OOT 2016: "Waiting for Goldman"

Packet 10 (Editors 4)

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1. Eight workers were killed during the erection of one of these on an island in Hyderabad in 1992. One of these is at the centre of the Seokguram Grotto and Sapphire eyes and lion-like cheeks are among 32 Lakshanas which are features of these things, the largest of which is at Lushan. Many of these are depicted with the ushnisha and can be in a number of different asanas. A number of these in the Gandhara style were destroyed in the Bamiyan Valley in Afghanistan, and a giant one of these is found at Kamakura. For 10 points name these depictions of enlightened beings such as Siddhartha Gautama.

ANSWER: <u>Buddha Statues</u> (accept: <u>Buddharupa</u>, and more specific Buddhas because these are not all exactly the same figure)

2. This compound and carbon disulfide form a mixture which is the standard example of a strong positive deviation from Raoult's law. This compound is commonly used to protect vicinal diols. In the presence of magnesium, this compound dimerises to form pinacol. The reaction of this compound with hydrogen cyanide is the first step of the synthesis of methyl methacrylate. The differential solubilities of iodide and bromide in this substance drive the Finkelstein reaction. It is produced alongside phenol in the cumene process. This polar aprotic solvent is commonly used for cleaning lab glassware. For 10 points, name this simplest ketone, used in nail polish remover.

ANSWER: Acetone (accept propanone)

- 3. The administrative differences of this region of England continued to be recognised in the *Leges Henrici Primi*, while coinage minted in this region by monarchs such as Sithric showed syncretic symbolism of hammers and crosses. The flight of a raven on a banner flown by the invading army which created this region was claimed by the *Annals of St Neots* to signify victory. This region was conquered by the sons of Ragnar Lothbrok, leading the Great Heathen Army. The origin of such toponyms as Scunthorpe, Skegness and Derby, for 10 points, name this region of England which was formally delineated by Alfred and Guthrum. ANSWER: **Danelaw**
- 4. One novel with this name in its title is structured with a series of mostly unsent letters written by a filmmaker and her critical theorist husband Sylvère Lotringer to the sociologist Hebdige. In addition to *I Love this name* by Chris Kraus, the journal of an author with this surname was published in 2011 as *The Exegesis of* that author. A character with this first name marries a servant called 'the Marchioness' in *The Old Curiosity Shop*. A novel by an author with this last name is set after World War Terminus and features the use of the Voigt-Kampff test as a means to distinguish who is and is not human. For 10 points give this last name of Philip K., author of *Do Androids Dream of Electric Sheep*?

ANSWER: <u>Dick</u> (do not accept Richard)

5. Wearing of the conical tantour headdress persisted among members of this faith in the Chouf after it had fallen out of general fashion. Members of this faith largely left Yemen following the battle of Ain Dara with the Qaysites in 1711. Members of this faith comprised the largest portion of the now reformed "Sword" battalion of the IDF. The "ignorant" members of this faith are known as juhhal, in contrast to the initiated uqqal. This faith is symbolised by a five-pointed, five-coloured star. For 10 points name this secretive monotheistic religion, most members of which are found in Israel and Lebanon.

ANSWER: **Druze**

6. It's not a fish or a garden, but Nam June Paik created from a set of CRT screens a *TV* one of these devices in 1963. An extremely long montage of shots from TV shows and films of these devices was displayed at the Hayward Gallery in 2011 and was made by Charles Marclay. A building with one of these devices on its façade appears just to the left of the bridge at the centre of Vermeer's *A View of Delft*. One of these devices rest on a tree branch while another slides off a table that also holds an orange one of these devices covered in ants. For 10 points, identify these timekeeping devices of which Dalí painted melting versions.

ANSWER: Clocks

7. While attempting to enter a city with this name, forces under James Philips were massacred leading to the plunder of that city in a punitive expedition led by Harry Rawson. One country with this name saw a

Communist coup led by Mathieu Kérékou. That country with this name had formerly been known as "French Dahomey". One body of water bearing this name has an eastern boundary at the Nun outlet of the Niger River: where it meets the Bight of Bonny. For ten points, a pre-colonial empire and its capital, a modern republic, and a "Bight" in the Atlantic all share what name?

