

**ACF Nationals 2013**  
**Packet by Northwestern**

**Tossups**

1. A study on the differences between the Dulwich and Huntington versions of this artist's most famous painting revealed that the title figure's dress was originally blue rather than yellow. A fortune teller points her right forefinger at the palm of a boy in one of his pictures of young children, a series that also includes one where an infant in a mob hat is being painted by a child in a red robe titled *Infant Academy*. The title figure of one of his paintings pours an offering into a smoke-emitting tripod and is offered a wreath by one of the Three Graces, which appear to be coming to life. One of his portraits depicts a woman enthroned next to a mysterious figure holding a chalice. This artist, who painted an aforementioned portrait of Lady Sarah Bunbury argued against copying subjects exactly as they appear in nature as part of his "Grand Style," which he discussed in his *Seven Discourses on Art*. For 10 points, name this British painter of *Sarah Siddons as the Tragic Muse*, the first president of the Royal Academy.

ANSWER: Joshua **Reynolds**

2. This man expelled his former superior, the Duke of Aumale, from the army. Charles Floquet defeated this man in a duel. His lack of religiosity was a reason for his appointment to Minister of War in the cabinet of Charles Freycinet. Paul Deroulede's League of Patriots supported this man. This man's rise to prominence started with him earning 100,000 votes in a department election that he was not even a candidate in. To avoid treason charges, this man fled to Brussels, where he committed suicide at the grave of his mistress. He was known as "General Revanche" for his focus on avenging France's loss in the Franco-Prussian War. For 10 points, name this nationalist French general whose supporters nearly overthrew the Third Republic in 1889 in his namesake affair.

ANSWER: Georges **Boulangier**

3. One man with this surname was the first American convert to Bahai. Apart from Thornton, other men with this surname have included a serial killer nicknamed the "Sacramento Vampire". In 1849, the Free Soil Party was able to elect a Senator with this last name in Ohio. A judge with this surname presided over the trial of the rebel John Fries and gave a speech to a Baltimore Grand Jury saying that the United States would fall into a "mobocracy" because of Thomas Jefferson. That man became the first Supreme Court Justice to be impeached. For 10 points, give this surname also shared by a man who was made Chief Justice and Treasury Secretary by Abraham Lincoln.

ANSWER: **Chase**

4. One character in this novel hides a pair of candles and some earrings in a locked box in her bedroom so she can pretend to be married. At a coming of age party in this novel, Totty breaks a string of beads, causing its main character to pick up a locket containing hair belonging to his lover. This novel's seventeenth chapter, "In Which the Story Pauses a Little," interrupts the narrative to address an imaginary reader's complaints about Augustus Irwine. Its protagonist falls in love with the niece of the Poysers, and manages the shop of Jonathan Burge. This novel is set in Hayslope, and climaxes with a woman being sentenced to death for abandoning her child. Its main character marries the Methodist preacher Dinah Morris after feuding with Arthur Donnithorne over Hetty Sorel. For 10 points, name this novel by George Eliot about a virtuous carpenter.

ANSWER: **Adam Bede**

5. Some equations for quantities computed by this method can be solved using the so-called analogy principle. A theorem due to Aitken shows that the output of this algorithm has a desirable property known as BLUE-ness when inverse variance weights are used. This procedure fails when a matrix known as  $X^T X$  is non-invertible, in which case the explanatory variables are dependent. The results of this method are best linear, unbiased estimators, or BLUE, according to the Gauss-Markoff theorem. The first-order conditions for this method are that both the dependent variable/residual covariance and the expectation of the residuals vanish. For 10 points, name this statistical technique that, given some data, produces a curve that minimizes the magnitude of the total distance between the curve and the data.

