I. Answer the following: 2x5=10

1. Let A (3,-4), B (9,-4), C (5,-7) and D (7,-7). Show that ABCD is a trapezium.

2. Without using Pythagoras theorem, show that the points (1,-4), (2,-3) and (4,-7) form a right angled triangle.

II. Answer the following: 4x3=12

3. Show that the points (-2,5), (6,-1) and (2,2) are collinear.

4. The line through the points (-2,9) and (9,3) has slope $\frac{-1}{2}$. Find the value of a

5. Find the slope of a line joining the points $\left(\frac{-1}{3},\frac{1}{2}\right)$ and $\left(\frac{2}{7},\frac{3}{7}\right)$

6. What is the slope of a line whose inclination with positive direction of x-axis is   i) $90°$ ii) $0°$

III. Fill in the blanks: 3x1=3

7. The inclination of x-axis and every line parallel to x axis is _____.

8. Two non-vertical lines are parallel if and only if their slopes are _____.

9. The slope of the line joining (12,3), (4,a) is $\frac{1}{8}$. The value of a is _____.

I. Fill in the blanks: 5x1=5

1. The SI unit of resistance is _____.

2. _____ substances are used as drying agents.

3. The molecular formula of blue vitriol is _____.

4. Cytokine induces _____ in the presence of auxins.

5. Went concluded that a chemical diffusing from the tip of coleoptiles was responsible for growth, and he named it as 'Auxin' meaning _____.

II. Answer in one or two sentences: 5x2=10

Part -A (any one)

1. Define SI unit of electric current.

2. A charge of 15 coulomb flows through a bulb in 5 second. What is the current through the bulb?

Part - B (any three)

3. Define hydrated salt.

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4. A solution was prepared by dissolving 25g of sugar in 100g of water. Calculate the mass percentage of solute.

5. In what way hygroscopic substances differ from deliquescent substances. (any two points)

6. Calculate the volume of ethanol in 200ml solution of 20% V/V aqueous solution of ethanol.

7. State True or False: (If false correct the statement)
   i) The molecular formula of green vitriol is $MgSO_4 . 7H_2O$
   ii) When silica gel is kept open, it absorbs moisture from the air, because it is hygroscopic in nature.

Part - C (any one)

8. Name the different types of plant Hormones.

9. What are synthetic auxins? Give examples.

III. Answer in detail: 2x5=10

Part - A (any one)

1. State ohm's law with circuit diagram.

2. Define electric potential and potential difference.

Part - B (any one)

3. Write the physiological Effects of Auxins
                    (or)
4. Write the physiological Effects of Gibberellins.

I. Choose the correct answer: 4x1=4

1. Who is the head of the world trade organization (WTO)
   a) Ministerial Conference   b) Director General
   c) Deputy Direction General   d) None of these

2. When did Portuguese colonize India?
   a) 1600 BC   b) 1602 BC   c) 1498 BC   d) 1616 BC

3. India signed the dunket proposal in _____.
   a) 1984   b) 1976   c) 1950   d) 1994

4. Indian government introduced _____ in 1991.
   a) Globalization   b) World Trade Organisation
   c) New Economic Policy   d) None

II. Fill in the blanks: 4x1=4

1. The term globalization was invented by _____.

2. WTO agreement came into force from _____.

3. The Dutch captured Pondicherry in _____.

4. A better economy introduced rapid development of the_____.

III. Match the following: 4x1=4

1. Multination Corporation
     in India   -   1986

2. GATT   -   Infosys

3. WTO   -   1947

4. 8th Uruguay round   -   Enforce international
                                                    trade

IV. Answer in short: 4x2=8

1. What is globalization?

2. Write short note on Multinational Corporation?

3. What is fair trade?

4. Write short note on Trips and Trims

V. Answer in Detail: 1x5=5

1. Briefly the history of globalization?