ANSWER: **Benin** (accept any answer with Benin in it)

8. A limit named for the "super" form of this property is encountered when thermal energy exceeds an activation energy proportional to the volume and the anisotropy energy. The data storage density of hard disks is restricted by that limit, whose characteristic decay time is predicted by the Néel-Arrhenius relationship. Above the Curie Temperature, ferromagnets exhibit this property, which is characterised by linear plots of applied field against magnetisation. Ground state oxygen, exhibits this property as it has unpaired electrons. For 10 points, name this property in which certain materials become weakly magnetized parallel to an applied magnetic field.

ANSWER: Paramagnetism

9. Thierry de Hery wrote extensively about this and Ulrich von Hutten described the use of Guaiacum as a cure for this condition, whose modern name Girolamo Fracastoro coined in a poem about a shepherd. This disease was treated by fumigation where a sufferer would sit on a bottomless seat with vaporized mercury then added. A morally questionable study of this disease where it was called "Bad Blood" was carried out in Tuskegee, Alabama. It had significantly different symptoms during the first major outbreak amongst soldiers of Charles VIII who were besieging Naples, and it was almost certainly brought back by Columbus' crew. For 10 points name this STD which features in many Ibsen plays also known as the "French disease".

ANSWER: Syphilis

- 10. Transition states of pericyclic reactions can be classed as having topologies named for Hückel or for this man. A class of cubic circulant graphs with an even number of vertices and connections between opposing pairs of vertices are called this man's "ladders". A function named for this man gives output one if its input is a square-free integer with an even number of prime factors. Six colours are needed to colour a map so that no two adjacent regions are the same colour on one structure proposed by this man, and that structure can be formed by cutting a Klein bottle. There is only one side to, for 10 points, which German mathematician's strip? ANSWER: August Ferdinand <u>Möbius</u>
- 11. In one work by this author, a town sheriff is woken at three am to be told a story of a man interrupting a church service and causing people to shriek that he is the devil when candlelight reveals him to be white rather than black. The central character of that novel by this author earlier made himself sick by eating toothpaste owned by Miss Atkins. A story by this author concludes with the discovery of a single hair lying on a pillow beside the deceased Homer Baron. This author of *The Light in August* and "A Rose for Emily" also wrote a novel that concerns Caddy and Quentin Compson. For 10 points name this author of *The Sound and the Fury*. ANSWER: William **Faulkner**
- 12. Paul Lodge edited the recently published collection of the correspondence between this philosopher and the Dutch philosopher Burchard de Volder. This philosopher used an anecdote of some clever gentlemen failing to find similar looking leaves as part of an illustration of the impossibility of numerically distinct substances being identical qualitatively. This philosopher wrote the barely dialogic *New Essays* as a criticism of Locke's *Essay*. This philosopher made recourse to the principle of sufficient reason in his *Theodicy*. For 10 points identify this German philosopher behind the notion of monads who discovered calculus independently of Newton. ANSWER: Gottfried Wilhelm <u>Leibniz</u>
- 13. In a discussion of the mystery of falling in love in one poem, this author states that "let it suffice / What we behold is censured by our eyes". That poem by this poet also describes a place where some "Compile sharp satires" to assuage "their violent passions". The speaker of one poem by this poet offers the addressee "a belt of straw and Ivy buds, / With Coral clasps and Amber studs". The merchant Barabas schemes to take control of the title location of one play by this poet of "Hero and Leander" and "The Passionate Shepherd to His Love". For 10 points name this playwright of *The Jew of Malta*.