ANSWER: **least squares** regression [prompt on **regression**]

6. This deity may have had a feminine aspect named Khwashkharrik. The priest Zatspram is known for being an adherent of this god. The realm in which this deity lived may have been called Vayu, also the name of an older air god. This god's followers are divided into three groups, including the fatalists, who believe that all matter is evil, and the Zaniks, who believe that all creation comes from this god. After being tricked, this god fulfills a promise by granting his son 9,000 years of kingship. This figure spent a thousand year making sacrifices, after which both his piety and his doubt were rewarded with twins – one good, one bad. For 10 points, name this supreme being from Zoroastrianism, the neutral father of Ahriman and Ahura Mazda.

ANSWER: **Zurvan**

7. Rosalie Colie's book *Light and Enlightenment* discusses the influence of the Dutch Arminians on this group. The "Great Duty of Resignation to the Divine Will" was discussed by the diarist John Worthington, who was affiliated with this group, while another member discussed the "opinion of the Eastern sages concerning the pre-existence of souls" in his *Lux Orientalis*. Another member of this group argued, in opposition to Descartes, that extension was a property of *both* body and mind; that view is expounded in his *Enchiridion Metaphysicum*. Yet another member of this school expounded a monistic vitalist outlook in such works as *The Principles of the Most Ancient and Modern Philosophy*; that book is by Anne Conway. Benjamin Whichcote was the major influence on--for 10 points--what movement that included Joseph Glanvill and Henry More, a group of 17th-century English thinkers known for their devotion to an ancient Greek philosopher?

ANSWER: **Cambridge Platonists**

8. One structure of this name is also known as Morgagni's sinus, and it has a diverticulum covered in mucous glands known as Hilton's pouch. That example is located in the larynx. The ependyma is a membrane that lines a system of four of these structures, which are connected by the foramina of Monro. That system is the site of hydrocephalus, a condition that may be relieved by a shunt to drain them, and that system is continuous with the central canal of the spinal cord. Another set of structures with this name is incompletely divided in reptiles. In humans, one of these objects receives blood through the mitral valve, and pumps blood through the aorta. For 10 points, give this common term for these structures, two of which are located in the heart.

ANSWER: **ventricles**

9. A 2006 study by Chiou and Wan found that this state is negatively correlated with Internet addiction, contradicting theories that it encourages addictive behavior. Keller and Bless induced this state using a modified version of Tetris and investigated its relationship to intrinsic motivation. People with an autotelic personality are especially prone to spending time in this state, which was first described in the book *Beyond Boredom and Anxiety*. A graph of this state locates it at the intersection of high challenge and high skill areas. The components of this state include a merging of action and awareness and a loss of self-consciousness, as defined by the psychologist who proposed it, Mihaly Csikszentmihaly [me-hee chick-sent-me-hee]. For 10 points, name this psychological state in which a person is completely immersed in performing an engaging task, which is often compared to being "in the zone."

ANSWER: **flow**

10. William Carragan completed the final movement of one of these works, whose third movement Adagio begins with violins playing a rising minor ninth. The third of these pieces ends with a movement in which the violins play a light polka underscored by a solemn chorale played by the horns and trombones. The sixth of these pieces opens with a movement marked "Majestoso," which begins with the violins playing its composer's characteristic duplet plus triplet rhythm. The unfinished ninth one includes a third movement representing its composer's "farewell to life," and is sometimes completed by tacking on its composer's *Te Deum*. The difficulty in choosing which of the many versions of these works is authentic presents its composer's namesake problem. The third of them is dedicated to their composer's hero Wagner, and the fourth one features a horn call in its third movement hunting scherzo. For 10 points, name these works for orchestra by an Austrian composer, whose fourth is nicknamed the "Romantic."

ANSWER: **symphonies** of Anton **Bruckner**

11. In one story, this figure named Sciron the King of Megara, thus gaining his first wife, who was jealous of this figure's second wife, who in turn became a seal to avoid him. The birth of this person's mother was finally disclosed only when Sisyphus was sent a stream. This man's wife Endeis was so jealous of his son by Psamathe that she and her stepsons conspired to kill that son, Phocus, at the pentathlon. After a dragon got past a wall built by this man, it was prophesied that Troy would fall at the hands of this man's descendants. This man's sons include Telamon and Peleus. A group of warriors loyal to this man eventually served Achilles. For 10 points, name this son of Zeus and Aegina who led the Myrmidons and became a judge of the underworld alongside Rhadamanthus and Minos.

