

**DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO**

Booklet Serial No. **209889**

Test Booklet Series

**ACCOUNTS ASSISTANT (FINANCE)  
OMR Examination - 2024**

**A**

**Time Allowed: 120 Minutes**

**Maximum Marks: 120**

**INSTRUCTIONS**

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET *DOES NOT* HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. Please note that it is the candidate's responsibility to encode and fill in the Roll Number, Booklet Serial No. and Test Booklet Series Code A, B, C or D carefully and without any omission or discrepancy at the appropriate places in the OMR Answer /Response Sheet. Any omission/discrepancy will render the Response Sheet liable for rejection.

3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside.

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4. This Test booklet contains 120 items (questions). Each item comprises of four responses (answers). You will select the response which you want to mark on the Answer Sheet/Response Sheet. In case you feel that there is more than one correct response, mark the response which you consider the appropriate. In any case, choose *ONLY ONE* response for each item.
5. You have to mark all your responses *ONLY* on the separate Answer /Response Sheet provided. See directions in the Response Sheet.
6. All items carry equal marks.
7. After you have completed filling in all your responses on the Response Sheet and the examination has concluded, you should hand over to the Invigilator *only the Answer /Response Sheet*. You are permitted to take away with you the Test Booklet and *Candidate's Copy of the Response Sheet*.
8. Sheets for rough work are appended in the Test Booklet at the end.
9. While writing Centre Code and Roll No. on the top of the Answer Sheet/Response Sheet in appropriate boxes use "**ONLY BLUE/BLACK BALL POINT PEN**".
10. **Penalty for wrong answers:**

**THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY THE CANDIDATE IN THE WRITTEN TEST (OBJECTIVE TYPE QUESTIONS PAPERS).**

- (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, ( $\frac{1}{4}$ ) of the marks assigned to that question will be deducted as penalty.
- (ii) If a candidate gives more than one answer, it will be treated as a wrong answer even if one of the given answers happens to be correct and there will be same penalty as above for that question.
- (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be no penalty for that question.

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(Set -A)

1. Which of the following is **NOT** a communicable disease?

- A) Tuberculosis
- B) Influenza
- C) Diabetes
- D) Ringworm

2. Consider the following pairs.

<b>Vitamin</b>	<b>Deficiency</b>
A. Vitamin A	Anaemia
B. Vitamin C	Skin Diseases
C. Vitamin D	Rickets
D. Vitamin B1	Beri Beri

Which of the above pairs are correctly matched?

- A) A and B
- B) B and C
- C) C and D
- D) A and D

3. Food cans are coated with tin instead of zinc due to

- A) Zinc is costlier than tin.
- B) Zinc is more reactive than tin.
- C) Zinc has a higher melting point than tin.
- D) Zinc is less reactive than tin.

4. Which of the following constitute a food-chain?

- A) Grass, wheat and mango
- B) Grass, goat and human
- C) Goat, cow and elephant
- D) Grass, fish and goat

5. Consider the following pairs.

<b>Electrical Parameter</b>	<b>Measuring Unit</b>
A. Power	Watts
B. Current	Volt
C. Frequency	Hertz
D. Resistance	Ampere

Which of the above pairs are correctly matched?

- A) A and B
- B) A and C
- C) A, C and D
- D) A and D

6. Consider the following pairs:

- |            |       |
|------------|-------|
| a. Sodium  | 1. S  |
| b. Carbon  | 2. Co |
| c. Sulphur | 3. Na |
| d. Cobalt  | 4. C  |

Which of the following pairs is/are correctly matched?

- A) a-3, b-2, c-1, d-4
- B) a-1, b-2, c-3, d-4
- C) a-3, b-4, c-1, d-2
- D) a-1, b-4, c-3, d-2

7. Forces that act for a limited period of time are referred to as \_\_\_\_\_.

- A) Impulsive forces
- B) Interval force
- C) Short force
- D) Interrupting force

8. Who was the first scientist to use the term SMOG and define its layers?

- A) Nikola Tesla
- B) Stephen Hawking
- C) Nicolaus Copernicus
- D) Dr. Henry Antoine

9. Consider the following statements

- 1. Life on the earth is possible due to the greenhouse effect
- 2. Increased emission of greenhouse gases is a natural process

Which of the above statements is/are correct:

- A) Only 1
- B) Only 2
- C) Both 1 and 2
- D) Neither 1 nor 2

10. Consider the following statements.

- a. There is infinite storage of fossil fuel inside the earth
- b. Sun can be taken as an inexhaustible source of energy
- c. Waste from a nuclear power plant can be easily disposed off

Which of the above statements is/are **NOT** correct?

