1. The chapel at Pembroke College Cambridge, the Sheldonian Theater at Oxford, the library of Trinity College, Cambridge, Temple Bar, the Ashmolean Museum, Greenwich Hospital, the Royal Exchange, and Chelsea Hospital. For 10 points, what 17th and 18th century British architect designed all these structures as well as the new St. Paul's Cathedral following the Great Fire of London.

Answer: Sir Christopher Wren
2. An outgrowth of The Housemartins, this British group, with such songs as "Old Red Eyes is Back", "36D", and "We Are Each Other" recently reached $\# 3$ on the all time album sales list in Britain with their album "Carry on Op the Charts". For 10 points, identify this band whose other albums include "Choke", "0898" and "Miaow" and whose name sounds like the scenery you may have passed coming into Knoxville.

Answer: The Beautiful South
3. Straddling the equator, it rises in a series of steps from a coastline with lagoons and mangrove swamps to the African central plateau in the east. It is bordered by Congo, Equatorial Guinea, and Cameroon and its chief river is the Ogooue which flows into the Atlantic. For 10 points, identify this west African nation with its capital at Libreville. Answer: Gabon
4. He married Tullia the daughter of Servius Tullius, whom he succeeded to the throne. He made Rome powerful and expanded its dominion but following his son Sextus ${ }^{\prime}$ rape of Lucrece, was overthrown and banished fron Rome. For 10 points, identify this last king of Rome. Answer: Lucius Tarquinus Superbus

5. The name's the same: One was the daughter of Nisus, who after betraying her homeland of Megara to Minos was drowned and changed into an egret. The other's death is sometimes attributed to Heracles who slew her for devouring a number of the cattle of Geryon. For 10 points, identify this woman loved by Glaucus who was transformed by circe into a woman with six dogs' heads on the lower part of her body that devoured creatures in the Strait of Messina.

Answer: Scylla
6. The lower case of this symbol is used in thermodynamics for the ratio of constant pressure and constant volume heat capacities for an ideal gas. It also refers to a special function, that for any integer $n$, the function yields the factorial of $\mathrm{n}-1$ and for one-half is the square root of pi. For 10 points, what is this Greek letter most familiarly applied to the high energy photons released during radioactive decay?

Answer: gamma
7. At the age of 15 , her marriage was arranged by the Duke of Northumberland to his son, Guilford Dudley. The Duke's purpose was to change through her the Royal Succession upon the death of Edward VI. For 10 points, identify this unfortunate girl and queen of England for nine days in 1553.

Answer: Lady Jane Grey
8. The site that inspired this work is located in the Wye River valley in Wales. An ode in everything but name, it expresses the profound meaning of a pilgrimatge or return to a special sacred place. For 10 points, identify this Wordsworth poem that begins with the lines "Five years have passed; five summers, with the length/of five long winters!..."

Answer: Lines Composed a Few Miles Above Tintern Abbey
9. This actor made his first film appearance in 1958, playing the lead in Roger Corman's The Cry Baby Killer. His other roles include that of Bobby Dupea in Five Easy Pieces, Jack Torrance in The Shining, and Jake Gittes in Chinatown. For 10 points, identify this actor who won Acadeny Awards for his roles in One Flew Over the Cuckoo's Nest and Terms of Endearment.

Answer: Jack Nicholson
10. ER Eddison wrote a A Fish Dinner at Hemison but this man wrote The Fish Can Sing. Carl Sandburg wrote The People, Yes and this man wrote Independent People. Gerhart Hauptmann wrote The Weavers but this man wrote The Great Weaver From Kashmir. For 10 points, identify this author of Salka Valka and The Bell of Iceland, that nation's only winner of the Nobel Prize in literature.

Answer: Halldor Laxness
11. This mathematical term can be applied to any function that is a solution to Bessel's differential equation and is sometimes taken to be synonymous with a Bessel function. The coordinate system to which it refers uses the Cartesian z axis, along with the polar coordinates $r$ and theta. For 10 points, what is this term for a surface consisting of all straight lines parallel to a given line and intersecting a given curve?