ANSWER: Aeacus

12. One poem by this author uses the images of a prickly pear, a barbed wire, a carrot, and a mandrake to conclude that "the weak overcomes its menace, the strong overcomes itself." That poem ends by wondering "What sap went through that little thread to make the cherry red!" Another of this author's poems ends with the exclamation "Again the sun! anew each day, and new and new and new, that comes into and steadies my soul," and compares the title figure to a "night miniature artist engineer" and "Leonardo da Vinci's replica." This author of "Nevertheless" wrote a poem claiming "things are important not because a high-sounding interpretation can be put upon them but because they are useful." She praised the title "armored animal" in "The Pangolin," and described the title genre in a poem which begins "I, too, dislike it." For 10 points, name this American author best known for her poem "Poetry."

ANSWER: Marianne Moore

13. In 2012, Wan et al. published a study about a low-field variety of this phenomenon, which can be observed due to inhomogeneity near a lightly-doped silicon p-n junction. Another variety of this behavior is produced by an atomic exchange mechanism that can be observed in manganese perovskite oxides. The anisotropy of these effects can be measured with a so-called barber pole, a type of sensor made from permalloy. Still another form of it can be produced by injection of spin-polarized carriers into a metal, as produced in CIP and CPP geometries due to RKKY coupling between layers with different susceptibility. Fert and Grunberg independently discovered that "giant" variety of this phenomenon, which is used in the read heads of hard disk drives. For 10 points, name this phenomenon in which the application of the *B* field changes a metal's resistance.

ANSWER: magnetoresistances [accept giant magnetoresistance or colossal magnetoresistance or tunnel magnetoresistance or low-field magnetoresistance]

14. In one of this author's novels, Apolodoro commits suicide after being raised on scientific principles by his positivist father Avito. In one of his short stories, a physician loses all his patients because he is too busy compiling the science fiction anthology *All or Nothing*. Another of his novels begins with a prologue by the fictional author Victor Goti. This author of *Love and Pedagogy* and the short story "The Madness of Dr. Montarco" wrote a novel that takes place in Valverde de Lucerna, where Lazarus exposes the title character's atheism to Angela. He inserted himself into one of his novels, in which he is confronted by his character Augusto. One of his title characters arouses the jealousy of Joaquin Monegro, who identifies with Lord Byron's *Cain*. For 10 points, name this member of Spain's Generation of '98, the author of *San Manuel Bueno, Mártir*, *Mist*, and *Abel Sánchez*.

ANSWER: Miguel de Unamuno

15. One king from this dynasty personally stabbed the Duke of Viseu to death after accusing him of treason. A ruler from this dynasty nicknamed "the Fortunate" expelled his nation's Jews in 1496. One member of this dynasty was nicknamed the "Perfect Prince" and fought alongside his father at the inconclusive Battle of Toro. This dynasty signed the Treaty of Windsor with Philippa of Lancaster, leading to its nation's long-standing alliance with England. The founder of this dynasty famously won the Battle of Aljubarrota, securing his independence from Castille. The last king of this dynasty is named "the desired" because of a myth that he will one day return, despite having been killed in combat against the Moors. Featuring members such as Joao I and Henry the Navigator, for 10 points name this dynasty that ruled Portugal before the House of Braganza.

ANSWER: Aviz Dynasty [or Aviz-Beja Dynasty]

16. The Rape of Europa is depicted on the pedestal of a fountain this artist created in the Boboli Gardens. A longhaired, bearded colossus climbs out of the ground and is surrounded by a series of grottoes with dancing water fountains in his enormous *Apennine Colossus* in the Villa di Pratolino. An equestrian statue by this student of Jacques du Broeucq is mounted on a symbol of Capricorn and its rider was separated from his horse during World War II. One of this man's works depicts a Nereid squeezing milk from her breasts. This sculptor of *Cosimo I* and the *Fountain of Neptune* showed a centaur being bludgeoned to death in *Hercules and Nessus*. A god in winged sandals stands on one foot in one of his bronzes, while he used marble for a work in the Loggia dei Lanzi where a man stands on top of another man and holds a protesting woman. For 10 points, name this Flemish-born Mannerist sculptor of *The Flying Mercury* and *The Rape of the Sabine Women*.

