1. Born on March 14, 1879 in Germany, he won the 1921 Nobel Prize for Physics. For ten points, who was this scientist noted among other things, for his work on the photoelectric effect? (Einstein)
2. It was the seventh state to ratify the constitution, and its flower is the black-eyed susan. The state bird is the baltimore oriole, and the Goddard Space Centeris located there. FTP, what is the state? (Maryland)
3. "Thomas Jefferson survives", he said, then lapsed into a coma from which he never revived. He was wrong, for Jefferson had-preceded him in death by a few hours. FTP, who was this ex-president? (John Adams)
4. Brian Epstein managed the Beatles, and Col. Tom Parker managed you-know-who. FTP, who was the long-time manager of the Rolling Stones? (Andrew Long Oldham)
5. In statistics you use a chi-square, and in drafting a T-square. FTP in what field of biology would you most likely use a Punnet square? (genetics)
6. You all know the islands of Langerhans are in the pancreas, but this question is about what goes out of the vancreas. FTP, name one of the two hormones which it secretes.
(glucogen or insulin)
7. His reoordings include Blue Haze, Round about Midnight and Sketches of Spain. FTP, who is this jazz artist who recorded the seminal Bitches Brew?
(Miles Davis)
8. The Dodgers beat the Ewins in the World Series, New York suffers a major blackout, Malcolm X is shot, and Martin Luther King, Jr. leads a march from Selma to Birmingham. FTP, what's the year? (1965)
9. We all have checkbooks, and maybe half the time, they're actually balanced. FTP, in governmental circles, who is credited with the development of the principle of checks and balances which influenced Madison in drafting the Constitution? (Montesqueieu)
10. "Welll I've ffen seen a cat without a grin...but a grin without a catl It's the most curious thing I ever saw in all my life!" And it will be curiouser and curiouser if, FTP, you cannot tell me the classic work from which this quote comes. (Alice's Adventures in Wonderland or Alice in Wonderland)NOT Throughthe LookingGlass
11. Durkheim's Division of Labor; Hegel's Theory of Right; Locke's Third Treatise; or Pascal's Pensees. FTP, which of these is an imaginary work?
(Locke's Thirid Treatise)
12. In Arthur Miller's Dea'h of a Salesman, we meet the salesman Willy Loman. FTP, in what Eugene O'Neill play would you find the salesman named Hickey? (The Iceman Cometh)
13. Mad Trist, by Sir Launcelot Canning; Modern Warfare by General Tom Thumb; The Seven Minutes by J.J.Jadway, and the Necronomicon by Abdul Alhazred. FTP, what do these books all have in coommon?
(They are imaginary(accept equivalents))

CHICAGO C TOSEUPS p. 2
14. He was voted out of command by his troops after he had won his most ffmous victory. He was captured by the British, escaped and joined Washington at Valley Forge. FTP, identify this soldier, whose only notable achievement was the capture of Fort Ticonderoga. (Ethan Allen)
15. FTP, what American city acquired its name when it was christened in French as "city of the strait" when founded in 1701 by Antoine de la Mothe Cadillac?
(Detroit)
16. They are complex molecules containing carbon atoms
arranged in four interlocking rings. Three of the rings contain 6 carbon atoms each; the fourth contains 5. Examples include vitamin D, male and female sex hormones, bile salts and cholesterol. FTP, identify this class of compounds which recently have gotten bad press for inducing psychosis in athletes. (Steroids)
17. It is officially the Jules Rimet Trophy, and it represents the world championship in a particular sport. It was first awarded in 1930, and is awarded every four years. FTP, what is the common name of this trophy?
(World Cup in soccer)
18. "Chapter 46. In which Miss Pecksniff makes love, Mr. Jones makes wrath, Mrs. Gamp makes tea, and Mr. Chuffey makes business." FTP, in which Dickens novel would you find this chapter heading? (Martin Chuzzlewit)
19. For a quick ten points, what was the familial relationship between Henry VII and Henry VIII of England? (Father \& Son)
20. George and Ira Gershwin wrote the opera Porgy and Bess. FTP, who wrote the novel Porgy on which the opera is based? (DuBose Heyward)
21. Fought between Russian troops under Tsar Peter I and the combined forces of Charles XII of Sweden and the Cossack chief Mazeppa, this 1709 battle marked Russia's emergence as a world power. FTP, name it.