Answer: cylindrical
12. The surviving fragments of his two poems "Purifications" and "On Nature" are the most extensive writings we have from any pre-Socratic philosopher. In "On Nature" he tells of cosmic evolutions driven by the force of, first, love and then strife. For 10 points, identify this pluralist from Sicily who maintained that earth, air, fire and water are the four elements of all material reality.

Answer: Empedocles
13. His works include To His Sacred Majesty, A Panegyrick on his Coronation and the elegy Upon the Death of Lord Hastings. Upon his death, he was buried in the same grave as Chaucer in Westninster Abbey. His Annus Mirabilis was published in 1667 and upon the death of Sir William Davenent in 1668, he becane poet laureate. For 10 points, identify this British author of Religio Laici, The Hind and the Panther, and Absalon and Achitophel.

Answer: John Dryden
14. It is fed by the River Ili which flows north-westwards from the Tien Shan range. A shallow salt lake with no outlet, it has been shrinking in size owing to the upstream extraction of water on the Ili. For 10 points, identify this 7100 square mile lake in Kazakhstan.

Answer: Lake Balkash
15. The American stock exchange is created, Jomo Kenyatta is convicted of managing the Hau Mau, the Church of Scientology is founded, Edwin Hubble and Robert Millikan die, and Ernest Heningway is awarded the Pulitzer Prize for fiction. For 10 points, name this year which also saw Elizabeth II crowned, the death of Stalin, and the execution of the Rosenburgs. Answer: 1953

ॠ. His collections include Something About Cats and other Pieces, Marginalia, Beyond the Wall of Sleep, and Dreams and Fancies. During his lifetime, he published The Shunned House in 1928 and The Shadow over Innesmouth in 1936. For 10 points, identify this author best known for his cthulhu mythos in which exterrestial horrors confront ordinary New Englanders.
17. A primary component of the humoral response, this class of proteins undergoes affinity maturation through the process of sonatic hypernutation in their hypervariable regions, where epitope binding occurs. About 150 kilodaltons in size, they are conposed of heavy and light chains joined by disulfide bonds in the hinge region. For 10 points, identify these proteins produced by B cells, which bind to foreign antigens during the immune response.

Answer: antibodies or immunoglobulins (prompt for more specific on globulins or gamma globulins)
18. In 1769, he wrote Treatise on Loans at Interest and in his 1766 Reflections on the Accumulation and Distribution of Wealth his analysis indicated that the sole source of wealth is land and only agricultural products may legitimately be taxed. He incurred the wrath of the powerful commercial and political interests with his fanous Six Edicts to the Royal Council in 1776. For 10 points, identify this French finance minister who was succeeded as finance minister by Necker in 1776.

Answer: Anne Robert Jacques Turgot, Baron de l'Aulne
19. His early works include folklike songs such as "Des Knaben Wunderhorn" and "Lieder eines fahrenden gesellen" as well as his first four symphonies which use voices and have mystical associations. This was followed by a sterner period with more realistic symphonies and haunting songs on the poems of Friedrich Ruckert. For 10 points, identify this composer whose third period was comprised of his Ninth Symphony, an unfinished tenth symphony and "Das Lied von der Erde".

Answer: Gustav Mahler
20. His law relating equilibrium concentrations of a solute distributed between immiscible liquid phases is the basis of the modern technique of solvent extraction. His renowned "heat theorem" allowed the equilibrium constants of chencial reactions to be calculated readily from retrievable experimental data. His later contributions include a law of diffusion of electrolytes, an understanding of ionic hydration, the idea of buffer solutions, and a novel source of infrared radiation. For 10 points, identify this theoretical physical chemist who studied electrochemical cells and who won the 1920 Nobel prize.

Answer: Walter Hermann Nernst
21. It is situated near the Ngotwane River on the main railway line linking South africa with the frontline states. Established in the 1890s and named after the chief of the Batlokwa tribe, it was chosen in 1962 as the future capital following independence. For 10 points, identify this city the capital of Botswana.

Answer: Gaberone
22. His "Strife" is an impressive tragedy of labor against capital and his "Fraternity" is his best novel outside his most famous body of work. A tirelesss campaigner, he reformed prison administration through his play "Justice". For 10 points, identify this man whose made his reputation in 1906 with the publication of his The Silver Box and The Man of Property.