ANSWER: Giambologna [or Giovanni da Bologna; or Jean de Boulogne]

17. This character is stung all over her body when Mineu tricks her into sitting naked on a red anthill. She imagines her unhappiness as a black ball covered in cobwebs in the chapter "Somewhere, Belgium." This character has to copy Books I and II of *Paradise Lost* as punishment for defacing a section of her textbook that depicts Christopher Columbus in chains. She confronts her mother for the first time after receiving three marbles from the "Red Girl." As a child, she befriends Gwen, though their relationship is eventually hurt by suggestions that she marry Gwen's brother. At the end of the novel named for her, she leaves her home country for England on a nursing scholarship. For 10 points, name this title character of a novel by Jamaica Kincaid, which describes her experiences growing up in Antigua.

ANSWER: Annie John [or Annie John]

18. Since 1990, this organization has held a yearly protest at the School of the Americas, in response to six of its members being killed in El Salvador by alumni. New members of this group undergo the process of "formation". A foundational text of this organization prescribes four themed weeks of meditation designed to be done on retreat. At meetings called "General Congregations", members of this group elect their leader, the Superior General, who serves for life and has been nicknamed the "Black Pope" for his vestments and power. Members of this group follow its founder's "Spiritual Exercises", and all members of this group take an oath of loyalty to the Pope. For 10 points, name this Catholic order founded by Ignatius of Loyola, one of whose members was recently elected as Pope Francis.

ANSWER: Jesuits or Society of Jesus [accept: Societas Iesu; SJ; SI]

19. Inexperienced members of this dynasty were aided by the "Book of Government." Forces of this dynasty put down Baba Ishak's movement with the help of Frankish mercenaries. This dynasty's founder defeated Al-Malik Al-Rahim, the last ruler of the Buyid dynasty. This dynasty's generals Chagri and Tughrul defeated the Ghaznavids at the Battle of Dandanaqan. The vizier Nizam al Mulk served members of this dynasty, and al Mulk's death at the hands of the Assassins may have been ordered by this dynasty's sultan Malik Shah I. A governor appointed by this dynasty, Zengi, created his own dynasty by reconquering lands from crusaders, and during the First Crusade this empire lost Nicaea and Antioch. Its most famous military success came when Romanus IV Diogenes was captured by Alp Arslan at Manzikert. For 10 points, name this dynasty founded in 1037 in Anatolia.

ANSWER: Seljuk Empire

20. These compounds are found in salen ligands. Their N-sulfinyl derivatives can be prepared using the Andersen reagent, and are widely used in enantioselective syntheses. In one reaction, an alkene donates electrons to this compound to produce a quinoline. A form of Vitamin B6 this compound after the addition of hydrozoic acid to an alkene. In the first step of the Strecker synthesis of amino acids, called pyrooxal phosphate binds to enzymes via these compounds. In another reaction, an alkyl azide rearranges to form hydrogen cyanide attacks this compound. Like dienes, these products of the Povarov and Schmidt reactions can be converted to tetrahydropyridines in the aza-Diels-Alder reaction. They are reduced from the addition of cyanoborohydride. Schiff bases are a type of, for 10 points, what organic compounds with a carbon-nitrogen double-bond?

ANSWER: imines

## Bonuses

1. Goldstone bosons are excitations of a field whose corresponding generators have undergone this process. For 10 points each:

[10] Name this phenomenon in which a continuous transformation ceases to be invariant for a system, even though the system's Lagrangian continues to be invariant under the transformation.

ANSWER: **spontaneous symmetry breaking** [prompt on **symmetry breaking**; do not accept "explicit symmetry breaking"]

[10] According to the Mermin-Wagner theorem, spontaneous symmetry breaking can only occur for short-range interactions in a system with this property.

