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| Questions 1 | Which one of the following items cannot be recorded in the appropriation account? | |
| Type | Multiple - Choice | |
| Option | Interest on Drawings | Incorrect |
| Option | Rent paid to Partners | Correct |
| Option | Partner’s Salary | Incorrect |
| Option | Interest on Capital | Incorrect |
| Solution | Rent paid to Partners | |
| Marks | 1 |  |

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| Questions | **Figure shows currents in a part of an electric circuit, then current I is.** | |
| Type | Multiple-Choice | |
| Option | **(a) 1.7A** | Correct |
| Option | **(b) 3.7A** | Incorrect |
| Option | **(c) 1.3A** | Incorrect |
| Option | **(d) 1A** | Incorrect |
| Solution | **(a) 1.7A**  **Reason:** Kirchhoff current law = Algebraic sum of total current entering a circuit at junction point is exactly equal to the total current leaving the same junction.  **Note:** Kirchhoff first law deals with the conservation of charge.    Apply Kirchhoff current law at point A  2 + 2 = I + 1 + 1.3  I = 4 – 2.3 = 1.7A | |
| Marks | 3 |  |

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| Questions | M, N and O are sharing profits and losses equally. O retires and the goodwill is appearing in the books at Rs. 60,000 Goodwill of the firm is valued at Rs. 3,00,000. Calculate the net amount to be credited to O’s Capital A/c | |
| Type |  | |
| Option | Rs. 90,000 | Incorrect |
| Option | Rs. 80,000 | Correct |
| Option | Rs. 70,000 | Incorrect |
| Option | Rs. 50,000 | Incorrect |
| Solution | Rs. 80,000  **Hint :-**  **A;** Amount of Goodwill debited = 60,000 × 1/3 = 20,000  **B;** Amount of Goodwill credited = 3,00,000 × 1/3 = 1,00,000  Net Amount credited **(B – A)** = 80,000 | |
| Marks | 1 |  |

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| Questions | The balance in the investments Fluctuation Fund, after meeting the loss on revaluation of investment, at the time of admission of a partner will be transferred to | |
| Type | Multiple - Choice | |
| Option | The General Reserve | Incorrect |
| Option | The Revaluation account | Incorrect |
| Option | The Old partner’s Capital Accounts | Correct |
| Option | None of the above | Incorrect |
| Solution | The Old partner’s Capital Accounts | |
| Marks | 1 |  |

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| Questions | On the Balance Sheet total Debtors appear at Rs. 45,000 and Provision for Doubtful Debts appear at Rs. 4,500. How much amount will be realised from Debtors, if bad debts amount to Rs. 7,500 and remaining debtors are realised at discount 2%. | |
| Type | Multiple - Choice | |
| Option | Rs. 32,340 |  |
| Option | Rs. 44,100 |  |
| Option | Rs. 39,690 |  |
| Option | Rs. 36,750 |  |
| Solution | Rs. 36,750  **Hint:-**  Remaining Debtors = Debtors – Bad debts  45,000 – 7,500 = 37,500  Amount Realised = Remaining Debtors – Discount  37,500 – 2% = 36,750 | |
| Marks | 1 |  |

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| Questions | X and Y were in partnership sharing profits and losses equally. Their draft account for the year ended 31st March, 2019 shows a profit of Rs. 2,40,000 before taking into account interest on a loan of Rs. 1,00,000 from Y at 10% Each partner is entitled to a salary as follows  X Rs. 20,000 per annum  Y Rs. 40,000 per annum  What is X’s total appropriation of profit for the year ended 31st March, 2014? | |
| Type | Multiple - Choice | |
| Option | Rs. 1,08,500 | Incorrect |
| Option | Rs. 1,10,000 | Incorrect |
| Option | Rs. 1,05,000 | Correct |
| Option | Rs. 1,15,500 | Incorrect |
| Solution | Rs. 1,05,000  **Hint:-**  Salary of X = 20,000    Total = 20,000 + 85,000 = 1,05,000 | |
| Marks | 1 |  |

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| Questions | A, B & C were partners in a firm. C died on 29th February, 2020. His share of profit from the closure of the last accounting year till the date of death was to be calculated on the basis of the average of three completed years of profits before death. Profits for the years ended 31st March, 2017, 2018 and 2019 were Rs. 1,20,000 Rs. 70,000 and Rs. 80,000 respectively.  Calculate C’s share of profit till his death and pass Journal entry for the same when:   1. There is no change in profit-sharing ratio of remaining partners, and 2. There is change in profit-sharing ratio of remaining partners, new ratio being 3:2 | |
| Type | Subjective | |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Solution | Journal Entry:   1. When there is no change in Profit-Sharing Ratio of A and B: 2. When there is change in Profit- Sharing Ratio of A and B:     **Notes:**   1. Profit sharing ratio of the partners is not given. It means they shared profit equally. 2. Profit and Loss Suspense Account is closed by transferring its balance to the Profit and Loss Appropriation Account at the end of accounting period. 3. Profit-sharing ratio between A and B changed to 3:2. Joshi’s share of profit will be adjusted between A and B in their Gaining Ratio which is calculated as under:   A's Gains = 3/5 – 1/3 = 4/15; B's Gains = 2/5 – 1/3 = 1/15; Thus Gaining Ratio = 4:1 | |
| Marks | 3 |  |