Answer: John Galsworthy
23. In conjunction with his brother Ernst he studied the flow of liquids through tubes, knowledge that could be applied usefully to the study of the human circulatory system. At the time Gauss introduced a logical system of units for magnetisn, he did the same for electricity and they were adopted at an international congress in 1881. For 10 points, identify this man who along with Gauss developed an early practical telegraph, after whon the SI unit of magnetic flux is $\checkmark$ named.

Answer: Wilhelm Eduard Weber

## 1996 Tennessee Masters

Questions by Legion of Superheroes

1. Given a function, give its indefinite integral for 10 points each. You may ignore the constant of integration in giving your answer. 10 scconds por pant
2. Integral of a to the $x, d x$

Answer: a to the $x$ over $\ln$ a (ln reads natural $\log$ a or $\log a$ )
2. Integral of secant squared $\mathrm{x} d x$

Answer: tangent of $x$ or $\tan x$
3. Integral of natural $\log$ of $x d x$ Answer: $x \ln x$ minus $x$ or $x$ natural $\log$ of $x$ minus $x$ or $x \ln x$ minus $x$
2. Answer the following questions about Dante's travels in the Inferno for 10 points each.

1. In which circle of hell does Dante encounter the carnal sinners, including Paolo and Francesca? Answer: second circle
2. Beginning with the sixth circle, that of the heretics, Dante travels through what city which lies in the infernal regions?

Answer: Dis
3. For 10 points, all or nothing, name the three traitors on whom Lucifer is gnawing at the very center of the earth. Answer: Brutus, Cassius, and Judas Iscariot
3. Identify the following famous Johns from European history for 10 points each.

1. This Spanish soldier and naval hero was the son of Emperor Charles V.

Answer: Don John of Austria
2. This Spanish mystic and poet founded the Discalced Carmelites.

Answer: St. John of the Cross
3. This king of Poland raised the Turkish siege of Vienna in 1683.

Answer: John III Sobieski or John III
4. Answer the following questions about rest and relaxation Greek mythology style.

1. For 5 points, name the Greek god of sleep.

Answer: Hypnos or Hypnus
2. For 10 points, name Hypnos mother who intervened with zeus to keep her son from being thrown from heaven. Answer: Nyx
3. For 5 points, name Hypnos brother, the Greek incarnation of death. Answer: Thanatos
4. For 10 points, name the leader of the Lycian forces in the Trojan war whose body was carried home by Hypnos and Thanatos after his slaying by Patroclus.

Answer: Sarpedon
5. Identify the following writers who dealt with homosexual themes from clues for 10 points each.

1. The explicit sex in this author's The Soft Machine, The Ticket that Exploded and Nova Express is almost entirely homosexual.

Answer: William S. Burroughs
2. This man included a chapter on "the unsavory or homosexual part of our tale, [which] any disinterested reader is encouraged to skip" in his prize-winning first novel, The Wapshot Chronicle. Answer: John Cheever
3. The homosexual actor, Eric, is among the characters in this African American's Another Country. Answer: James Baldwin
6. Put the following sets of three events in correct chronological order for 10 points each.

1. The Mann Act is passed forbidding transportation of women across state lines for immoral purposes, Sun Yat-Sen founds the

Kuomintang, and federal income tax is introduced with passage of the 16 th amendment.
Answer: Mann (1910), Sun Yat-Sen (1912), income tax (1913)
2. Sung dynasty, period of the Three Kingdoms, and $T^{\prime}$ ang dynasty

Answer: Three Kingdoms (220-264), T'ang (618-907), Sung (960-1279)
3. Dingley Tariff, Underwood Tariff, Wilson-Gorman Tariff

Answer: Wilson-Gorman (1894), Dingley (1897), Underwood (1913)
7. Identify the following islands for the stated number of points.

1. 5 pts: It was part of the Norse kingdom of the Hebrides in the middle ages and has its capital at Douglas. Answer: Isle of Man
2. 10 pts: It is separated by the Solent from Great Britain to the north and has its county seat at Newport. Answer: Isle of Wight
3. 5 pts: Designated a US National Park in 1931, it is the largest Island in Lake Superior. Answer: Isle Royale
4. 10 pts: Since 1337 this group of islands off the SW coast of Britain have belonged to Cornwall. Their chief settlement is Hugh Town on St. Mary's island.