(Poltava)
22. Sometimes called Charcot's Disease, this degenerative disease of the central nervous system causes hardening of tissues in the brain and spinal cord. FTP, name this "greatest crippler of young adults."
(Multiple sclerosis, or MS)
23. Balboa, as everyone knows, discovered the Pacific Ocean. Well, almost everyone. FTP, according to John Keats, who accomplished that feat, in his "On First Looking into Chapman's Homer"? (Cortez)
24. In psychiatry it is a major state of personality dissociation characterised by amnesia. In music it's a contrapuntal polyphonic musical form. FTP, what is this word, derived from the Latin for "flight"? (Fugue)
25. According to one book of the Bible, a daughter of Herodias, whom later writers have named Salome, demanded that she be siven John the Baptist's head in a charger. FTP, this tale appears in which Biblical book? (Matthew)

CHICAGO C BONI p. 1
(30) 1. Three statistical distributions are used in statistical mechancics. Fot 10 points each, name these three distributions.
(Maxwell-Boltzman, Fermi-Dirac and Bose-Einstein)
(25) 2. Yeah, you've heard the phrase "a bushel and a peck", but you probably don't know just how much that is. For 20 points, how many quarts are in a bushel and a peck?
(40)
(25) 3. Sometimes the first names are all you need. For instance, John Paul, George and Ringo are immediately recognizable as the Beatles. For 5 points each, identify the following bands based on the first names of their members.
A. Mick, Keith, Charlie, Brian, Bill (Rolling Stones)
B. Pete, Roger, John, Keith (The Who)
C. Johnny, Sid, Steve, Paul (Sex Fistols)
D. Bono, Edge, Adam, Larry (U2)
E. Johnny, Tommy, Dee Dee, Joey (Ramones)
(20) 4, For 10 points each, answer these questions about the Reconstruction

Era. A. This southern state had been readmitted to the Union and
Federal troops were withdrawn in 1868 , byt when the state legislature expelled the Negroes, federal troops returned. Name the state. (Georgia)
B. Radical reconstructionists received a setback in 1866 when the courts ruled that martial law was not permitted when the civil courts were
in operation. Name this famous Supreme Court case. (ex parte Milligan)
(30) 5. Ifentify this 8 -letter word, 30-20-10.
A. It is a higher plane curve and a special case of a hypocycloid. Its equation in $x$ to the $2 / 3$ plus $y$ to the $2 / 3=R$ to the two-thirds.
B. Adding the letters "ea" to the end of this word makes the class of the phylum Echinodermata, including the starfish.
C. They are small members of the orbital system lying between Mars and Jupiter. (Asteroid)
(30) 6. FTP each, tell me in what famous disaster each of these men perished. A. The Roman historian Pliny the Elder (eruption of Vesuvious/destruction of Pompe B. John Jacob Astor IV (sinking of the Titanic)
C. Harry Truman (Mt. St. Helens) (HOST NOTE: Not the president, but the old duffer who refused to move)
(20) 7 He was of Indian origin and lived for several years on the Kaw Indian reservation, before he went on to serve as vice-president under Herbert Hoover. For 20 points, identify this accomplished Indian.
(Charles Curtis)
(20) Q. A simple problem in vectors. A. For 10 points, add the foliowing 3 vectors together: $a=4 i-j ; \quad b=-3 i+2 j ; c=-3 j . \quad$ $\quad \underline{i}-2 j)$ B. For 10 points more, what is the magnitude of the vector you have just formed by adding the 3 original vectors together? (square root of 5)
(20)9. In Greek myth, there was a robber in Attica who placed passersby in an iron bed, then cut off any overhanging parts, or stretched them to fit if they were too small. FTP, who was he, and for 10 more, who put an end to this reign of terror by killing the robber in his own bed?
(Procrustes, killed by Theseus)
(20) 10. FTP each, name the two major protein constituents of human muscle tissue.
(Actin and Myosin)
(25) 11. Two's company, three's a crowd. For 5 points each, give the famous third member that makes each of these companies a crowd.
