**ACF Nationals 2010**

**Packet by Michigan and Minnesota B**

1. Early on in this work, an old woman mutters “Wel-a-wel-a-day” as she recounts the dangers presented by Lord Maurice, the “dwarfish” Hildebrand, and the “barbarian hordes.” In another section, this work compares Merlin’s Demon debt with the protagonist’s attempt to hide in a closet filled with “cates and dainties.” As it ends, the combination of the dragoons having drunk Rhenish wine and the cover provided by an “elfin storm” allows a pair of figures to slip out of the Baron’s mansion and, with Angela’s help, escape across the moors. Composed in 1819, its 32nd stanza alludes to a poem by Alain Chartier that would be adapted by its author as “La Belle Dame Sans Merci.” Inspired by the belief that a virgin would see an image of her future husband after performing certain rites on a particular night, for 10 points, identify this work, about lovers Porphyro and Madeline, a poem by John Keats.

ANSWER: ***The Eve of Saint Agnes***

2. This man arrested and executed Vladmir Rytov for smuggling caviar as part of his anti-corruption campaign. At the death of his former patron, Mikhail Suslov, he took the position of Ideology Secretary and pushed for economic modernization. During his most prominent tenure, an airplane containing Georgian Congressman Larry McDonald was shot down, leading the U.S. to allow GPS for non-military use. This man diplomatically wrote “we want peace” in order to be "growing wheat, building and inventing, writing books and flying into space” in his infamous letter to ten year old Samantha Smith. As part of project PAUK, he attempted to isolate Alexandr Solzhenitsyn from other dissidents as head of the KGB. Succeeded in his most famous position by Konstantin Chernenko, For 10 points, name this leader of Soviet Russia from 1982 to 1984, after Leonid Brezhnev.

ANSWER: Yuri **Andropov**

3. One figure in these texts is has aspects of Armaiti, Asha, and Khshathra, as well as three others termed the "Bountiful Immortals."  Only five of them have survived, but one of these "of the Seven Chapters," or Haptanghaiti, was written after their author's death and provides evidence of reform in that a new genre of feminine *gena* powers and a commentary on the pre-existent soul were created.  The worship of false religion is condemned in them, especially towards the "evil mind," Aka Manah, and other daevas.  Their final section is a dialogue between Jamaspa and their creator and they comprise *Yasnas* 28-53 of a sacred text alongside the *Visperad*, *Videvdat*, and *Yashts*. For 10 points, name these Zoroastrian prayer-hymns.

ANSWER: ***Gathas*** [prompt on answers of *Zend-Avesta*, or on *Yasna* before it’s mentioned]

4. Valproate, or Depakote, can cause encephalopathy in individuals in which this pathway is defective, and CSPI deficiency is a particularly severe disorder affecting this pathway. Disorders in this pathway may be treated with sodium phenylbutyrate, which is metabolized to phenylacetate in the body. One enzyme in this pathway is an isomer of an enzyme that makes up part of the CAD complex in pyrimidine biosynthesis; that enzyme is allosterically regulated by N-acetylglutamate and is called CPS-I. In one step in this pathway, carbamyl phosphate is combined with ornithine to produce citrulline. Originally discovered by  Henseleit and Krebs, for 10 points, name this cycle which is used to remove nitrogen from unneeded amino acids from the body.

ANSWER: **urea** cycle

5. A speaker describes the plight of the character Ulrich who accepts his adulterous wife in this man’s “The Faithlesss Louisa.” Another work by this author describes the actions of a drummer boy and was published in the collection *Poems for the Times*.One of his final works was a set of poems inspired by the story of Lazarus and his early works include the tragedy *William Ratcliff*.Yet another work by this author, subtitled “A Summer Night’s Dream,” described the protagonist visualizing honey dripping down from a tree before he is shot by Laskaro. That work *Atta Troll* was published three years after its author’s work celebrating a revolt in Silesia, *Germany: A Winter’s Tale*. In addition to “Two Grenadiers” which reflected his love for Napoleon, this man wrote a poem about a beautiful woman who lures sailors to their death. For 10 points, name this poet of the lyrics *The North Sea* and *The Lorelei*.

ANSWER: Heinrich **Heine**

6. Sections of this work discuss early Roman law and the Germanic wadium, while it begins with a quote from the Havamal, a portion of the Edda. This work extends the author’s first work, a collaboration in which he analyzed analogous ideas in Hinduism and Judaism. Marilyn Strathern critiqued this book from a gender perspective, while Sahlins’ article on the “The Spirit of [It]”, claimed that its author may have misunderstood an idea called the hau, in which the souls of the people involved in the title ritual become intermingled. The author views the title concept as multivalent—that is, a situation where a single action stands for all of society, called a total prestation. Drawing from Malinowski’s study of the kula ring and the institution of the potlatch, for 10 points, identify this sociological work about the titular exchange by Marcel Mauss.