ANSWER: at least **3-dimensional** [accept equivalents]

[10] Second-order phase transitions exhibit spontaneous symmetry breaking, as discovered by this Soviet scientist in his mean-field treatment of phase transitions, which led to the discovery of universality.

ANSWER: Lev Davidovich **Landau**

2. This character proves his love to Louis Ironson by removing his Mormon underwear. For 10 points each:

[10] Name this character, whose relationship with his Valium-addicted wife Harper falls apart when she discovers he is a closeted homosexual.

ANSWER: **Joe Pitt** [or Joe **Pitt**]

[10] Joe Pitt and his mentor Roy Cohn appear in this two-part "Gay Fantasia on National Themes" by Tony Kushner.

ANSWER: **Angels in America**

[10] In *Angels in America*, Harper explains to Prior Walter's caretaker, Belize, that God's angels have wandered the earth for many years because God left Heaven after this event. When Prior enters into Heaven, he discovers that it looks like this event's aftermath.

ANSWER: 1906 **San Francisco earthquake**

3. This situation occurs when no player would change their decision after taking into account the decisions of other players. For 10 points each.

[10] Name this type of solution to non-cooperative games named for an American mathematician.

ANSWER: **Nash equilibrium** [or **Nash equilibria**]

[10] For games that do not have pure strategy Nash equilibria, players may need to use this type of strategy, in which players assign probabilities to pure strategies and randomly choose one. For instance, players with two options would choose option A  $x$  percent of the time and option B one minus  $x$  percent of the time.

ANSWER: **mixed** strategies

[10] Backward induction is used to solve for this type of equilibrium, which does not suffer from the existence of noncredible threats. It consists of the strategies that constitute a Nash equilibrium for each subset of an extensive form game.

ANSWER: **subgame perfect** Nash equilibrium

4. One of these pieces is nicknamed "Wrong Note," and another is played only on the black keys. For 10 points each:

[10] Name these challenging pedagogical piano pieces written by the composer of the *Minute Waltz*. The "Revolutionary" one commemorates the Warsaw Uprising.

ANSWER: Frederic **Chopin**'s **etudes** [prompt on partial answer]

[10] Chopin's etudes are much more entertaining than this Austrian composer's mind-numbingly boring etudes, he collected in books such as *The School of Velocity*. He also premiered Beethoven's *Emperor* concerto.

ANSWER: Carl **Czerny**

[10] This 20th century composer wrote an influential set of piano etudes, including "Infinite Column" and "Disorder." His other works for piano include the eleven pieces in his *Musica Ricercata*.

ANSWER: Gyorgi **Ligeti**

5. For 10 points each, name these authors of notable translations.

[10] This Victorian poet produced a “Bird’s-eye view” of Attar’s *Conference of the Birds*, though he’s most famous for his translation of the *Rubaiyat* of Omar Khayyam.

ANSWER: Edward **FitzGerald**

[10] This author won the 1966 National Book Award for his translation of Cortazar’s *Hopscotch*. He is known for his English translations of many Portuguese and Spanish-language novels, including *One Hundred Years of Solitude*.

ANSWER: Gregory **Rabassa**

[10] Like Jun’ichiro Tanizaki, this author of *Days of Hunger* and *The Waiting Years* translated *The Tale of Genji* into modern Japanese. Genji’s mistress Lady Rokujo inspired the protagonist of her novel *Masks*.

ANSWER: Fumiko **Enchi** [or Fumi **Ueda**; accept either name in reverse order]

6. Chemical weapons are in the news again. For 10 points each:

[10] Shortly after the Boston Marathon bombing, letters containing this poison were sent to President Obama and to Senators from Mississippi and Alabama. Charges have been dropped against the Elvis impersonator initially arrested for this crime.

ANSWER: **ricin**

[10] A general from this nation recently claimed that there is evidence that Syria has used chemical weapons against its rebel movement. The United States says it is skeptical.

