کارشناسی (سنتی)- کارشناسی ارشد (فراگیر)



تعداد سؤالات: تستى: ۳۰ تشريحى: ۱۱

زمان أزمون (دقيقه): تستى: ۶۰ تشريحى: ۶۰



نام درس: زبان تخصصی

رشته تحصیلی/ گد درس: شیمی محض و کاربردی (۴۰۲۸

استفاده از:

کُد سری سؤال: یک (۱)

امام خمینی (ره): این محرم و صفر است که اسلام را زنده نگه داشته است.

	,							
A. Choose the best choice (a,b,c or d) to complete the each statements.								
1 gives all of us the opportunity to become magicians with matter.								
a. Equipments	b. Experiments							
c. Chemistry	d. Instruments							
; 3 .	The first step in scientific methods is to collect data by making							
a. hypothesis	b. calculations							
Vc. observations	d. estimations							
John Dalton interpreted experimental re	John Dalton interpreted experimental results to propose the that matter consists of b. hypothesis, atoms							
a. principle, molecules	b. hypothesis, atoms							
ge. discovery, ions	d. invention, atoms							
A. A is a rigid and compact form of m	A is a rigid and compact form of matter with shape and volume.							
a. liquid , variable	b. solid, constant							
E c. solid , variable	d. gas, variable							
c. solid, variable d. gas, variable, is the energy a body possesses because of its motion. a. total energy b. potential energy c. kinetic energy d. activation energy								
S a. total energy	b. potential energy							
E c. kinetic energy	d. activation energy							
6. The of the velocity of an object is called its speed.								
a. direction b. effect	c. derivative d. magnitude							
7. Mass and volume are properties.								
a. chemical b. intensive	c. extensive d. microscopice							
8. The smallest particle of an (a) that can exist is called								
a. element, clectron	b. element, atom							
c. mixture, ion	d. mixture, element							
9. Moseley found that the properties of the x – rays by an element depend on its								
a. absorbed, physical state	b. emitted, atomic number							
c. absorbed, group number	d. emitted, mass number							

کارشناسی (سنتی)- کارشناسی ارشد (فراگیر)



تعداد سؤالات: تستى: ٣٠ تشريحى: ١١

زمان أزمون (دقيقه): تستى: ۶۰ تشريحى: ۶۰



نام درس: زبان تخصصی

رشته تحصیلی/ گد درس: شیمی محض و کاربردی (۴۰۲۸ و

استفاده از:

کُد سری سؤال: یک (۱)

10. Millican experiments that enabled him to determine the charge of the electron							
a	. estimate	b. carried out	c. emphasise	d. contribute			
11.	1. Atoms with the number of protons but number of neutrons are called						
a	a. Same, different, isotones		b. different, same, isotopes				
c	c. same, different, isotopes		d. different, same, isotones				
Q 2.	The mass be	etween isotopes of hy	drogen are relatively large.				
3	. equallity	b. differences	c. exchanges	d. transfer			
Ú3.	B. Compared with the size of the nucleus, the space occupied by the electrons is						
ું ∏a	. tiny	b. negligible	c. point like	d. enormous			
₹.	4. A (An) has the appearance and properties of metal but behaves chemically like						
ijķι	4. A (An) has the appearance and properties of metal but behaves chemically like a onmetal. a. metalloide b. organo metallic c. alloy d. transition metal						
્ટું _a	. metalloide	b. organo metallic	c. alloy	d. transition metal			
13.	5 is a device for determining the mass of atoms.						
_	a. Analytical balance		b. Mass exchanger				
	c. Digital balance		d. Mass spectrometer				
5 6.	6 is a general term for a plot showing the variation of a property at constant temperature.						
	. Curve		c. Phase diagram				
17. As a gas is heated, its molecules			more energy and move				
a	gain, faster		b. lose, faster				
c	absorb, slower		d. need, fast				
18.	18 forces are the attractions and repulsions between molecules.						
a	intra molecular		b. inter molecular				
c	. mechanical		d. electrical				
19. Attractions the potential energy of an object.							
a	often decrease		b. seldom increase				
c	always increase		d. always decrease				