ANSWER: ***The Gift****: Forms and functions of exchange in archaic societies* [accept *Essai sur le* ***don***]

7. He discussed the lack of good municipal art in urban areas in his essay “Our Ugly Cities,” and predicted that the airplane would “wipe out the borders of the world” after viewing an early Wright Brothers flight. One of his works depicts a slave girl named *Pink* being freed by Henry Ward Beecher, while his memorial to Sacco and Vanzetti features some of latter's last words and is located in the Boston Public Library. He portrayed James R. McConnell, a pilot killed in World War I, as a man with wings in *The Aviator*. His Twelve Apostles adorns the Cathedral of St. John the Divine in New York, and he depicted a stampede directed by Hercules in the first sculpture accepted by the Met, his *Mares of Diomedes*. For 10 points, identify this sculptor of the head of Lincoln in the US Capitol Rotunda and a National Memorial featuring the heads of four presidents at Mount Rushmore.

ANSWER: Gutzon **Borglum**

8. It often arises near transverse homoclinic points, as in the Smale horseshoe. A Poincaré section or first-return map for this type of dynamics will exhibit a fractal structure. In examples such as the logistic map, as a parameter is increased a sequence of period doubling bifurcations characterized by the Feigenbaum constant leads to its onset. It is characterized by positive Lyapunov exponents, meaning that small errors in initial data grow quickly and make practical long-term predictions impossible. Devaney specified three requirements for it: topological transitivity, dense periodic orbits, and sensitivity to initial conditions. For 10 points, what is this physical phenomenon, exemplified by the weather, in which a deterministic system exhibits apparently random behavior?

ANSWER: **chaos**

9. The Rio Salado flows into one river of this name, which reaches the Atlantic south of Bahia Bianca in central Argentina. Another river of this name contains empties into Matagorda Bay near Palacios. The "Little" river of this name flows through Nankoweap Canyon and the Kaibab National Forest, after collecting water from the Puerco River, and it includes a kayaking section through the Painted Desert. The aforementioned river passes through a series of "Highland Lakes" including Inks Lake, Lake Buchanan, and Lake Travis before flowing through Austin, Texas. For 10 points, give this name which also applies to a river that forms Lake Powell at the Glen Canyon Dam, before it passes through Yuma and forms the boundary between California and Arizona.

ANSWER: **Colorado** Rivers

10. Part V of this work asserts that Proudhon’s veneration of violence made his ideas incompatible with those of its subject. This work traces the paradoxical nature of a man who is able to express the “oscillations of feeling” that animate the individual, yet champions a metaphysics based on determinism. It analyzes a definition of “greatness” that turns on the incapacity of persons like Marx to recognize their own insignificance, and traces the influence of Joseph de Maistre’s ideas on a certain writer who, as this work asserts, should be treated as a philosopher rather than a novelist. This work, which posits a distinction between two types of intellectuals, begins with a fragment taken from Archilochus stating that although one of the title creatures knows “many things,” the other knows “one big thing.” For 10 points, identify this work subtitled “An Essay on Tolstoy’s View of History,” a work by Isaiah Berlin.

ANSWER: “**The Hedgehog and the Fox**”

11. Attendees at this event included George Read and Richard Bassett from Delaware, and Egbert Benson from New York. They resided together at the city tavern belonging to George Mann, after initially being called to discuss water navigation regulations at this meeting, which attempted to resolve issues not agreed upon at the Mount Vernon Conference. It was attended by delegates of only five states, but Abraham Clark of New Jersey seized on the opportunity to call for a further meeting.  For 10 points, identify this 1786 meeting that decided to reconvene a year later in Philadelphia to amend the *Articles of Confederation*, and was held in the namesake Maryland city.

ANSWER: **Annapolis** Convention

12. The developer of this process also developed a method for generating straight-chain detergents with a platinum catalyst and was named James Roth. Sunley and Watson developed a variation on this reaction that uses an alternative iridium-based catalyst. It inspired a similar process which takes place under anhydrous conditions and is named after Tennessee Eastman. The catalyst for this compound adopts a d8 configuration during its first step, an oxidative addition, and subsequently participates a reductive elimination step after an insertion reaction involving carbon monoxide. It supplanted the earlier Wacker and BASF methods and, unlike the Cativa process, uses homogeneous rhodium iodide as a catalyst. For 10 points, name this commercial process in which carbon monoxide is combined catalytically with methanol to produce acetic acid, developed by the company that manufactures RoundUp.