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| Questions | X and Y were partners sharing profit & loss in Ratio of 3:2. they decided to dissolve firm on 31st December, 2020. On above date capitals were Rs. 40,000 & Rs. 30,000 respectively creditors amount Rs. 28,000. Assets were realised for Rs. 92,500. Creditors of Rs. 16,000 were taken by Y at Rs. 14,000. Remaining creditors were paid 5% less. Realisation expenses were Rs. 1,000.  Prepare Realisation A/c & Cash A/c | |
| Type | Subjective | |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Solution |  | |
| Marks | 3 |  |

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| Questions | Amit and Sumit are partners. They admitted Vinit for 2/5th share in profits. For this purpose goodwill is to be valued at three year’s purchase of super profits.  Following information is provided to you :    The normal rate of return is 12% p.a. Average Profit are Rs. 3,06,000 per year. You are required to Calculate Vinit’s share of goodwill. He is not able to bring any amount for Premium for Goodwill. Pass required entry | |
| Type | Subjective | |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Solution | Ans. Adjustment capital of partners = 10,00,000 + 8,00,000 + 1,80,000 – 30,000 | |
| Marks | 3 |  |

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| Questions | The capital accounts of Ram, Shyam and Mohan stood at Rs. 1,00,000 Rs. 75,000 Rs. 50,000 respectively after the necessary adjustments in respect of the drawings and the net profit for the year ended 31st December 2019.  It was subsequently ascertained that 5% interest on capital and on the drawings of each partner had been omitted.  The drawings of the partners have been:  Ram Rs. 10,000  Shyam Rs. 7,500  Mohan Rs. 6,000  The interest on these amounted to Rs. 200; Rs. 150; and Rs. 75 respectively.  The profit for the year as already adjusted amounted to Rs. 50,000. The partners share profits in proportion of 2:2:1.  Give necessary entries for the above adjustments and show your working clearly. | |
| Type | Subjective | |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Solution |  | |
| Marks | 4 |  |

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| Questions | **Which of the following is not a mineral acid?** | |
| Type | Multiple-Choice | |
| Option | **Hydrochloric acid [HCl]** |  |
| Option | **Sulphuric acid [H2SO4]** |  |
| Option | **Citric acid [C6H8O7]** |  |
| Option | **Nitric acid [HNO3]** |  |
| Solution | **Citric acid [C6H8O7]**  **Sol.:** Citric acid is an example of organic acid or edible acid.  **Note**:   * Mineral acids or inorganic acids are generally prepared from the minerals present in the earth’s crust. Eg. HCl (Hydrochloric acid), H2SO4 (Sulphuric acid), and HNO3 (nitric acid) are mineral acid. * Edible acids or organic acids are produced by plants or animals.   E.g.,  • Acetic acid (CH3 — COOH)     * Citric acid (C6H8O7)      * Lactic acid (C3H6O3)      * Formic acid (HCOOH) * Oxalic acid | |
| Marks | 2 |  |

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| Questions | **A solution turns blue litmus to red its pH may be** | |
| Type | Multiple-Choice | |
| Option | 11 |  |
| Option | 14 |  |
| Option | 5 |  |
| Option | 10 |  |
| Solution | (c) 5  **Note**: **pH–Scale**: A scale to measure Hydrogen ion concentration in a solution is called pH scale.   * Neutral substances have a pH of exactly 7(neutralization) * Acid (acidic solutions) have a pH of less than 7 (Acidic nature) * Bases (basic solutions) have a pH of more than 7 (basic nature) | |
| Marks | 2 |  |

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| Questions | **Define the pH scale.** | |
| Type | Subjective | |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Solution | **pH scale**: A scale for measuring hydrogen ion concentration in a solution is called pH scale. pH scale range is 0–14.  **Note**: pH of the solution means negative logarithm at base 10 of H+ ion concentration.  pH = –1og10 [H+]   * Neutral substances have a pH of exactly 7(neutralization). * Acid (acidic solutions) have a pH of less than 7 (Acidic nature). * Bases (basic solutions) have a pH of more than 7 (basic nature). | |
| Marks | 3 |  |