ANSWER: Christopher Marlowe

14. This process can be suppressed by PARP inhibitors which are used in treating *BRCA1* and *BRCA2* related cancers. Cells in sufferers of Bloom Syndrome are less able to perform this process. LexA and RecA are important in the SOS response of prokaryotes that is initiated when this process is needed. NHEJ, NER and BER are all pathways to carry out this process. This process is defective in Xeroderma Pigmentosum and thus

TT photodimers caused by UV light are not removed. Chemotherapy and radiotherapy are designed to overwhelm a cell's capacity to perform this process. For 10 points name this process that reconfigures damaged genetic material.

ANSWER: **DNA repair**

15. This person passed 3200 trials each taking at least three million years to defeat a demon and they were born on the ninth day of the first lunar month. Son Wukong is given a position as keeper of horses after meeting this deity and later becomes immortal after stealing a peach from this man's orchard. One of this person's daughters weaves colourful clouds and this person creates the Milky Way to separate that daughter from her cowherd husband. This person organised a race between 12 animals, which was won by a rat. For ten points, name the highest deity of Taoism who is named after a green stone.

ANSWER: Jade Emperor

- 16. A Rossini overture which opens with five cellos depicts one of these things in its second movement. The final movement from Haydn's "Evening" symphony is named for one of these things as is Vivaldi's Concerto No. 5 from The Contest between Harmony and Invention and Beethoven's Piano Sonata No. 17. One of these things interrupts the "merry gathering of country folk" in the penultimate movement of Beethoven's Pastoral symphony. Depicted in the final movement of Summer by Vivaldi, and evoked by aeoliphones and thunder sheets in Richard Strauss's An Alpine Symphony, for 10 points, identify this meteorological phenomenon. ANSWER: Storms [or thunderstorms or tempests, prompt on "bad weather" or equivalents]
- 17. One spy during this war checked into a Charing Cross hotel with a name meaning "Mr. to act shamelessly" where he had meetings with Father Gapon. Paul von Rennenkampf began a feud, which later manifested at the battle of Tannenberg, during this war's battle of Mukden. The US president won the Nobel Peace Prize for negotiating the Treaty of Portsmouth which ended this war in which one force, which later sweated in Nosy Be in Madagascar attacked several British fishing boats at Dogger Bank. It was later destroyed by Admiral Togo at the decisive naval battle of Tsushima. For 10 points name this 1904-5 war for control of Korea and Manchuria discussed in the book *Rising Sun and Tumbling Bear*.

ANSWER: Russo-Japanese War

18. In an unsuccessful attempt to prevent this event, Valentine Dale met representatives of the Governor of the Netherlands. One side in this event scored a decisive victory at Gravelines [Grahv-leen] and after this event, 307 enemy prisoners were held in a barn in Torquay. In retribution for this event, the winning side mounted the unsuccessful Drake-Norris Expedition and during this event, Robert Dudley mustered defences at Tilbury: where a notable speech was delivered by Elizabeth I. For 10 points, name this attempted invasion of England in 1588 which ended with disaster for the namesake fleet of Philip II.

ANSWER: <u>Spanish Armada</u> [accept <u>Grande y Felicisima Armada</u>; or <u>Invincible Armada</u> and variations indicating an attempted invasion of England by Spain in 1588 before mention] [CC]

19. A newspaper had to apologise after falsely reporting this footballer's death as part of a test run of their app. Jock Wallace attempted to sign this player for Leicester but he ultimately moved to Levante instead, causing Leicester to be relegated. This footballer was forced to explain his comment about Edgar Davids only being on a certain team's board due to being black soon after he was stripped of his honorary title of president of another club following the election of Sandro Rosell. This footballer is the namesake of a turn in which the ball is dragged behind the player's planted foot. For 10 points name this Dutch, Ajax and Barcelona forward and advocate of "total football".