Answer: Scilly islands
8. Identify the famous American on a $30-20-10$ basis.

1. He became a teacher and lay evangelist for the Disciples of Christ in 1856. During the Civil War he led a daring victory at Middle Creek, KY, served as chief of staff to Gen. William Rosecrans, and distinguished himself at Chickamauga. 2. In 1863 he began his 18 year service in the House of Representatives. He was implicated in the Credit Mobilier scandal but rode out the storm and was elected to the Senate in 1880, a post he never filled.
2. In 1880, the same year as his election to the Senate, he was elected president, but only served four months before Charles Guiteau shot him at a Washington DC railroad station.

Answer: James Abram Garfield
9. The field of chemistry is full of acronyms. Given a chemistry acronym, along with a description, identify what the letters in the acronym stand for for 10 points each.

1. GLC--a technique of chemical separation and analysis in which a small vaporized sample is injected into a stream of inert gas flowing through a column containing nonvolatile liquid adsorbed on a powdered solid

Answer: gas-liquid chromatography
2. NHR--a type of spectroscopy based on transitions between nuclear spin states in a strong magnetic field Answer: nuclear magnetic resonance
3. IUPAC--the worldwide organization and quasi-governing body of the field of chemistry Answer: International Union of Pure and Applied Chemistry
10. Answer the following questions about the life and works of James Whistler for the stated number of points.

1. For 5 points, what man did whistler sue for libel following negative comments about his works exhibited in 1877 at the Grosvener Gallery?

Answer: John Ruskin
2. For 10 points, the object of the libel trial was a painting of Old Battersea Bridge. What title was given to the painting by Whistler?

Answer: Nocturne in Black and Gold: The Falling Rocket
3. For 5 points, part of that same exhibit was Whistler's Arrangement in Grey and Black $\# 1$. Who was the subject of this work?

Answer: Thomas Carlyle
4. For 10 points, Whistler won the suit and was awarded how much in damages from Ruskin?

Answer: one farthing
11. Identify the modern British authors who created the following characters on a 10-5 basis. 1. 10 pts: Tony Last and Guy Crouchback 5 pts: Sebastian Flyte, Captain Charles Ryder Answer: Evelyn Waugh
2. 10 pts: Augustus Fink-Nottle 5 pts: Jeeves

Answer: P.G. Wodehouse
3. 10 pts: Alec Scudder and Maurice Christopher Hall 5 pts: Dr. Aziz and Lucy Honeychurch Answer: E.M. Forster
12. Identify the film director from clues, 30-20-10.

1. Before directing, this man wrote two novels: Pride of the Bimbos and Union Dues, and the short story anthology The Anarchist's Convention. He also wrote the screenplay for the film Piranha.
2. His first film was the critically acclaimed Return of the Secaucus Seven, and he followed this with Lianna, Baby It's You, and The Brother from Another Planet, as well as his 1987 exploration of union activity in West Virginia coal mines entitled Matewan.
3. One of America's best-known independent filmakers, his most commercially successful film was Eight Hen Out, and his newest work, currently in release, is Lone Star.

Answer: John Sayles
13. Answer the following questions about the Sikh religion for the stated number of points.

1. For 10 points, who is its founder?

Answer: Guru Nanak
2. For 10 points, what is the holy text of Sikhism?

Answer: Adi Granth or Granth Sahib
3. In 1699 the ceremony of baptism was instituted, whereupon the newly baptised pledged to observe the " $5 \mathrm{k}^{\prime} \mathrm{s}$," which involve not cutting the hair or beard (kes), as well as the wearing of four objects. For 5 points each, identify any two of these personal effects.

Answer: comb (kanga), shorts (kach), iron bracelet (kartha), and sword (kirpan) (accept reasonable equivalents)
14. Identify the following pairs of vampires featured in the works of Anne Rice. 5 points for each.

1. These ancient Egyptians were the first two vampires.

Answer: akasha and Enkil
2. These twin sisters eventually kill Akasha in The Queen of the Damned and one takes her place as the host to the spirit infusing the vampires.

Answer: Haharet and Mekare
3. Name the vampire who headed the Theater of Vampires in Paris in Interview with the vampire and the Roman vampire who created him at the age of 17 in Venice.