- A) a and b
- B) b and c
- C) a and c
- D) All of the above

11. Which hill is the Vaishno Devi Mandir located on?

- A) Katra
- B) Aru
- C) Patnitop
- D) Trikuta

12. Arrange the following in chronological order:
- Jallianwala Bagh Massacre
  - Dandi March
  - Lucknow Pact
  - Quit India Movement
- A) a, b, c, d  
B) c, a, b, d  
C) c, b, d, a  
D) a, d, b, c
13. The first legislature of the princely state of Jammu and Kashmir was called the
- Praja Sabha
  - Rajya Sabha
  - Vidhan Sabha
  - Maha Sabha
14. Which of the following is **NOT** a tributary of Jhelum River?
- Vishaw
  - Sind Nallah
  - Verinag
  - Roumushi
15. As per J & K reorganisation Act, 2019, which was created without legislator is:
- Jammu
  - Jammu and Kashmir
  - Kargil
  - Ladakh
16. Consider the following statements.
- Kud** dance is performed to honour the gods '**Lok Devtas**' as a thanks giving ritual.
  - It is practiced on festive occasions like Eid and Ramzan days are going.
- Which of the above statements is/are correct:
- Only 1
  - Only 2
  - Both 1 and 2
  - Neither 1 nor 2
17. Which of the places is known as the "Gateway to the Kashmir valley"?
- Jammu
  - Leh
  - Ladakh
  - None of the above
18. Which pass connects Jammu and Kashmir with Ladakh?
- |                  |                   |
|------------------|-------------------|
| A) Nathu La Pass | B) Zoji La Pass   |
| C) Rohtang Pass  | D) Shipki La Pass |

19. What is the official language of Jammu and Kashmir?  
A) Hindi  
B) Kashmiri  
C) Urdu  
D) English
20. Arrange the following states in an order from north to south:  
a. Himachal Pradesh  
b. Tamil Nadu  
c. Telangana  
d. Madhya Pradesh  
A) a, b, c, d  
B) c, a, b, d  
C) a, d, c, b  
D) a, d, b, c
21. Consider the following pairs:  
a. Kaziranga National Park  
b. Jim Corbett National Park  
c. Ranthambore National Park  
d. Gir National Park  
1. Gujarat  
2. Rajasthan  
3. Uttarakhand  
4. Assam  
Which of the following pairs is/are correctly matched?  
A) a-3, b-2, c-4, d-1  
B) a-1, b-2, c-3, d-4  
C) a-4, b-3, c-2, d-1  
D) a-1, b-4, c-3, d-2
22. Arrange the following events in chronological order:  
a. G20 Summit in India  
b. ICC World Cup Final 2023  
c. Launch of Chandrayaan 3  
d. COP28 climate summit in Dubai  
A) c, a, b, d  
B) a, c, b, d  
C) a, c, d, b  
D) c, b, d, a
23. Consider the following statements:  
a. Rabi crops are sowed between October and November.  
b. Rabi crops require a lot of water.  
c. Rabi crops need warm weather for growth.  
Which of the above statements is/are correct?  
A) Only a  
B) a and b  
C) Only c  
D) None of the above
24. The population growth rate means  
A) Difference between the growth of male and female  
B) Difference between the population of urban and rural areas  
C) No. of births per thousand persons  
D) Difference between birth rate and death rate

25. In which tourist places *Kolahoi glacier* is located?

- A) Gulmarg  
B) Pahalgam  
C) Sonamarg  
D) Mansabal

26. Consider the following pairs:

Lake	State
a. Hussian Sagar	1. Manipur
b. Pulicate Lake	2. Jammu and Kashmir
c. Dal Lake	3. Andhra Pradesh
d. Loktak Lake	4. Telangana

Which of the following pairs is/are correctly matched?