ANSWER: Johan Cruyff

20. One poem by this author suggest that surprisingly the sun rises in the title location and in a novel by this author a watch-maker Mendel gets trapped behind enemy lines. Other than writing "Crescenzago" this author wrote a poem where he asked the readers who live in "warm houses" to consider a woman without "hair or name" and asks that the reader "repeats them to your children." In another memoir this author of "If not now, when?" wrote "matter is matter, neither noble nor vile, infinitely transformable" in the story "Nitrogen". For 10 points name this author of *The Periodic Table* and *If This is a Man*, an Italian-Jewish Chemist.

Answer: Primo Levi

21. This is the name of the river which the main water source for the city of Galle. A Chinese ethnic minority with this name inhabits Wutou, Wanwei and Shanxin off the coast of Dinxing city. One invention with this name was invented by Elwood Baker and his son and another was invented by Eli Witney. The later massively reduced the cost of cotton production while the former was a card game intended to be a faster version of Rummy. Brinjevec and Old Tom are varieties of a drink with this name. For 10 points name this drink drunk by the slovenly people who Hogarth contrasted with the inhabitants of Beer Street.

ANSWER: Gin

- 1. An 18th century cannon was pressed into service during this siege, which was relieved after 217 days. Name, for 10 points each:
- [10] This siege in the Boer War, which saw three Victoria Crosses awarded, the use of an armoured train to attack the besiegers, as well as the playing of cricket matches during Sunday ceasefires.

ANSWER: Siege of Mafeking

[10] This man was commander of the British forces at Mafeking, and following his experiences, wrote *Aids to Scouting*, and an edited version, *Scouting for Boys*.

ANSWER: Robert Baden-Powell

[10] This other British-controlled South African town was also besieged during the 2^{nd} Boer War, but is better known for its "Big Hole" which made many of the Randlords their first fortunes.

ANSWER: **Kimberly**

- 2. Most canals were superseded by the railways, but many still operate for large bulk shipping. Name, for 10 points:
- [10] This ship canal which could arguably be said to have been started by Charlemagne, but its final version opened in 1992, passing through Nuremberg.

ANSWER: Rhine-Main-Danube Canal

[10] This canal has locks including the Iroquois and the Dwight D. Eisenhower and is the main export route for Ontarian grain.

ANSWER: St. Lawrence Seaway

[10] Some workers on this canal were awarded the Order of the Red Banner of Labour, despite being gulag prisoners. The Rus portaged their boats between the two rivers linked by this canal.

ANSWER: Volga-Don Canal

3. The title character of one novel by this author is involved with the running of a lignite mine in Crete and emotionally in the prostitute Madame Hortense. For 10 points each:

[10] Identify this author of Zorba the Greek.

ANSWER: Nikos Kazantzakis

[10] A black angel offers a pleasure filled life to title character of this Kazantzakis novel who constructs crosses for use in crucifixions.

ANSWER: The Last Temptation of Christ

[10] This other rather more ancient Greek novelist wrote the romance *Aethiopica* in either the second or third century AD.

ANSWER: Heliodorus of Emesa

- 4. This author developed the idea of heterotopias which can be seen as ambiguous spaces of otherness which are both mental and physical in *Of Other Spaces*. For 10 points each:
- [10] Name this French author who pioneered the idea of heterotopias as physical embodiments of aspects of the utopia in *The Order of Things*.

ANSWER: Michel Foucault

[10] In *Of Other Spaces*, Foucault distinguishes between heterotopias of deviance like prisons or care-homes and crisis heterotopias such as boarding schools or these voyages on which women were expected to lose their virginity in western society.

ANSWER: <u>Honeymoons</u> (accept <u>voyages des noces</u>)

[10] Foucault's third principle of heterotopias is that they juxtapose in a real place several incompatible places. He uses the example of these quadrilateral places whose Char Bargh variety has a form of spiritual navel at its centre.

ANSWER: Persian Gardens

- 5. This author's best known character is first encountered as a former high-school baseball player who is selling the MagiPeeler for a living. For 10 points each:
- [10] Name this author who wrote about Harry Angstrom in the "Rabbit" Novels as well as writing *The Witches of Eastwick*

ANSWER: John Updike

[10] In this "Rabbit" novel, Harry Angstrom is troubled by his son Nelson who damages his Ford Mustang having earlier come into fortune after inheriting his father's Toyota dealership.