ANSWER: **Monsanto** Process

13. This author wrote a short story in which Little Jebb ends up going to prison for murder while his father lives to be over a hundred.  In that story, a nine year old boy named Seth reflects on a stranger who came to his parents' house looking for work; it is revealed that Seth followed the stranger after that experience for many years.  That story, "Blackberry Winter," appears in a collection whose title story contains the emotional death of Mrs. Lockhart and her perceived betrayal by her son Bolton.  This author of "The Circus and the Attic" wrote one novel in which Jerry Beaumont proclaims himself a knight and another in which Jerry Calhoun and Slim Sarrett are among the love interests of Sue Murdock.  For 10 points, name this author of *World Enough and Time* and *At Heaven's Gate* who also created Jack Burden and Willie Stark in the novel *All the King's Men*.

ANSWER: Robert **Penn Warren**

14. An early painting of his shows a winged angel dominating the center with two large blotches of red on the left and right, and another of his paintings depicts a large group of people praying as a bird-like creature breaks through the roof. In addition to *The Elements* and *The Devil in the Church* he created a self-portrait featuring grotesque fingernails and an outstretched arm. A gold-skinned young boy wearing a red sash and crying and sitting in field of broken machinery is seen in his *Echo of a Scream*, but more renowned is a 1000-square foot mural depicting a huge robotic bird, men wearing gas-masks, and a machine that spits out gold coins. He completed *Portrait of the Bourgeoisie* one year before participating in a plot to assassinate Leon Trotsky. For 10 points, name this man, who belonged to the “Big Three” of Mexican muralists along with Diego Rivera and José Orozco.

ANSWER: David Alfaro **Siqueiros**

15. This military commander died at Salzbach en route to engaging in a battle against a rival who had earlier won the Battle of Saint Gotthard. In addition to that rivalry with Raimondo Montecuccoli, legend has it that this brother of the Duke of Bouillon was induced to betray the king as a result of his love for Anne Geneviève, the Madame de Longueville and the sister of his other major rival. Of this man, who led a successful campaign in Flanders after conquering Treves, Napoleon once said: his “genius grew bolder as he grew older." His greatest victory came at the Battle of the Dunes, where he crushed the victor at Rocroi and thereby ended the rebellion of the Frondé. For 10 points, name this general, a constant foil to the Prince de Condé as a viscount under Louis XIV.

ANSWER: Vicomte de **Turenne** [or Henri de la **Tour d’ Auvergne**]

16. Much of the second section of this work is played in triple time. The opening theme is structured around the first four notes, A, G sharp, A, G natural, and part 1 features a vision of demons before a character sings “Into thy hands.” At one point this work contains an instruction that every instrument must “exert its fullest force,” that climactic section was added on the advice of its composer’s friend August Jaeger. Part 2 includes the lullaby “Softly and Gently” as sung by a chorus of angels, while the whole work begins with an orchestral prelude that segues into the title figure’s first words: “Jesu, Maria.” Originally composed for the Birmingham music festival, it depicts the title man’s journey from death to his encounter with God in Heaven. For 10 points, identify this oratorio based on a poem by Cardinal John Newman, a work by Edward Elgar.

ANSWER: ***The Dream of Gerontius***

17. In Chinese myth, Lan Caihe, one of the eight immortals, is traditionally said to possess only one of these objects.  In Welsh myth, Gwydion is called one of the three golden makers of *these*after he makes them for Arianrhod in a plot to make her give a name to Lleu Llaw Gyffes. In addition to saddles and shields, Manawydan and Pryderi are driven out of England by angry villagers for making these objects.  The Norse god of silence, Vidar, will kill Fenrir at Ragnarok with one of these which he is crafting out of strips of discarded leather, the Thickmost one.  Hans Christian Andersen wrote about a red set of them, which cause a girl to dance uncontrollably. At the end of some versions of Snow White, the queen is given a red-hot iron pair of, for 10 points, what articles of clothing, which are often made by elves or leprechauns?

ANSWER: **shoes**

18. Kelley observed that high frequency radar was returned strongly at high latitudes, which are known as its namesake "summer echoes."  Red flashes of light with tendrils hanging below, known as sprites, are observed in this layer during thunderstorms. An unusual type of cloud which glows bluish-white and is usually seen from near the poles is found in this layer, and is known as a noctilucent cloud. Zonal flow is very small near the top of this layer of the atmosphere, which has temperature decreasing with increasing height. For 10 points, name this region of the atmosphere from about 50 to 85 kilometers above the surface, whose upper section is the coldest part of the atmosphere, which is also the location where meteors usually burn up.