ANSWER: **Israel**

[10] This group, composed of anti-government forces, would be the target of any chemical attack by the Syrian government. It has been in a state of rebellion for over a year.

ANSWER: Syrian **National Coalition** [or **National Coalition** for Syrian Revolutionary and Opposition Forces, or **Coalition Nationale**]

7. This man gave himself a lavish coronation based on that of Napoleon. For 10 points each:

[10] Name this allegedly cannibalistic dictator of the Central African Republic. He famously beat children with sticks when they refused to wear the required school uniform with his face on it.

ANSWER: Jean-Bedel **Bokassa** [or Emperor **Bokassa**; or Salah Eddine Ahmed **Bokassa**]

[10] Bokassa was overthrown in this French military operation.

ANSWER: Operation **Baracuda**

[10] Bokassa overthrew and was overthrown by this man, who came to power in the aforementioned Operation Barracuda. He lost power to Andre Kolingba in 1981.

ANSWER: David **Dacko**

8. This author collaborated on the lost play *The Isle of Dogs* along with Ben Jonson. For 10 points each:

[10] Name this member of the University Wits who wrote the play *Summer’s Last Will and Testament* and a picaresque novel about Jack Wilton entitled *The Unfortunate Traveler*.

ANSWER: Thomas **Nashe**

[10] Nashe wrote a preface to an edition of this sonnet sequence by Philip Sidney, which includes the poem “With how sad steps, O moon, thou climb’st the skies.” It depicts the love between the two title characters.

ANSWER: **Astrophil and Stella**

[10] This other University Wit wrote the pamphlet “The Defense of Cony-Catching,” as well as the play *Pandosto*, which inspired Shakespeare’s *Winter’s Tale*. One of the first references to Shakespeare appears in his *Groats-Worth of Wit*.

ANSWER: Robert **Greene**

9. This book concludes that "he who in relation to guilt is educated by" the title subject "will rest only in the Atonement." For 10 points each:

[10] Name this work, which ends by observing that as "soon as psychology has finished with" the title subject, "it is to be delivered to dogmatics." This book considers the title subject "as explaining hereditary sin progressively."

ANSWER: The Concept of Anxiety (: A Simple Psychologically Orienting Deliberation on the Dogmatic Issue of Hereditary Sin) [or Begrebet Angst; or The Concept of Dread]

[10] A year before he published *The Concept of Anxiety*, Kierkegaard published this book that discusses Abraham's sacrifice of Isaac.

ANSWER: *Fear and Trembling* [or *Frygt og Bæven*]

[10] In 1843 Kierkegaard also published this book, which is often paired with *Fear and Trembling*. This "venture in experimenting psychology" appeared under the pseudonym Constantin Constantius.

ANSWER: *Repetition* [or *Gjentagelsen*]

10. It prompts a so-called "sermon" from its addressee, who advises its writer to "teach your heart some self-restraint" because "inexperience leads to grief." For 10 points each:

[10] Identify this fictional missive which begins "I write to you -- no more confession / is needed, nothing's left to tell. / I know it's now in your discretion / with scorn to make my world a hell," and contains its writer's vow that "another never / in all the world could take my heart!"

ANSWER: Tatiana's letter to Eugene Onegin [accept obvious equivalents; prompt on partial answer]

[10] Tatiana's letter appears in the third chapter of *Eugene Onegin*, a verse novel by this Russian author of "The Queen of Spades."

ANSWER: Alexander Sergeyevich Pushkin

[10] *Eugene Onegin* was dubbed "an encyclopedia of Russian life" by this influential literary critic, who worked with Nikolai Nekrasov on the magazine *Sovremennik* and wrote a letter accusing Nikolai Gogol of betraying the Russian people.

ANSWER: Vissarion Grigoryevich Belinsky

11. Absorption of photons by the 11-cis retinal in rhodopsin activates this protein. For 10 points each:

[10] Name this protein that helps the retina convert light into electric signals by activating a phosphodiesterase that degrades a second messenger, decreasing the causing the hyperpolarization of the membrane potential.