- A) a-2, b-1, c-4, d-3  
B) a-1, b-3, c-2, d-4  
C) a-3, b-4, c-1, d-2  
D) a-4, b-3, c-2, d-1

27. Consider the following statements:

- a. Ajanta caves were tagged as the UNESCO World Heritage Sites in 1983.  
b. Currently, these caves are taken care of by the Archaeological Survey of India.  
c. The caves are believed to be made in Gupta period and Vakataka, period.

Which of the above statements is/are correct?

- A) Only a  
B) a and b  
C) a and c  
D) All of the above

28. Who is popularly known as the "Grand Old Man of India"?

- A) Bal Gangadhar Tilak  
B) Dadabhai Naoroji  
C) Gopal Krishna Gokhale  
D) Mahatma Gandhi

29. Consider the following pairs:

Dam	State
a. Sardar Sarovar Dam	1. Uttarakhand
b. Bhavani Sagar Dam	2. Maharashtra
c. Koyna Dam	3. Gujarat
d. Tehri Dam	4. Tamil Nadu

Which of the following pairs is/are correctly matched?

- A) a-2, b-1, c-4, d-3  
B) a-1, b-2, c-3, d-4  
C) a-3, b-4, c-2, d-1  
D) a-4, b-3, c-2, d-1

30. Consider the following pairs:

- a. Founder of Dogra Dynasty  
b. Dar-ul-Alam  
c. Mian Deedo  
d. Treaty of Lahore
1. Maharaja Ranjit Dev  
2. Rebellion Group Head  
3. Gujarat  
4. Gulab Singh

Which of the following pairs is/are correctly matched?

- A) a-2, b-4, c-1, d-3  
B) a-1, b-2, c-3, d-4  
C) a-3, b-4, c-2, d-1  
D) a-4, b-1, c-2, d-3

31. Fixed cost is a cost:
- A) Which changes in total in proportion to changes in output
  - B) Which is partly fixed and partly variable in relation to output
  - C) Which do not change in total during a given period despite changes in output
  - D) Which remains same for each unit of output
32. Calculate the prime cost from the following information:
- Direct material purchased: Rs. 1,00,000  
Direct material consumed: Rs. 90,000  
Direct labour: Rs. 60,000  
Direct expenses: Rs. 20,000  
Manufacturing overheads: Rs. 30,000
- A) Rs. 1,80,000
  - B) Rs. 2,00,000
  - C) Rs. 1,70,000
  - D) Rs. 2,10,000
33. Suppliers personal a/c are seen in the
- A) Sales Ledger
  - B) Nominal ledger
  - C) Purchases Ledger
  - D) General Ledger
34. Book Keeping is regarded as the step of accounting.
- A) Fourth
  - B) Secondary
  - C) Third
  - D) First
35. Which of the following is correct?
- A)  $\text{equity} = \text{asset} + \text{liability}$
  - B)  $\text{liability} = \text{asset} + \text{equity}$
  - C)  $\text{asset} = \text{liability} + \text{equity}$
  - D)  $\text{equity} = \text{liability}$
36. Which concept suggests the exclusion of human Resource in balance sheet?
- A) Account Concept
  - B) Money Measurement Concept
  - C) Going Concern Concept
  - D) Cost Concept

37. Which of the following procedures should an accountant follow while preparing a voucher?
- A) Verify the date, amount, signature and transaction details on the supporting documents
  - B) Confirm if an authorised signatory has approved the supporting documents
  - C) Select the type of voucher that will be used for the transaction
  - D) All of the above
38. Which of the following business documents is a proof of payment for a business transaction?
- A) Receipt
  - B) Invoice
  - C) Debit note
  - D) None of the above
39. In bank statement, cash deposited is shown as \_\_\_\_\_.
- A) debit
  - B) credit
  - C) expense
  - D) profit
40. What is "Deposit in transit" in bank reconciliation?
- A) Added to Bank Balance
  - B) Subtracted From Bank Balance
  - C) Subtracted From the Cash Book Balance
  - D) Added to Cashbook Balance
41. What type of cheques is that which is issued by a firm but not yet presented to the bank?
- A) Uncredited cheques
  - B) Outstanding cheques
  - C) Uncollected cheques
  - D) Bounced cheques
42. The Public Financial Management System (PFMS) Was earlier known as
- A) Central Plan Schemes Monitoring System (CPSMS)
  - B) Controller General of Accounts (CGA)
  - C) Central Sector Scheme of Planning Commission
  - D) Core Banking System (CBS)
43. Statement of financial position produced from incomplete accounting record is commonly known as
- A) Balance sheet
  - B) Statement of affairs
  - C) Statement of financial operations
  - D) Cash flow statement