ANSWER: **mesosphere**

19. In one this author’s short stories, a charlatan who sells fake ringworm medicine finds himself competing with Rastafarian and a Jehovah’s Witness for clients on a crowded *molue*, or bus. That story, in addition to such works as “In the City of Red Dust” and “When the Light Returns,” was published in the collection *Stars of the New Curfew*.A novel by this author centers on a painter’s love for Ifeyiwa, who dreams of killing her husband. That work, *Dangerous Love*, preceded a story inspired by the Sudanese famine, “A Prayer for the Living.” His first novel, about a man named Jeffia who realizes his family wealth is due to the corruption present in Lagos, was called *Flowers and Shadows*.In another work, this author introduces the vivacious barkeep Madame Koto who interacts with the “abiku,” Azaro. For 10 points , identify this author of *Incidents at the Shrine* and *The Famished Road*.

ANSWER: Ben **Okri**

20. This man's bizarre death apparently involved him asphyxiating in a bathtub covered by boiling water, discovered when police broke into his locked bathroom. Events during his rule included the passing of Decree 900, aimed at massive land redistribution, and the *Alfhem* affair, named for a Swedish boat that linked this man's administration to arms from Czechoslovakia. His daughter Arabella infamously had a love affair with the matador Jaime Bravo, and publicly shot herself in front of him. He ascended to defense minister after joining a coup against Jorge Ubico. In the wake of Operation WASHTUB, he was overthrown by Carlos Castillo Armas as part of a plan known as Operation PBSUCCESS. For 10 points, name this reformist leader who was ousted by a 1954 junta orchestrated by United Fruit and the CIA in Guatemala.

ANSWER: Jacobo **Arbenz** Guzman

21. In dispersive media, this man’s namesake theorem involves a term proportional to the imaginary part of permittivity times the square of electric field, accounting for absorptive dissipation. Without dissipation, his theorem states that the partial time derivative of energy density, plus J dot E, equals minus the divergence of his vector. This expresses conservation of energy in electrodynamics. The Abraham-Minkowski debate is the question of how to generalize his vector to fields in materials. For a plane wave, his vector points in the direction of propagation and has a magnitude of epsilon-nought times the electric field squared. For 10 points, who is this English physicist whose namesake vector gives the energy flux transported by an electromagnetic field, proportional to E cross B?

ANSWER: John Henry **Poynting**

22. Jared Spicer wrote a 1968 poetry collection with this name, while a children's book by Frances Darling with this title details Reuben's fourth birthday and how he almost misses a family photograph.  Hal Blythe claims the most famous poem of this name is an exercise in perspective and should be read like a screenplay.  The central image of that poem is often interpreted as an intermediary between man and nature as well as being an archetype of purification, fertility, and growth.  This poem's central image may also signify female maturation contrasted with the innocent color of the nearby animals; it may have been inspired by gazing through the window of a dying girl's bedroom, which was “glazed with rain.” For 10 points name this poem about a titular conveyance adjacent to poultry by William Carlos Williams.

ANSWER: The **Red Wheelbarrow**

23. The first three parts of this composer's *Songs for Achilles* were taken from an opera in which the titular Trojan is killed by Neoptolemus, while another of his operas sees Jo Ann fall in love with Merlin, who arrives in Act I on a spaceship. This composer created the song cycle *The Heart's Assurance* for the tenor Peter Pears and may have used *The Magic Flute* as a basis for his first opera *The Midsummer Marriage*. His oratorios include *The Mask of Time* and one featuring African-American spirituals such as "Go Down Moses" and "Deep River." That work's libretto was originally planned to be written in part by T.S. Eliot, but instead was written completely by the composer, who used Herschel Grynszpan's sparking of the Kristallnacht to express his objection to the Nazis. For 10 points, name this British composer of *A Child of Our Time*.

ANSWER: Sir Michael Kemp **Tippett**

Members of this culture practice a traditional textile art called *paj ntaub* (pa DOW"), which makes use of geometric and organic designs.  This ethnic group practices the *hu plig* (hew plee), or soul-calling ceremony three days after a child is born.  At birth the child's placenta is buried; when a person dies, the soul is thought to travel back to this burial place and wear the placenta as a jacket for protection against evil spirits called *dabs*.  Many members of this group fled to Thailand and then took political asylum in Western countries after being targeted for their involvement in the Secret War in Laos.  These people believe a child will become a *tvix neeb*(tsi neng), or shaman, if he or she is afflicted with epilepsy, leading Anne Fadiman to write about the conflicts between California doctors and the Lee family from, for 10 points, which southeast Asian ethnic group featured in *The Spirit Catches You and You Fall Down*?