کارشناسی (سنتی)- کارشناسی ارشد (فراگیر)



تعداد سؤالات: تستى: ٣٠ تشريحى: ١١

زمان أزمون (دقيقه): تستى: ۶۰ تشريحى: ۶۰



نام درس: زبان تخصصی

رشته تحصیلی/ گد درس: شیمی محض و کاربردی (۴۰۲۸ و

استفاده از:

کُد سری سؤال: یک (۱)

20.	20. Many of physical properties of gases are very, particularly at							
a.	a. different, low pressures		b. different, high temperature					
c.	c. similar, low temperature		d. similar, low pressures					
21.	Homogeneous mix	tures are also called						
a.	solutes	b. solvents	c. solids	d. solutions				
3 2.	A(An) gives a solution in which the solute is incompletely ionized in solution.							
, Za.	. weak electrolyte		b. non electrolyte					
Uc.	strong electrolyte		d. ionic dissolving					
3 3.	33. In the solvent is a solid a. aqueous solution b. solid solution c. nonaqueous solution d. stock solution 24 Separates the components of on the basis of differences in particle size. a. filtration, compound b. decenting, asymptotic defiltration, mixture							
Ša.	. aqueous solution		b. solid solution					
ÚÇ.	c. nonaqueous solution		d. stock solution					
<u>\$</u> 4.	Separates	the components of	on the basis of d	on the basis of differences in particle size.				
Ĵa.	a. filtration, compound c. decanting, compound		b. decanting, mixture					
¥c.			d. filtration, mixture					
8 5.	decanting, compound d. filtration, mixture In							
g a.	qualitative	b. volumetric	c. gravimetric	d. photometric				
Z 6.	is the proc	ss of electron gain.						
			b. dissociation, activation					
c. reduction, oxidation			d. oxidation, reduction					
27 hydrocarbon has one or more double or triple bonds.								
a. An aromatic		b. An unsaturated						
b. An aliphatic			c. A saturated					
28. Alkane substitution by a radical chain mechanisme.								
a.	takesplace	b. restrict	c. confine	d. enrich				
29. A is a reactant that centers of positive charge in a molecule.								
a.	nucleophile, seeks	out	b. nucleophile, leave					
c.	c. electrophile, look for		d. electrophile, leave					

کارشناسی (سنتی)- کارشناسی ارشد (فراگیر)



تعداد سؤالات: تستى: ٣٠ تشريحى: ١١

زمان أزمون (دقيقه): تستى: ٤٠ تشريحى: ٤٠



نام درس: زبان تخصصي

رشته تحصیلی/کُد درس: شیمی محض و کاربردی (۴۰۲۸ 🍾

استفاده از:

گد سری سؤال: یک (۱)

30. The proteins, carbohydrates and nucleic acids are

a. industrial polymers

b. synthetic compounds

c. inorganic polymers

d. natural polymers

سؤالات تشريحي

« هر سؤال ۲/۰ نمره »

Give a convenient meaning in Persian for each of the following terms and write at least two verivatives for each one in detail sheet.

n procedure

🔊 fluid

3 exchange

4. refine

5. pollute

2. translate the following passages to the Persian.

<u>هر سؤال ۱ نمره</u>

A change in physical state brought about by heating may be reversed by cooling, and a chemical hange can be reversed only by other chemical change.

A magnetic field is a function that affects moving charged particales.

- 8. The relative heights of the peaks indicate the proportions of ions various masses.
- 9. All molecules attract one another when they are a few molecular diameters apart.
- 10. We can identify the form of the solute by noting whether the solution conducts an electric current.
- 11. Nuclear magnetic resonance spectroscopy, measures the environments of certain nuclei in a molecule to elucidate its structure.