44. What happens when interest on drawings is charged to partner?
- A) Credited to partner's current a/c
  - B) Not shown in current account
  - C) Debited to partner's capital a/c
  - D) None of the above
45. M and N are two partners sharing profit and losses in 3:2 ratio. They admit P as a new partner with  $\frac{1}{5}$ th share. What will be the new profit-sharing ratio?
- A) 12:4:7
  - B) 12:8:5
  - C) 12:5:8
  - D) 8:5:12
46. The method of transferring items from a journal into their respective ledger accounts or journals is known as.
- A) Balancing
  - B) Arithmetic
  - C) Entry
  - D) Posting
47. When audit is undertaken to check the financial controls and irregularities in the organization, it is which type of audit?
- A) System audit
  - B) Compliance audit
  - C) Internal audit
  - D) Statutory audit
48. Current Ratio = \_\_\_\_\_.
- A) Current assets / Current liabilities
  - B) Fixed assets / Current liabilities
  - C) Debt / Current assets
  - D) Debt / Equity
49. A bank pass book is a copy of
- A) The cash column of a customer's cash book
  - B) The bank column of a customer's cash book
  - C) The customer account in the bank's ledger
  - D) The debtor's account in the bank's ledger

50. Trial balance helps to check the accuracy of the:
- A) Balance sheet
  - B) Ledger
  - C) Journals
  - D) Cash flow statement
51. Which of the following entities generally prepare their books of accounts under single entry system?
- A) Joint stock companies
  - B) Sole traders
  - C) Government organisations
  - D) Not-for-profit organisations
52. GST is a consumption of goods and service tax based on
- A) Development
  - B) Dividend
  - C) Duration
  - D) Destination
53. What does financial leverage measure?
- A) No change with EBIT and EPS
  - B) The sensibility of EBIT with % change with respect to output
  - C) The sensibility of EPS w.r.t % change in the EBIT level
  - D) % variation in the level of production
54. Finance Bill becomes the Finance Act when it is passed by.
- A) Lok Sabha
  - B) Both Lok Sabha and Rajya Sabha
  - C) Both House of Parliament and signed by President.
  - D) Both House of Parliament and signed by Prime Minister.
55. Income which accrue or arise outside India & also received outside India is taxable in case of .
- A) Resident and Ordinary Resident
  - B) Resident but not Ordinary Resident
  - C) Non Resident
  - D) Resident and Ordinary Resident and Resident but not Ordinary Resident

56. Which of the following is/are included in definition of "Goods" as defined under section 2(52) of the CGST Act, 2017-
- A) Money
  - B) Actionable claim
  - C) Securities
  - D) Bonds
57. Amount payable at the time of closure or opting out of National Pension Scheme referred to in section 80CCD shall be exempt to the extent of total amount payable.
- A) 30%
  - B) 100%
  - C) 40%
  - D) 25%
58. Goodwill of a firm of X and Y is valued at Rs. 30,000. It is appearing in the books at Rs. 12,000. Z is admitted for 1/4 share. What amount he is supposed to bring for goodwill?
- A) 3,000
  - B) 4,500
  - C) 7,500
  - D) 10,500
59. **Assertion (A):** If the interest is payable outside India, tax must be deducted at source.  
**Reason (R):** If tax has not been deducted at source, the amount paid as interest will not be allowed as a deduction in computing business income.  
Select the correct answer from the code given below:
- A) Both (A) and (R) are correct and (R) is the correct explanation of (A).
  - B) (A) and (R) both are correct but (R) is not the correct explanation of (A).
  - C) (A) is correct but (R) is wrong.
  - D) (A) is wrong but (R) is correct.
60. From the following information, find out the number of units that must be sold by the firm to earn profit of Rs. 1, 80,000 per year.
- Sales price: Rs. 25 per unit  
Variable manufacturing costs - Rs. 12 per unit  
Variable selling costs - Rs. 3 per unit  
Fixed factory overheads - Rs. 5, 00,000  
Fixed selling costs - Rs. 3, 00,000
- A) 60,000 units
  - B) 88,000 units
  - C) 98,000 units
  - D) 1,00,000 units