ANSWER: Rabbit is Rich

[10] Updike is one of only 3 writers to win the multiple Pulitzer Prizes for Fiction along with William Faulkner and this author who discussed a wealthy Indiana family in *The Magnificent Ambersons*.

ANSWER: Booth Tarkington

6. Name some things relating to breakfast drinking. For 10 points each:

[10] A waitress says "Breakfast of Champions" every time she serves a customer a martini in a novel of the same name by this author of *Cat's Cradle*.

ANSWER: Kurt Vonnegut

[10] This author of *The Trial of Henry Kissinger* once described Johnnie Walker Black Label as the Breakfast of Champions, and recommended cutting it with Perrier as a mid-morning restorative.

ANSWER: Christopher Hitchens

[10] A popular breakfast drink/hangover cure in Canada is a Bloody Caesar, which differs from a Bloody Mary in its use of this ingredient.

ANSWER: Clam broth (accept Clamato, accept anything to do with Clams really)

7. For 10 points each, name some model organisms.

[10] These insects were extensively studied by Thomas Hunt Morgan. The presence of large polytene chromosomes in their salivary glands has led to their popularity as model organisms.

ANSWER: *Drosophila melanogaster* (accept Fruit Flies)

[10] The Casper mutants of this aquatic model organism are completely transparent. These model organisms are named for their distinctive lateral stripes.

ANSWER: Zebrafish (accept *Danio rerio*)

[10] John Gurdon won a Nobel prize for inducing pluripotency in cells from adults in this species and the Spemann-Mangold organiser experiment was conducted on embryos of this species. These tetraploid model organisms are popular owing to their large oocytes.

ANSWER: Xenopus Laevis (accept African Clawed Frog, prompt on "Xenopus" or "Frog")

8. During the Great War, he proposed that Germans use mortars to fire lunch baskets to aeroplane pilots and produced many depictions of flat inhabitants dealing with the lack of space in their quarters. For ten points each: [10] Name this British cartoonist whose complicated devices have led to his name being associated with any makeshift contraption.

ANSWER: William Heath Robinson

[10] His work often mocking the sterility of modern architecture, name this cartoonist for the *Daily Express* who also wrote the local history parody, *Draynflete Revealed*.

ANSWER: Osbert Lancaster

[10] This New Zealand-born contemporary of Lancaster and Heath Robinson mocked appeasement while working for the *Evening Standard*. He depicted Hitler and Stalin meeting in *Rendezvous* and created Colonel Blimp.

ANSWER: David Alexander Cecil Low

- 9. The Italian Jesuit Gabriel Malagrida was executed in the Távora affair in the wake of this event. For 10 points each:
- [10] Identify this event that drove Joseph I to set up a tent camp on the hills of Ajuda.

ANSWER: 1755 <u>Lisbon Earthquake</u>

[10] The Tipplers' Revolt broke out in the wake of the Lisbon Earthquake as a protest against the monopoly on this fortified wine.

ANSWER: Port

[10] The Marquis of Pombal founded this company to regulate the sale and production of Port in 1756.

ANSWER: <u>Douro</u> Wine Company (accept Companhia Geral da Agricultura e Vinhos do Alto Douro)

- 10. A positive Lhermitte's sign, where flexing one's head produces the sensation of electric shocks down the body, is indicative of this disease. For 10 points each,
- [10] Give this disease which is characterised by demyelination of white matter tracts in the brain and spinal cord. This autoimmune disease can take a chronic course but is often relapsing-remitting in the early stages.

ANSWER: <u>Multiple Sclerosis</u> [or <u>MS</u> or <u>Disseminated Sclerosis</u> or <u>Encephalomyelitis disseminata</u>]

[10] Either in Schwann cells or oligodendrocytes, myelin provides an insulating cover to this part of a neuron. These long, thin projections transmit action potentials at speeds of up to 150 metres per second.