ANSWER: transducin

[10] Transducin is a heterotrimeric one of these proteins, which have a namesake type of coupled receptors. These proteins, including the Ras subfamily, hydrolyze GTP.

ANSWER: G proteins or guanine nucleotide-binding proteins

[10] One particular subunit of G proteins, the Gq subfamily, activates this enzyme, which cleaves PIP2 in the pathway that produces diacylglycerol and IP3.

ANSWER: PLC [or phospholipase C]

12. Winter hexagon-member Rigil is this type of binary system. Unlike in an optical binary, two stars cannot be seen; unlike in an eclipsing binary, the light intensity does not noticeably vary; unlike in an astrometric binary, the system is not visibly wobbling. For 10 points each:

[10] Name this class of binary star system in which the existence of a second star can be deduced only from periodically changing emission lines.

ANSWER: spectroscopic binaries

[10] The periodic changes in spectroscopic emission lines are due to this effect, which manifests as the star's velocity relative to the observer changes orientation and magnitude during its orbit.

ANSWER: the Doppler effect [or Doppler shift]

[10] Eclipsing binaries that are also spectroscopic can be used as these valuable astronomical entities. Objects known as this have a known, calibrated distance-magnitude relationship.

ANSWER: standard candle

13. This man stepped down as Nixon's Treasury Secretary to join the "Democrats for Nixon." For 10 points each:  
[10] Name this politician who stepped down from his position as Secretary of the Navy to become the Governor of Texas, a position he held until 1969.

ANSWER: John **Connally**

[10] This body concluded that John Connally was wounded by the same bullet that hit Kennedy. It also concluded that Lee Harvey Oswald was the lone gunman in the assassination.

ANSWER: **Warren Commission**

[10] This Louisiana businessman is the only person ever put on trial for the Kennedy assassination, as a prosecutor in New Orleans believed this man was part of a CIA plot. He was acquitted.

ANSWER: Clay **Shaw** [or Clay **Bertrand**]

14. One leader's financial troubles after his war against the Transylvanian Saxons were a cause for this clash. For 10 points each:

[10] Name this 1462 victory for some Romanians against Mehmet II in which Hamza Pasha was impaled on a stake after his forces were ambushed in a surprise attack.

ANSWER: The **Night Attack**

[10] This ruler of Wallachia launched the "Night Attack" and was notable for displaying the heads of his enemies on pikes, hence his epithet.

ANSWER: **Vlad the Impaler** [or **Vlad III**; or **Vlad Tepes**; or **Vlad Dracula**]

[10] Vlad the Impaler clashed with this brother of his, an alleged lover of Mehmet II. He and Vlad fought against each other at the Battle of Vaslui.

ANSWER: **Radu** the Handsome [or **Radu** cel Frumos; or **Radu III**; or **Radu** the Fair]

15. This folk song was the signature tune of Huddie "Leadbelly" Ledbetter. For 10 points each:

[10] Name this folk song, whose lyrics declare "Sometimes I live in the country / Sometimes I live in town / Sometimes I have a great notion / To jump into the river and drown." Its chorus repeats the title phrase before the line "I'll see you in my dreams."

ANSWER: **"Goodnight, Irene"**

[10] Leadbelly was pardoned from jail after being discovered by this American musicologist, who worked to record and preserve original American folk music along with his son Alan.

ANSWER: John **Lomax**

[10] In 1940, Alan Lomax supervised RCA's recording of this singer's *Dust Bowl Ballads*. He inscribed the phrase "This Machine Kills Fascists" on his guitar and recorded the folk classic "This Land is Your Land."

ANSWER: Woody **Guthrie**

16. Gautama Maharishi cursed this deity to have a thousand vaginas on his body after this deity seduced Maharishi's wife, Ahalya. For 10 points each:

[10] Name this Vedic thunder god who, in another episode, got drunk on soma, destroyed ninety-nine fortresses, and defeated the dragon Vritra, thus returning water to the world.