61. A snake in the grass  
A) Secret of hidden enemy  
B) Unforgotten happening  
C) Unrecognizable danger  
D) Unreliable person
62. Synonym of ADMONISH  
A) Threaten  
B) Praise  
C) Shallow  
D) Appeal
63. Antonym of AGONY  
A) Pleasure  
B) Bliss  
C) Ecstasy  
D) Fear
64. Rearrange the jumbled phrases in meaningful references.  
1. Are tree from  
2. Grow abundantly  
3. Low plants  
4. Tundra region  
5. During the short summer  
6. Like mosses and clinches  
7. And  
8. Ice  
A) 3, 6, 2, 5, 7, 4, 1, 8  
B) 4, 1, 8, 5, 7, 3, 6, 2  
C) 5, 3, 6, 2, 7, 4, 1, 8  
D) 5, 4, 1, 8, 7, 2, 3, 6
65. Insert proper preposition in the sentence.  
He hinted \_\_\_\_\_ some loss of treasure.  
A) Of  
B) for  
C) with  
D) at
66. Choose the correct option  
The boys were playing cricket.  
A) Cricket had been played by the boys.  
B) Cricket has been played by the boys.  
C) Cricket was played by the boys.  
D) Cricket was being played by the boys.

67. Fill in the blanks with the suitable article.  
"The Sun rises in the east and sets in \_\_\_\_ west".

- A) a
- B) an
- C) the
- D) Are

68. Choose the correct option.

"If had left early like every time else did, I \_\_\_\_ sitting here, now listening to all this rubbish".

- A) May not be
- B) may be
- C) wouldn't be
- D) was

69. Pick out the clause in the following sentence.

"Neha Played when Evening came"

- A) Neha Played
- B) When Evening Came
- C) Played when evening
- D) Evening came

70. He said to us, "why are you all sitting about there doing nothing"?

- A) He asked us why all we sitting about there doing nothing.
- B) He asked us why are we all sitting about there doing nothing.
- C) He asked us why we were all sitting about there doing nothing.
- D) He asked us why were we all sitting about there doing nothing.

71. Secondary data is primarily sourced from:

- A) Original research studies
- B) Publicly available databases
- C) Personal interviews
- D) Laboratory experiments

72. What is an example of primary data collection method?

- A) Surveying existing research papers
- B) Reviewing census data
- C) Analyzing historical records
- D) Conducting interviews and surveys

73. Consider the following statements regarding questionnaire preparation:

- a. Questionnaires collect data by asking people to respond to different set of questions.
- b. The validity and reliability of the data you collect and the response rate you achieve depend largely on the design of your questions.
- c. Collect the data without a pilot test of all questionnaires.
- d. When designing your questionnaire you should consider the wording of individual questions prior to the order in which they appear.

Which of the following statement is correct?

- A) a and b
- B) b and c
- C) a and d
- D) b and d

74. Which of the following statement regarding tabulation is FALSE?

- A) Tabulation allows for the presentation of complicated data.
- B) Tabulation is a prerequisite for a grammatic representation of data.
- C) Statistical analysis of data necessarily involves tabulation.
- D) Tabulation facilitates comparison between rows and not columns

75. Eight randomly selected college students were asked to state the number of hours they slept the previous night. The resulting data values are 4,8,7,5,3,7,7,3.

Arrange the following values in decreasing order:

- a. Mean of sleeping hours of the students
- b. Median of sleeping hours of the students
- c. Mode of sleeping hours of the students
- d. Number of random Sample

- A) a, b, c, d
- B) a, d, b, c
- C) d, c, b, a
- D) c, b, d, a

76. Consider the following statements regarding probabilities:

P: Probabilities can never add up to more than one.

Q: Probabilities of mutually exclusive events always add up to one.

R: Probabilities can never be zero

S: Probabilities are always positive

Which of the following statement is correct?

A) P and S

B) S only

C) P, R, and S

D) P, Q, R and S

77. In a class of 100 students, every student must pick exactly one sport to play. 28 students pick Football, 27 students pick Kho-Kho, 33 students pick volleyball and 12 students pick cricket. 23 boys play cricket, and 13 boys play volleyball. Meanwhile out of a total 40 girls, 13 girls play Kho-Kho.