ANSWER: Axons

[10] A demyelinating disease of the peripheral nervous system is Guillain-Barré Syndrome. In a third of cases this occurs due to immune cross-reactivity to this pathogen, a common bacterial cause of food poisoning. Like salmonella, it is commonly found on raw chicken.

ANSWER: <u>Campylobacter</u> species [accept specific species such as <u>C. jejuni</u>]

- 11. This man sailed with Robert Clark Morgan and published "Narrative of Missionary Enterprises in the South Sea Islands" after translating the Bible into Cook Islands Maori. For 10 points each:
- [10] Name this member of the London Missionary Society who gave his name to seven of its ships after he was eaten by cannibals in modern day Vanuatu.

ANSWER: John Williams

 $[10] This\ LMS\ missionary\ named\ Victoria\ Falls\ and\ was\ greeted\ by\ a\ man\ later\ MP\ for\ Lambeth\ North\ in\ Ujiji.$

ANSWER: David Livingstone

[10] This LMS missionary won the 400m at the 1924 Olympics after missing the 100m because the heats were on a Sunday.

ANSWER: Eric Liddell

- 12. If Ugaritic myth has taught us anything, it's that you can fight El's favourites and he won't really care. For ten points each:
- [10] This god fights Yam in the first part of his namesake cycle. This storm god also appears in lots of other Semitic myths. In the Bible, Gideon destroys statues of this god and Elijah has a competition with the priests of this deity.

ANSWER: **Ba'al**(u) Haddad (prompt on **Haddad**)

[10] After Ba'al conquers Yam, he challenges this death god to a fight only to die in the process. After which this death god takes Ba'al's role with disastrous results.

ANSWER: **Mot**(u)

[10] Ba'al is revived by his sister, this very violent war goddess.

ANSWER: Anat(u)

- 13. Hugh Aldersey-Williams wrote a recent biography of this author that traces the literary influence he has had, extending even into the 21st century. For 10 points each:
- [10] Identify this polymath who wrote the *Pseudodoxia Epidemica* as well as a work inspired by the discovery of a Roman archaeological site in Norfolk, his *Hydriotaphia*.

ANSWER: Thomas **Browne**

[10] Guy Patin described Thomas Browne as expressing a "pleasant" variety of this temperament in his thoughts. Robert Burton wrote *The Anatomy of* this temperament.

ANSWER: melancholy

[10] This poet quoted the lines "May all the stars hang bright above her dwelling, / Silent as though they watched the sleeping Earth!" from his poem *Dejection: An Ode* to end his "Letter on Thomas Browne". He also collaborated with Wordsworth on the *Lyrical Ballads*.

ANSWER: Samuel Taylor $\underline{\textbf{Coleridge}}$

- 14. Thankfully, some people decided to catalogue the music of various composers. For ten points each:
- [10] This botanist published his catalogue of Mozart's works in 1862, assigning to each of them K numbers, for example the Mozart bassoon concerto is K191 and his Requiem Mass is K626.

ANSWER: Ludwig Ritter von Köchel

[10] The catalogue of J.S. Bach's work is normally known by 3 letters. The first 224 works in this catalogue are all cantatas.

ANSWER: <u>BWV</u> (prompt on <u>Bach-Werke-Verzeichnis</u> and <u>Bach works directory</u>)

[10] The sonatas of Scarlatti were catalogued by this American harpsichordist.

ANSWER: Ralph Kirkpatrick

15. According to Roland Barthes, the public know the difference between boxing and wrestling because boxing is this kind of sport. For ten points each:

[10] Name this movement in 17th century Roman Catholicism which emphasised Calvinist ideas and was posthumously named for a Dutch bishop. Blaise and Jacqueline Pascal were notable followers of this movement.

ANSWER: Jansenism

[10] Blaise Pascal likely contributed to Port-Royal Logic, a work by this Jansenist leader and mathematician.

