \end{bmatrix}$ is singular.
21. Arithmetic mean of 100 items is 34. At the time of calculation, three items 118, 70 and 19 were wrongly taken as 180, 17 and 90 respectively. What is the correct mean ?
22. Define range and quartile deviation.
23. Distinguish between positive correlation and negative correlation.
24. Find the mean of variables x and y from the regression equations given by $2y - x - 50 = 0$ and $3y - 2x - 10 = 0$.

(10 × 2 = 20 marks)

Section C (Short Essay/Problem Type)*Answer any six questions.**Each question carries 5 marks.*

25. Find the value of $\left[\frac{a^{-1}b^2}{a^2b^{-4}} \right] \div \left[\frac{a^3b^{-5}}{a^{-2}b^3} \right]^{-5}$.

26. Find the value of $\frac{36.52 \times 25.43}{15.31 \times 2.56}$ using logarithm.

Turn over

27. A man sells 7 tables and 8 chairs at Rs. 2,940 and 5 tables and 6 chairs at Rs. 2,150. What is the selling price of each ?
28. Let $P = \begin{bmatrix} 0 & 1 \\ 2 & 3 \end{bmatrix}$, $Q = \begin{bmatrix} -1 & 2 \\ 4 & 3 \end{bmatrix}$ and $R = \begin{bmatrix} 2 & -1 \\ 6 & 5 \end{bmatrix}$. Find $P(Q + R)$ and $PQ + PR$. Hence prove that $P(Q + R) = PQ + PR$.
29. A company sells x tins of chocolate powder each day at Rs.15 a tin. The cost of manufacturing and selling these tins is Rs. 10 per tin plus a fixed daily overhead cost of Rs. 1,000. Determine (i) Cost function ; (ii) Revenue function ; and (iii) Profit function. What is the total cost, total revenue and total profit when 500 tins are manufactured and sold a day.
30. The marks obtained by seven students are 5, 10, 15, 20, 25, 30, 45. Find the harmonic mean.
31. Obtain the standard deviation for the data on scores given below :

Score	0–10	10–20	20–30	30–40	40–50	50–60	60–70
No. of students	10	15	25	25	10	10	5

32. Find the rank correlation coefficient between poverty and overcrowding from the table given below :

Town	A	B	C	D	E	F	G	H	I	J
Poverty	17	13	15	16	6	11	14	9	7	12
Overcrowding	36	46	35	24	12	18	27	22	2	8

(6 × 5 = 30 marks)

Section D (Essay Type)

Answer any **two** questions.
Each question carries 12 marks.

33. Solve the following system of equations :

$$3x - 2y + 7z = 5 ; 7x + y + 9z = 6 ; 3x + 3y - 7z = 0.$$

34. Find the inverse of A, where $A = \begin{bmatrix} 3 & 5 & 7 \\ 2 & -3 & 1 \\ 1 & 1 & 2 \end{bmatrix}$.

35. Explain the graphs of frequency distributions.

36. In a partially destroyed record of an analysis of correlation data the following results are legible. Variance of $x = 9$ and the regression equations are $8x - 10y + 66 = 0$; $40x - 18y = 214$. Find (i) The mean values of x and y ; (ii) The co-efficient of correlation ; and (iii) The standard deviation of y .

(2 × 12 = 24 marks)