- |                           |    |    |
|---------------------------|----|----|
| a. Boys who play Kho-Kho  | 1. | 2  |
| b. Girls who play cricket | 2. | 10 |
| c. Boys who play cricket  | 3. | 14 |
| d. Total number of boys   | 4. | 40 |
|                           | 5. | 60 |

Which of the pairs given above is/are correctly matched?

A) a-1, b-2, c-3, d-5

B) a-3, b-1, c-2, d-4

C) a-3, b-1, c-4, d-5

D) a-3, b-1, c-2, d-5

78. An economist estimated that a commodity Y had a price index of 10, calculated for 1993 with a base year of 1990, and a quantity index of 0.5 when calculated for 1990 with a base year of 1993. What is the Fisher Ideal Value Index for 1993 with the base year taken to be 1990?

A) 5

B) 10.5

C) 20

D) 15

79. One of the features of the census is:

- A) Defining boundaries
- B) Simultaneity
- C) Employment of census-workers
- D) Homogeneity

80. Consider the following statements regarding Measures of Mortality:

- |                                |  |
|--------------------------------|--|
| a. Gross Reproduction Rate     | 1. Reduces the reproduction rates                    |
| b. Age-Specific Fertility Rate | 2. Affected by mortality rates                       |
| c. Net Reproduction Rate       | 3. Has modal value between 20 and 25                 |
| d. Maternal Mortality Rate     | 4. Is measured per 1000 live births.                 |
|                                | 5. Measures the number of daughters over a lifetime. |

Which of the pairs given above is/are correctly matched?

- A) a-5, b-3, c-2, d-1
- B) a-5, b-3, c-4, d-2
- C) a-5, b-3, c-2, d-4
- D) a-3, b-5, c-2, d-1

81. The interest on Rs.54,000 loan for nine months at 8% interest per year is

- A) 1340
- B) 2430
- C) 3240
- D) 4230

82. Tom and Jerry went to a restaurant for dinner. Tom ordered 2 hamburgers and 1 soft drinks, totalling Rs.70. Jerry ordered 1 hamburgers and 2 soft drinks, totalling Rs.50. Then the cost of one hamburger and one soft drink are

- A) Hamburger – Rs.30, Soft Drink – Rs.30
- B) Hamburger – Rs.30, Soft Drink – Rs.10
- C) Hamburger – Rs.15, Soft Drink – Rs.25
- D) Hamburger – Rs.25, Soft Drink – Rs.15

83. Consider the following statements:

- a. The number of ways to arrange the letters of the word "PEPPER" is 60
- b. In a group of 20 people, the number of ways to select a committee of 3 members

where the order doesn't matter is  $\binom{20}{3}$ .

- c. The expansion of  $(2+x)^3$  using binomial theorem is  $8+6x+12x^2+x^3$ .
- d. The number of ways 3 boys and 3 girls are sit in a row is 360.

Which of the following statement is correct?

- A) c and d
- B) b and c
- C) a and b
- D) d and a

84. Consider the following statements:

- a. The limit of  $\frac{x^2 - 1}{x - 1}$  as  $x$  approaches 1 is 0.
- b. If  $f(x) = \frac{1}{x}$ , then the derivative of  $f(x)$  with respect to  $x$  is  $\frac{1}{x^2}$ .
- c. The limit of  $\frac{e^x - 1}{x}$  as  $x$  approaches 0 is 1.
- d. The limit definition of a derivative for a function  $f(x)$  is  $\lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h}$ .

Which of the following statement is correct?