ANSWER: Antoine Arnauld

[10] A resurgence of Jansenism after their decline was called the Formulary Controversy and pitted Jansenists against this teaching and missionary order founded by Ignatius Loyola and known as "God's Marines".

ANSWER: Jesuits (accept The Society of Jesus)

16. Answer some questions about literary magazines, for 10 points each:

[10] Noted for its cartoons and many covers by Saul Steinberg this magazine is currently head edited by David Remnick.

ANSWER: The New Yorker

[10] Tom Lutz edits this major online only cultural magazine that started out on a tumblr in 2011. The *Marginalia Review* is a subsection of this online magazine.

ANSWER: The <u>Los Angeles Review of Books</u> [or <u>LARB</u>]

[10] This magazine is head-edited by Andrew Gallix and has such illustrious subeditors as David Winters. Its motto is "Whatever it is, we're against it!" and it has a major recurring feature in which contemporary philosophers are interviewed at great depth.

ANSWER: 3:AM magazine

17. Name some things relating to diagrams in chemistry. For 10 points each:

[10] The lines on pressure-temperature phase diagrams have their slopes determined by this equation, which states that their gradient is equal to the ratio of the entropy change and the volume change during phase transitions.

ANSWER: Clausius-Clapeyron equation

[10] Unlike Orgel diagrams, these diagrams can be used for both high-spin and low spin complexes to predict their ground states and the number of allowed electronic transitions they can undergo.

ANSWER: **Tanabe-Sugano** diagrams

[10] Pourbaix diagrams, which show the most stable state of mixtures under a variety of conditions, plot reduction potential on the y-axis and this quantity, which is less than 7 for acids, on the x-axis.

ANSWER: pH

18. These entities assume Russell-Saunders coupling as opposed to J-J coupling. For 10 Points Each:

[10] With examples including "singlet S" and "triplet P", name these abbreviated descriptions of angular momentum quantum numbers for multi-electron atoms.

ANSWER: Term Symbols

[10] Hund's first rule states that the lowest energy configuration will be that for which the total value of this quantity is maximised. This quantity corresponds to the intrinsic angular momentum of a particle.

ANSWER: **Spin** angular momentum

[10] The allowed values for the total angular momentum are given by this doubly-eponymous series, the minimum value of which is the absolute value of L minus S.

ANSWER: Clebsch-Gordan series

19. During this war the forces of the Crown were ambushed and many of their supplies fell into the river leading the battle to be known as the Battle of the Ford of the Biscuits. For 10 points each:

[10] Name this Rebellion in which Gaelic chieftains rose up against Elizabethan rule. It resulted in the Flight of the Earls after their defeat, despite Spanish help, as well as almost bankrupting the Exchequer.

Answer: Nine Years' War (accept Tyrone's Rebellion)

[10] The Nine Year's War was waged predominantly by the Earl of Tyrone, a member of this clan. Their chieftains were inaugurated at Tullyhogue [Tully-ho].

Answer: O'Neill

[10] The O'Neills claimed the throne of this Kingdom whose current symbol of a Red Hand descends from their leadership.

Answer: <u>Ulster</u>

20. Identify some pioneering musicians in the genre of free jazz, for 10 points each.

[10] This jazz composer won a Pulitzer Prize for his 2007 album *Sound Grammar* that began with the same notes as *The Rite of Spring*. This composer may be better known for his 1959 album *The Shape of Jazz to Come*. ANSWER: Ornette <u>Coleman</u>

[10] Noted for a series of solo concerts carried out in the 1960s, this jazz pianist is best known for his 1966 album *Unit Structures*, the music of which features only himself on the piano and two basses, one played with bow and the other pizzicato.

ANSWER: Cecil **Taylor**

[10] This hard bop and free jazz composer was notably aggressive when conducting his band. He is responsible for the classic albums *Pithecanthropus Erectus* and *The Black Saint and the Sinner Lady*.

ANSWER: Charles Mingus