killexams.com

Medical

BMAT

Biomedical Admissions Test

ORDER FULL VERSION

Question: 58

A colloid made from a liquid dispersing medium and gas dispersed phase is called what?

A. Aerosol
B. Emulsion
C. Sol
D. Solid Foam
E. Foam

Answer: E

Foams are colloids with a liquid dispersing medium and a gas dispersed phase. An aerosol has a gas dispersing medium and dispersed phase. An emulsion has a liquid dispersing medium and dispersed phase. A sol has a liquid dispersing medium and a solid dispersed phase. A solid foam has a solid dispersed medium and a gas dispersed phase.

Question: 59

Which of the following is not true about complex ions?

A. Complex ions are formed with a metal as the central atom
B. The other molecules that bond to the metal are called ligands
C. Ligands act as Lewis Acids
D. The coordination number of a complex ion refers to the number of bonds the center atom forms
E. All of the above are true

Answer: C

Ligands, the compounds that bind to the central metal atom, always act as Lewis Bases. Lewis Bases donate lone pairs of electrons to the Lewis Acid (the metal ion). All other statements are true.

Question: 60

A fixed quantity of a gas undergoes a change in temperature from 100 K to 200 K and a change in pressure from 2 atm to 1 atm. After theses changes, the volume of the gas is

A. Half of the original volume
B. Unchanged
C. Twice the original volume
D. Four times the original volume
E. Eight times the original volume

Answer: D

The pressure, temperature, and volume of a gas are related by the ideal gas law, $PV=nRT$. Solving for volume gives the equation $V=(nRT/P)$. The molar quantity of gas (n) is constant, so the equation reduces to $V=T/P$. In the context of the question, temperature is doubled while pressure is halved, resulting in a four-fold increase in volume.

Question: 61

When sodium acetate, $NaCH_3COO$, is added to water the resulting solution is basic. True or false?

A. True
B. False

Answer: A

The statement is true. In water, $NaCH_3COO$ forms Na^+ and CH_3CO ions. Na^+ is neutral, and does not affect the pH of the solution. CH_3COO^- is the conjugate base of acetic acid, and reacts with water to form hydroxide ions. Therefore, the resulting solution will be basic.

Question: 62

What do the letters in the S-T-A-R method of communication stand for?

A. Standard Target Acquisition Review
B. Situation, task, action, result
C. Start, train, act, review
D. Say it, try it, act on it, review it
E. They don't actually stand for anything.

Answer: B

STAR stands for situation, task, action, result. S - Explain the situation. T - Describe the task that needed to be completed. A - What action did you take? R - Describe the result. For example: "I was brought in to lead a $1.5 million project that was failing and management didn't understand why. My task was to bring the project back on schedule. To do this, I analyzed why the project had fallen behind schedule and discovered the team was in a matrixed organization and the operational processes were taking precedence over this project. To solve the problem, I worked with functional managers to free up time for key resources. The result was that we got the project turned around and delivered on schedule. Furthermore, we won an additional $500,000 contract because the client went from being dissatisfied to very happy." Key Takeaway: STAR is an effective technique to deliver a cohesive narrative of what you are doing or have done Master it and you will win points in interviews and with senior managers. Have at least 10 of these scenarios prepared. Try not to re-use any in one given day, no matter how many interviews you have. At the end, people get together and compare notes. Plus, in many cases, that perfect example you have won't fit the question that is asked. If someone asks you about a time you managed a team through adversity, you can't use your story about how you singlehandedly increased earnings 20 percent while saving the CEO's grandmother from a burning house.

Question: 63

A princess who is severely allergic to certain frogs is confronted with the possibility that her prince may be a frog. There are 3 frogs in front of her. She's

not sure she'll be allergic to the frog until she kisses it. One frog is definitely safe to kiss. Should she kiss a frog and risk death?

A. Yes
B. No
C. Maybe

Answer: C

Maybe is the best choice here. This is a somewhat absurd question, but it's one an editor had in an interview. It is designed throw you off. The question is at the end of the day about risk. Businesses must take risks to succeed. Princesses may have to in order to find their Prince Charming. Key Takeaway: The interviewer is really asking you to analyze the risk and determine if it is worth it. This is an easy question if you do not panic. Maybe a quick Q&A could lead to an answer here, or you can propose something out of the box to manage this risk, like a big box of Benadryl.

Question: 64
How many molecules are in .275 grams of SO_3?

A. 3.22×10^{20}
B. 4.50×10^{21}
C. 2.07×10^{21}
D. 1.12×10^{20}
E. 4.56×10^{22}

Answer: C

Begin this problem by converting grams of SO_3 to moles of SO_3 using the molar mass of SO_3. Once you have obtained this value, use Avogadro's number to convert moles of SO_3 to molecules of SO_3. The final expression is (.275 grams SO_3) x (1 mol / 80.057 grams) x (6.022×10^{23} molecules / 1 mol), indicating that the correct answer is 2.07×10^{21}.

Question: 65

What volume of .250 M potassium hydroxide is needed to neutralize 1.25 liters of .500 M hydrochloric acid?

A. 2.50 liters
B. 1.25 liters
C. .625 liters
D. .375 liters
E. 5.0 liters

Answer: A

Hydrochloric acid (HCl) is a strong, monoprotic acid. Potassium hydroxide (KOH) is a strong base that contains one hydroxide anion per molecule. The concentrations and volumes of these solutions are related by the formula (Molarity1)(Volume1) = (Molarity2)(Volume2). Entering the variables into this equation gives (.250 M)(Volume1) = (.500 M)(1.25 liters). Solve for Volume1 to find the correct answer, 2.5 liters.

SAMPLE QUESTIONS

*These questions are for demo purpose only. **Full version** is up to date and contains actual questions and answers.*

Killexams.com is an online platform that offers a wide range of services related to certification exam preparation. The platform provides actual questions, exam dumps, and practice tests to help individuals prepare for various certification exams with confidence. Here are some key features and services offered by Killexams.com:

Actual Exam Questions: Killexams.com provides actual exam questions that are experienced in test centers. These questions are updated regularly to ensure they are up-to-date and relevant to the latest exam syllabus. By studying these actual questions, candidates can familiarize themselves with the content and format of the real exam.

Exam Dumps: Killexams.com offers exam dumps in PDF format. These dumps contain a comprehensive collection of questions and answers that cover the exam topics. By using these dumps, candidates can enhance their knowledge and improve their chances of success in the certification exam.

Practice Tests: Killexams.com provides practice tests through their desktop VCE exam simulator and online test engine. These practice tests simulate the real exam environment and help candidates assess their readiness for the actual exam. The practice tests cover a wide range of questions and enable candidates to identify their strengths and weaknesses.

Guaranteed Success: Killexams.com offers a success guarantee with their exam dumps. They claim that by using their materials, candidates will pass their exams on the first attempt or they will refund the purchase price. This guarantee provides assurance and confidence to individuals preparing for certification exams.

Updated Content: Killexams.com regularly updates its question bank and exam dumps to ensure that they are current and reflect the latest changes in the exam syllabus. This helps candidates stay up-to-date with the exam content and increases their chances of success.

Technical Support: Killexams.com provides free 24x7 technical support to assist candidates with any queries or issues they may encounter while using their services. Their certified experts are available to provide guidance and help candidates throughout their exam preparation journey.

For More exams visit https://killexams.com/vendors-exam-list
Kill your exam at First Attempt....Guaranteed!