ANSWER: **Indra**

[10] This younger brother of Indra went to the god Bali disguised as a dwarf and requested three footsteps' worth of land. When Bali consented, this god grew into a giant, stepping from the heavens to the earth to the underworld and onto Bali's head.

ANSWER: **Vamana**

[10] In some versions, Vamana and Indra are sons of Aditi and this sage. Two of this sage's other wives, Vinata and Kadru, got into a heated argument over the color of a horse's tail.

ANSWER: **Kashyapa**



17. One general in this battle kept fires lit to prevent a night attack, but the opposing side of 1,400 men attacked at the crack of dawn. For 10 points each:

[10] Name this second most famous battle from the Jacobite Uprising of 1745, where Sir John Cope was defeated by the Jacobites.

ANSWER: Battle of **Prestonpans**

[10] The outcome of Prestonpans was reversed in this battle, where the Duke of Cumberland defeated Bonnie Prince Charlie and ended the 45.

ANSWER: Battle of **Culloden Moor**

[10] This Jacobite leader, nicknamed “Bobbing John”, led the Jacobites during the 1715 rebellion at the Battle of Sherrifmuir. He was defeated for good at the Battle of Fetteresso and charged with treason.

ANSWER: John **Erskine** [or Earl of **Mar**]

18. With Hückel, this name describes an alternative approach to the Woodward-Hoffmann rules.

[10] Name this form of aromaticity where the pi orbitals have an odd number of out-of-phase overlaps. In 2003, Herges reported the first stable compound with this configuration.

ANSWER: **Möbius** aromaticity

[10] Compounds with Möbius aromaticity are systems with this pi electrons according to this formula, which is 2 less than for an aromatic compound. For molecules with planar topology, this number of pi electrons would make it antiaromatic.

ANSWER: **4n**

[10] A magnetic field that is perpendicular to an aromatic compound will induce a current in the aromatic ring.

Therefore, one can tell if a compound is aromatic by using this method, which averages the diagonal elements of the magnetic shielding tensor. If the answer is negative, the compound is aromatic.

ANSWER: **nucleus-independent chemical shifts** [or **NICS**]

19. This deity may have originally been a war god in a pantheon led by El, and at times the goddess Asherah was considered a consort of this god, and even had an object of worship in this god’s temple. For 10 points each:

[10] Name this Semitic deity whose epithets include “The Lord of Hosts”

ANSWER: **Yahweh** [or **Jehova**; or **Adonai**; or **HaShem**; or The **LORD**; accept **YHWH** with any vowels in between the consonants or spelled out as an acronym; accept **Hebrew God** or **Old Testament God** or **Judeo-Christian God**; prompt on “God”; prompt on “Elohim”; as a moderator you can read any of these as the correct answer]

[10] The Lord of Hosts dwelt within this mobile tent when the Israelites were wandering the desert. This term also names the part of a Catholic church where communion wafers are stored.

ANSWER: **Tabernacle**

[10] In Pre-Islamic times, Allah shared the Kaaba with this Nabatean god worshipped by the Quraysh tribe. The statue of this god in the Kaaba was used for divination.

ANSWER: **Hubal**

20. One artist with this surname was a contemporary of Caravaggio who advised Charles I on his art collection and was handsomely rewarded by Philip IV of Spain for his 1633 version of *The Finding of Moses*. For 10 points each:

[10] Give this surname shared by an artist who depicted a naked Susanna recoiling in horror from an elder who places his finger to his mouth.

ANSWER: **Gentileschi**

[10] Artemisia Gentileschi is best known for this Biblical scene, where the title woman, assisted by a maid, uses a sword to perform a bloody deed.

ANSWER: **Judith Slaying Holofernes** [or **Judith** and **Holofernes**; accept equivalents that mention these two people]

[10] Gianbattista Tiepolo, who created his own version of *Susanna and the Elders*, painted *Allegory of the Planets and Continents* and *The Marriage of Frederick Barbarossa to Beatrix of Burgundy* in a residence in this German city. Balthasar Neumann designed that residence for the Schonborn family in this city.

ANSWER: **Wurzburg**