Answer: Armand and Marius
15. Identify the composers of the following works on a $10-5$ basis.

1. 10: Alpine symphony, The Love of Danae, Ariadne auf Naxos

5: Elektra, Salome, Der Rosenkavalier Answer: Richard Strauss
2. 10: Shepherd of the Delectable Mountains, Job (a Masque for Dancing), Hugh the Drover

5: The Lark Ascending, Sinfonia Antarctica
Answer: Ralph Vaughn Willians

5. 15

3. 10: Funeral March of a Marionette and Sappho

5: Faust and Romeo and Juliet Answer: Charles Gounod
16. Given the opening lines of the following poems, supply the title for 10 points. If you need the author of the poem, you will receive 5 points.

1. 10: "Sunset and evening star,/ And one clear call for me!"

5: Alfred, Lord Tennyson
Answer: Crossing the Bar
2. 10: "Thou still unravished bride of quietness,"

5: John Keats
Answer: Ode on a Grecian Urn
3. 10: "Bent double, like old beggars under sacks"

5: Wilfred Owen
Answer: Dulce et Decorum Est
17. Identify the scientist $30-20-10$ from clues.

1. After graduation from college, he joined the Lick Observatory at Mount Familton California where in 1892 he studied a nova in the constellation Auriga and was the first to note the puff of gas given off indicating that it involved some sort of explosion.
2. Later that same year, he discovered a fifth satellite of Jupiter that was named Amalthea by Flammarion.
3. In 1916, he discovered a dim star that had the fastest proper motion, a red dwarf that bears his name.

Answer: Edward Emerson Barnard
18. For 5 points each, give the highest ranked professional tennis player from the following countries, according to current

ATP tour point standings (male).

1. the Netherlands Answer: Richard Krajicek
2. Sweden Answer: Thomas Enqvist
3. Austria Answer: Thomas Huster
4. Russia Answer: Yevgeny Kafelnikov
5. Switzerland Answer: Harc Rosset
6. South Africa Answer: Wayne Ferreira
7. Tine for a plot sumary bonus: Given a sumnary, identify the plot from British history. 10 points each. 1. A conspiracy to assassinate Charles II and his brother James as they travelled from Newmarket races to London, this 1683 plan was aborted but was betrayed to the government, implicating Monnouth, Algernon Sidney, and several prominent Whigs. Answer: Rye House plot
8. A fictitious Jesuit plot to assassinate Charles II and replace him with James, it was invented by Titus Oates and Israel Tonge in 1678 and caused widespread panic.

Answer: Popish plot
3. In this plot, a former page to Hary, Queen of Scots was induced by the priest John Ballard to organize a conspiracy in 1586 to assassinate queen Elizabeth.

Answer: Babington plot
20. Identify the SCHOOL of philosophy with which the authors of the following works were nost closely associated for 10 points, you will earn 5 points for naming the school given the work's author.

1. 10 pts: How To Make Our Ideas Clear 5 pts: C.S. Pierce

Answer: Pragmatism
2. 10 pts: Sunna contra Gentiles 5 pts: Thomas Aquinas

Answer: Scholasticism
3. 10 pts: Philosophy of Arithnetic

5 pts: Edmund Husserl
Answer: phenomenology
21. Identify the taxonomic order to which the following mammals belong for 5 points each.

1. squirrel Answer: rodentia
2. seal Answer: Carnivora
3. dolphin Answer: cetacea
4. shrew Answer: insectivora
5. sheep Answer: artiodactyla
6. bat Answer: chiroptera
7. Identify the following play, $30-20-10$.
8. Containing "some of the most fertile and vigorous poetic dialogue written for the stage since Shakespeare," its fierce humor offended Irish patriots, culminating in riots that took place in Dublin after its 1907 production at the Abbey Theatre. 2. The plot concerns a timid, pleasant boy who flees home convinced he has killed his cruel father. He becomes lionized by the people to whom he flees for his action, but, they change their minds after the father reappears and they have another scuffle. FTP, name this werk that eentors on
9. Gentering on Christy Mahon, theoptad is the best-known work of John Millington Synge. Answer: The Playboy of the Western World