A. Dismas, Gestas and . . . (Jesus Christ)
B. Ham, Shem, and . . . (Japheth)
C. Armstrong, Coliins, and . . . (Aldrin)
D. Caspar, Balthazar, and . . . (Melchior)
E. Martin, Barton, and .... (Fish) (3 congrescon who opposed FDR'spolicies)
(30) 12. Name this eccentric English chemist, 30-20-10.
A. He was the first to measure the weights of gases to determine density.
B. He was the first to determine the gravitational constant, and thus
the first to accurately compute the mass and density of the earth.
C. He was the first to discover hydrogen.
(Henry Cavendish)
(20) 13. Faulkner wrote the Bear, and so did Chekhov. For 5 points each, what poets wrote this menagerie of works?
A. The Flea
(John Donne)
B. The Owl and the Pussycat (Edwand Lear)
C. The Purple Cow
(Gellett Burgess)
D. The Tyger
(William Blake)
(30) 14. Between 264 and 146 BC, three Punic Wars were fought. FTP each:
A. Name the two city-states who fought the Punic Wars. (Rome and Carthage)
B. Hannibal was the most famous general of the Wars, but lost anyway.

Who was the Roman general who defeated him at Zama in 202 BC (Scipio Africanus
C. Who, by demanding "Carthage must be destroyed" in every speech,
helped bring on the Third Punic War and the final defeat of Carthage.
(Cato the Elder or Cato the Censor or Marcus Cato)
(20) 15. The dinosaurs are classed in two major categories, based upon the shapes of their hipbones. FTP each, give the names for the two major orders of dinosaurs. (ornithischians and saurischians)
(30) 16. Berkyllium takes its name from the city where the main campus
of the University of California is located. FTP each, give the name
of the element which takes its name from:
A. Latin for Copenhagen (Hafnium)
B. Latin for Stockholm (Holmium)
C. Latinfor Paris (Lutetium)
(30) 17. Sometimes it's hard to remember the names of yesterday's best sellers. For 15 points each, name the authors of these 16 th century bestsellers.
A. Orlando Furioso (1532) (Ludivico Ariosto)
B. Jerusalem Delivered (1575) (Torquato or Torquato Tasso)
(30) 18. Hollywood has always been fascinated with Kings. FTP each,
give me the titles of the following fillms, all with the word "King" in the title.
A. Jack Nicholson, Bruce Dern and Ellen Burstyn starred in this 1972 film about a late night radio talk show host. (King of Marvin Gardens)
B. The 1941 movie about small town life in 1900 starring Ann Sheridan, Robert Cummings and Ronald Reagan (King's Row)
C. Merican C. Cooper and Ernest B. Schoedsack directed this 1933 classic which won an oscar nomination for best photography. (King Kong)
19. Heat capacity is the amount of heat in calories required to raise the temperature of one mole of a substance one degree centigrade. In the following questions, $R$ is the universal gas constant.
A. $C_{v}$ (READ $C$ sub $v$ ) is the heat capacity at constant volume of
an ideal monatomic gas. FTP, what does $C_{v}$ ecual in terms of $R$ ? ( $3 / 2 R$ )
B. For 10 more, what does $C_{p}$, heat capacity at constant pressure, equal interms of $R$ ? ( $5 / 2 \mathrm{R}$ )
C. For a last 10, what does the heat-capacity ratio ( $\mathrm{C}_{\mathrm{p}}$ divided by $\mathrm{C}_{\mathrm{v}}$ ) equal? (5/3, or 1.67$)$
20. (25) London is obviously the largest city in the United Kingdom. For 5 points each, and an additional 5 points if you get all 4, name the next 4 largest cities in the United Kingdom of Great Britain and Northern Ireland. (Birmingham, Sheffield, Leeds, Glasgow)
21. (30) FTP each, identify the sport associated with the following:
A. 24 -second rule (Basketball)
B. 20 -point must system (Boxing)
C. $20-$ second rule (not 20 sec. timeout) (boxing--he has 20 secs. to get back into the ringwhen forced out.
(25) 22. He was the last of the Milesian school of philosophers and, like Thales, held that a single element lay behind the diversity of nature. For 25 points, who was this Greek philosopher who thaought that everything was made of air? (Anaximenes NOT Anaxagoras or Anaximander)