- A) b and c  
B) a and b  
C) d and a  
D) c and d

85. Let  $A = \{x : x \in \mathbb{R}, |x| < 1\}$ ,  $B = \{x \in \mathbb{R}, |x - 1| \geq 1\}$  and  $A \cup B = \mathbb{R} \setminus D$ , then the set  $D$  is

- A)  $\{x \in \mathbb{R} : 1 \leq x < 2\}$   
B)  $\{x \in \mathbb{R} : 1 < x \leq 2\}$   
C)  $\{x \in \mathbb{R} : 0 \leq x < 1\}$   
D)  $\{x \in \mathbb{R} : 1 \leq x \leq 2\}$

86. Consider the following pairs:

- a.  $F = \{(x, y) \in \mathbb{R} \times \mathbb{R} : x^2 + y = 2\}$  1.  $F \circ F = \{(x, z) \in \mathbb{R} \times \mathbb{R} : z = 4x + 3\}$   
b.  $F = \{(x, y) \in \mathbb{R} \times \mathbb{R} : x^2 + y^2 = 25\}$  2.  $F$  increasing on  $(0, \infty)$ , but not on  $\mathbb{R}$   
c.  $F = \{(x, y) \in \mathbb{R} \times \mathbb{R} : y = 2x + 1\}$  3.  $F$  is one-one but not onto  
d.  $F = \{(x, y) \in \mathbb{R} \times \mathbb{R} : y = x^2\}$  4. Range of  $F = [-2, \infty)$   
5.  $F$  is not a function

Which of the pairs given above is/are correctly matched?

- A) a - 1, b - 2, c - 3, d - 5  
B) a - 2, b - 1, c - 5, d - 4  
C) a - 3, b - 4, c - 1, d - 2  
D) a - 4, b - 5, c - 1, d - 2

87. Consider the following pairs:

- |   |                    |
|---|--------------------|
| a. Square matrix has two identical rows   | 1. Determinant = 1 |
| b. $3 \times 3$ Identity matrix   | 2. Determinant = 4 |
| c. $3 \times 3$ diagonal matrix with diagonal entries 1, 2 and 3  | 3. Determinant = 0 |
| d. P and Q are two $3 \times 3$ matrices with $\det(P) = 2$ and $\det(Q) = 4$ . Then the determinant of $PQ^T$ is | 4. Determinant = 6 |
|   | 5. Determinant = 8 |

Which of the pairs given above is/are correctly matched?

- |                               |                               |
|-------------------------------|-------------------------------|
| A) a - 3, b - 1, c - 4, d - 5 | B) a - 3, b - 2, c - 5, d - 1 |
| C) a - 4, b - 1, c - 2, d - 5 | D) a - 1, b - 2, c - 3, d - 4 |

88. Arrange the following events in increasing order of probability:

- Picking a diamond from a well-shuffled deck of 52 playing cards.
- Drawing a King from a standard deck of 52 cards.
- Rolling a number between 1 and 5 on a fair six-sided die.
- Getting heads on a fair coin toss.

- |               |               |
|---------------|---------------|
| A) a, b, d, c | B) c, a, d, b |
| C) b, a, d, c | D) d, a, c, b |

89. The area of the triangle determined by the three points  $A(1, 2, 3)$ ,  $B(3, 2, 1)$ , and  $C(2, 4, 5)$  is

- |                |                |
|----------------|----------------|
| A) $\sqrt{20}$ | B) $\sqrt{23}$ |
| C) $\sqrt{26}$ | D) $\sqrt{29}$ |

90. The unit vector having the opposite direction of the vector  $(1, -1)$  is

- |                                |                                 |
|--------------------------------|---------------------------------|
| A) $\frac{1}{\sqrt{2}}(1, -1)$ | B) $\frac{-1}{\sqrt{2}}(1, -1)$ |
| C) $(-1, 1)$                   | D) $(1, -1)$                    |

91. Which of the below statement is correct?
- A) Microeconomics is primarily concerned with the overall economy.
  - B) Individual markets are the focus of macroeconomics.
  - C) Governments do not have any control over market prices.
  - D) When economists study a market's price, their main goal is to figure out why the price is what it is and how it might change.
92. What is the meaning of a 'Mixed Economy'?
- A) Traditional and modern industries
  - B) Both the public and private sectors are involved
  - C) Involvement of both foreign and domestic investors
  - D) Subsistence and commercial farming
93. Which of the following is the relation that the law of demand defines?
- A) Income and price of a commodity
  - B) Price and quantity of a commodity
  - C) Income and quantity demanded
  - D) Quantity demanded and quantity supplied
94. What is Gross Domestic Product?
- A) The total value of goods and services manufactured in the country.
  - B) The total value of all the transactions in the country.
  - C) The reduction in the total value of goods and services produced in the country.
  - D) The monetary value of all finished goods and services made within a country during a specific period.
95. 'Agreement on Technical Barriers to Trade (TBT)' is related with which institution?
- A) World Bank
  - B) NITI Aayog
  - C) World Trade Organization
  - D) World Economic Forum
96. Commercial Paper (CP) is an unsecured money market instrument issued in the form of a \_\_\_\_\_?
- A) Cheque
  - B) Bill of Exchange
  - C) Demand Draft
  - D) Promissory Note
97. Bank rate is the rate at which the RBI extends credit to the
- A) Government of India
  - B) Foreign countries
  - C) Commercial Banks
  - D) State Governments