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| Questions | **Assertion: The following chemical equation,**    **is a balanced chemical equation.** | | |
| Type | Multiple-Choice | | |
| Option | **Both A and R are true and R is correct explanation of the assertion A.** | |  |
| Option | **Both A and R are true but R is not the correct explanation of the assertion A.** | |  |
| Option | **A is true but R is false.** | |  |
| Option | A is false but R is true. | |  |
| Solution | A is false but R is true.  **Sol.:** In a balanced chemical equation, the total numbers of atoms of each element are equal on both sides of the equation.  The correct balanced chemical equation is, | | |
| Marks | 3 |  | |

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| Questions | **Calculate the pH of 10–5 M NaOH solution.** | |
| Type | Subjective | |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Solution | NaOH is a strong base. It ionizes completely in aqueous solution as     [OH–] = [NaOH] = 10–5 M  To calculate the pH of the solution, we should known [H+]. This can be calculated by using the formula  [H+] [OH–] = KW = 10–14 M2   pH = –log [H+] = –log [10–9] = 9 | |
| Marks | 3 |  |

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| Questions | **Which acid is produced in our stomach? What happens if there is an excess of acid in the stomach? How can its effect be cured?** | |
| Type | Subjective | |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Solution | Hydrochloric acid is produced in our stomach. The excess acid in the stomach causes indigestion to produce pain and irritation. This effect can be cured by using antacids. Antacids (a group of mild bases) react with excess acid in the stomach and neutralize it. | |
| Marks | 2 |  |

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| Questions | **What is efflorescence?** | |
| Type | Subjective | |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Solution | **Efflorescence**: When a chemical compound loses its water of crystallization on expose to air, this is known as efflorescence.  **Note**: When crystals of washing soda are left open in dry air, they lose nine water molecules and form monohydrate. This phenomenon is called efflorescence. | |
| Marks | 3 |  |

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| Questions | **What is pH scale? Explain the importance of pH in everyday life.** | |
| Type | Subjective | |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Solution | **pH Scale**: pH is a scale on which the strength of acid solution as well as basic solutions are represented by the hydrogen ion concentration in them. pH scale has value from 0 to 14.  pH of the solution means negative logarithm at base 10 of H+ ion concentration.  pH = – log10 [H+]  **Importance of pH in everyday life:**   * Plants and animals are sensitive to pH changes. * Living organisms can survive only in a narrow range of pH change (7 to 7.8). When acid rain (pH less than 5.6) flows in the river aquatic animals like fish cannot survive in it. * Plants require soil of specific pH range for their healthy growth (close to 7). * The pH value of acidic soil can reach as low as 4 and the basic soil can go up to 8.3. Chemicals can be added to adjust pH for the healthy growth. | |
| Marks | 3 |  |

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| Questions | **Balance the following chemical equation and also identify the type of chemical reaction.** | |
| Type | Subjective | |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Option |  |  |
| Solution | (Skelton equation)    Type of reaction: Redox reaction (oxidation – reduction reaction)  During chemical reaction, oxidation an reduction reactions occur simultaneously. Such reaction are called as redox reaction.  Here, H2S is oxidized. [Removal of hydrogen]  I2 is reduced. [Addition of hydrogen]      Type of reaction: Decomposition reaction.  Those reactions in which a compound splits up into two or more simpler substances are known as decomposition reaction.      **Type of reaction:** Double displacement reaction.  Those reaction is which two compounds react by an exchange of ions to form two new compounds. | |
| Marks | 3 |  |

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| Questions | **A certain piece of copper is to be shaped into a wire of minimum resistance. Its length and diameter should be.** | |
| Type | Multiple-Choice | |
| Option | **(a) L, D** | Incorrect |
| Option | **(b) 2L, D** | Incorrect |
| Option | **(c)** | Correct |
| Option | **(d)** | Incorrect |
| Solution | **(c)**  **Reason:** Resistance of wire    Where,  = resistivity of wire  *l* = length of wire  A = Cross-sectional area of wire    D = diameter of wire  Resistance R =  For minimum resistance  Option (a) Length = *l* Diameter =D  = R  Option (b) Length = 2*l* Diameter =D  = 2R  Option (c) Length =  Diameter = 2D  R3 =  Option (d) Length = 2L Diameter =  R4 =  Minimum resistance is  when length = , diameter = 2D. | |
| Marks | 4 |  |

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| Questions | **What is the current (I) in the circuit?** | |
| Type | Multiple-Choice | |
| Option | **(a) 1.5 A** | Correct |
| Option | **(b) 2.5 A** | Incorrect |
| Option | **(c) 3.5 A** | Incorrect |
| Option | **(d) 4.5 A** | Incorrect |
| Solution | **(a) 1.5 A**  **Sol.:** Total resistance in parallel combination    Total resistance in series combination    Electric current form ohm’s law    Where, I = current in wire  V = potential difference  R = resistance of wire  The given circuit can be simplified is    Both 2 resistances are in parallel    Both 1 resistances are in series    Both 2 resistances are in parallel     I =  = 1.5A  Thus, the current flowing through the circuit is 1.5A. | |
| Marks | 5 |  |