Physical Chemistry 2nd YUGS EV ST

Signature (12.2)

asse os s **cumens** astansiriyah Universit

epartment of Chemistry

The reduced phase rule is interested in two variants across at a R F R F

The three phases of HyO in the phase diagram meets?

aswer: a) at lasm b) over lasm

Liquid solution of HNOs is formed from?

it How many phoses are there when the number o

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by The Clausius-Clapeyron equation can be applied when there is 4nswert - at UKU - bit Set - cl. 6 & ...

7: One of the following formulas represents the right eq. $(assert a) P_A = \chi_4 P^*_A \qquad b) P_A > \chi_4 P^*_A$

8: Malality is used to calculae the molar muss of the? Inswer: a) non-volatile solute 5) pure sol

16. One of the most important benefits of measuring APE, \$15. \$17, and \$11 is to calculate - - - of B?

M in Thousan

The vapor pressure (VP) of a substance in

have VP of 150 terr? Appli is 45 kJ mol??

Plot the phase diagram of the system (A & B) assumed that (A & B) do not react with each other. A freezes at (-5 °C) and B freezes at (7 °C), and that an entectic mixture is formed when the ratio is 70 with the content of the conte

Best wishes

Dr Abduljabbar I. R. Rushdi

50 K. At what icapperature will the substance

1=250K

DK-45000)

Q3.

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| Physical_Chemistry_ | 2 nd YUGS EV ST | 100 |
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| Name of a student | Signature - Signature | No |
| Mustansiriyah University | | 2025_Bologna_Process |
| Department of Chemistry | | m_Class_B_Paper_A |
| | | |
| Q1/MCQ test (Answer the following) | | (Marks 50 %) |
| 1: The reduced phase rule is interested in two variants? | | 1 6 |
| Answer: a) p & P b) F & T | c) p & conc. | d) T & conc. |
| 3/6/1/2016 | 71 | 1,1 11 10 1111 |
| 2: Ideal solution follows law. | Second 1 | |
| Answer: a) Raoult's b) Trouton's | c) Henry's law | d) Van't Hoff's law |
| Celes (in) jes . | -0 | |
| 3: The three phases of H ₂ O in the phase diagram meets? | | Ma |
| Answer: a) at 1 atm b) over 1 atm | c) below 1atm | d) at any pressure |
| اعطاء الما مل للني التريكي | | |
| 4: Liquid solution of HNO3 is formed from? | | * |
| 5: How many phases are there when the number of varian | c) 3 C | d) 4 C |
| 5: How many phases are there when the number of varian | nts is zero and the number | of components is one? |
| Answer: a) zero b) 1 | c) 2 | d) 3 |
| | | |
| 6: The Clausius-Clapeyron equation can be applied when | | |
| | c) G & L | d) S & S |
| 7: One of the following formulas represents the right and | ation of House in Inc. | |
| 7: One of the following formulas represents the right equal Answer: a) $P_A = \chi_A P^*_A$ b) $P_A > \chi_A P^*_A$ | c) P | * _A d) none of these |
| C'3', or Clad NIVAL Pionis | C) IA | ay none of these |
| 8: Molality is used to calculate the molar mass of the? | | |
| Answer: a) non-volatile solute b) pure solute | c) pure solvent | d) solution |
| الفع الازمري ليولم وفاعلية لأالمنيالي | | |
| 9: Osmosis pressure exerts when the solvent transfers to the | | ~ / |
| Answer: a) volatile solute b) non-volatile solute | e c) pure solvent | d) solution |
| امالاشاء اعجمال في في بالمال | | |
| 10- One of the most important benefits of measuring $\triangle VP$ Answer: a) M b) m | $(a, \Delta T_b, \Delta T_f)$ and ΔH is to call $(a, b, \Delta T_b)$ | |
| 30 | , | d) p |
| (VP) of a substance is 30 torr at | 250 K At what company | |
| | 250 K. At what temperat | ure will the substance |
| have VP of 150 torr? Δ_{vap} H is 45 kJ mol ⁻¹ ? | Son | (Marks 25%) |
| JA be s mil | 25 | |
| Q3/ Plot the phase diagram of the system (A & B) assun | | eact with each other. A |
| freezes at (-5 °C) and B freezes at (7 °C), and that | | 000.00:41 - /10 |
| % of A and that the eutectic melts at (-10°C), then label all the parts (n & F) of the diagram? (Narks 25%) | | |
| % of A and that the eutectic melts at (-10°C), then | | |
| % of A and that the eutectic melts at (-10°C), then | | |

Thur_13-03-2025

Best wishes

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