98. Which five year plan of India was based on Mahalanobis model?  
A) First  
B) Second  
C) Third  
D) Fourth
99. Which is not one of the four main factors of production?  
A) Land  
B) Labour  
C) Manufacturing  
D) Capital
100. What does the Lorenz curve represent?  
A) Taxable income elasticity  
B) Relationship between the price of a certain commodity and its demand  
C) Income distribution  
D) Rate of employment
101. The thrust on the rocket is:  
A) In the same direction of the rocket  
B) In the opposite direction of the rocket  
C) At  $90^\circ$  to the direction of the rocket  
D) None of the above
102. What causes the twinkling of stars?  
A) Atmospheric refraction of starlight  
B) Dispersion of starlight  
C) Scattering of starlight  
D) Prism effect
103. Who invented the Light Bulb?  
A) Thomas Edison  
B) Eli Whitley  
C) Alister Hardy  
D) Michael Faraday
104. The Bacille Calmette-Guerin vaccine (popularly called BCG vaccine) is a vaccine to prevent which of these diseases?  
A) Tuberculosis  
B) Polio  
C) Thyroid  
D) Jaundice
105. Name the hardest material present in the body?  
A) Dentin  
B) Bone-marrow  
C) Enamel  
D) Femur

106. Which is the most malleable metal?
- A) Gold
  - B) Copper
  - C) Silver
  - D) Aluminum
107. What is dry ice?
- A) Liquid Nitrogen
  - B) Water ice
  - C) Solid Carbon dioxide
  - D) Frozen ethanol
108. What is the common name of Calcium Hypochlorite?
- A) Heavy water
  - B) Bleaching powder
  - C) Baking soda
  - D) Baking powder
109. The washing machine works on the principle of which of the following?
- A) Dialysis
  - B) Diffusion
  - C) Reverse Osmosis
  - D) Centrifugation
110. 'Short-sight' in human eye can be corrected by using proper
- A) Convex Lens
  - B) Concave Lens
  - C) Cylindrical Lens
  - D) Bifocal Lens
111. Which of the following memory is used for storing software that does not need updates?
- A) Flash memory
  - B) ROM
  - C) SRAM
  - D) DRAM
112. Which of the following is an antivirus?
- A) Trojan Horse
  - B) Worms
  - C) Macro Virus
  - D) Norton

113. The term FLOSS is associated with
- A) Non-Open Source software
  - B) Proprietary software
  - C) Open source software
  - D) None of the above
114. Daisy wheel printer is what type of printer?
- A) Non impact
  - B) Impact
  - C) Laser
  - D) Line Printer
115. Which of the following cloud storage service owned by Microsoft?
- A) I cloud
  - B) One drive
  - C) Floppy drive
  - D) Google drive
116. Storage of firmware is \_\_\_\_\_.
- A) Cache Memory
  - B) RAM
  - C) External
  - D) ROM
117. In IT Act 2000, which section deals with the punishment for cyber terrorism?
- A) 66 (A)
  - B) 66(B)
  - C) 66 (F)
  - D) 45(F)
118. Digital signature service that has been launched on Aadhar platform is called \_\_\_\_\_.
- A) DigiSign Desk
  - B) eSign Desk
  - C) Online Sign Desk
  - D) Google Sign Desk
119. What does "Smart Governance" involve?
- A) Making governance processes complicated
  - B) Integrating IT to improve service delivery and decision-making
  - C) Avoiding technological advancements
  - D) Reducing transparency in government activities
120. The "UMANG" app allows citizens to access:
- A) Virtual reality games
  - B) Streaming movies
  - C) Government services and information
  - D) Online fitness classes