ANSWER: the **Hmong** (or **Mong**)

**Michigan and Minnesota B Bonuses**:

1. It allows a certain thinker to make an argument that a single individual can supersede the limitations of the universal, and revolves around a man confronted with making a choice based on the strength of the absurd, for 10 points each:

[10] Identify this event, which is analyzed using a series of three questions, including whether or not a “teleological suspension of the ethical” exists.

ANSWER: Abraham’s decision to **sacrifice** **Isaac** or **the sacrifice of Isaac** or **the binding of Isaac** (prompt on “a father’s decision to kill his son, or sacrifice his son”)

[10] Whether or not Abraham’s choice to sacrifice Isaac represents a teleological suspension of the ethical is one of the primary *Problemata* animating this work written by Soren Kierkegaard.

ANSWER:  ***Fear and Trembling*** or ***Frygt og Baeven***

[10] *Fear and Trembling* critiques the discussion of faith set forth by Georg Hegel in this 1821 work that discusses the shift from an “Abstract” understanding of the title concept to the social development of an “Ethical Life.”

ANSWER: ***Philosophy of Right*** or ***Elements of the Philosophy of Right*** or *Grundlinien der* ***Philosophie des Rechts*** or ***Naturrecht und Staatswissenschaft im Grundrisse***

2. Cellos are the only instrument scored in this collection's first and fifth sections, while the "Song of the Bush" is contained in its fourth section. For 10 points each:

[10] Name this collection of nine suites, which draw heavily upon the composer's earlier collection *Choros*.

ANSWER: **Bachianas brasileiras** (accept **Brazilian Bach pieces**)

[10] This composer, whose symphonies have such nicknames as "The War" and "The Victory," composed the *Bachianas brasileiras*.

ANSWER: Heitor (or Hector) **Villa-Lobos** (prompt on partial last name)

[10] The tocata section of the second suite in *Bachianas brasileiras* uses such instruments as a pandeiro and a reco-reco to depict one of these objects carrying peasants.

ANSWER: a **train** (accept The **Little Train of the Brasilian Countryman** or **O tremzinho do caipira)**

3. This law was a simplification of the work done on X-rays by Max von Laue. For 10 points each:

[10] Name this law devised by an English physicist to explain why the cleavage faces of crystals reflect X-ray beams at certain angles of incidence. This law expresses the relationship of a X-ray’s wavelength, the angle of incidence, and the spacing between crystal lattice planes.ANSWER: **Bragg’s** Law

[10] Bragg’s Law can be used to explain why acoustic standing waves, when produced in a solid, can scatter light waves. The scattering of light by acoustical phonons is this type of scattering, named after a Frenchman who also gives his name to a primitive cell of a reciprocal lattice.

ANSWER: **Brillouin** Scattering

[10] Another physical effect involving light and crystals is this one, in which the application of an electric field produces a birefringence in crystals that lack inversion symmetry. Unlike the Kerr effect, this effect produces a birefringence proportional to the field.

ANSWER: **Pockels** Effect

4. This novel depicts the death of the virtuous Miss Melville and ruination of the tenant Hawkins, for 10 points each:

[10] Identify this novel, subtitled “Things as they are,” which focuses on a title figure, the personal secretary to Squire Falkland, who uncovers his master’s murder of Tyrrel.

ANSWER: ***Caleb Williams***

[10] *Caleb Williams* was written by this British author of *Fleetwood* and *Cloudesley*, who may be best known as the father of Mary Shelley.

ANSWER: William **Godwin**

[10] Of *Caleb Williams*, this contemporary essayist said: “no one ever began… that did not read it through.” His own work includes a notable 1825 collection of studies of fellow writers as well as the plaintive *Liber Amoris*.

ANSWER: William **Hazlitt** [the collection is *The Spirit of the Age*]

5. This man died at the Battle of Corupedium after reportedly fighting in single combat. For 10 points each:

[10] Name this former general of Alexander who co-ruled in Macedon after ousting Demetrius.

ANSWER: **Lysimachus**

[10] Lysimachus made this city one of his treasuries and his eunuch Philatarus founded its Attalid Dynasty. King Eumenes II of this place responded to a papyrus embargo by inventing parchment from animal hide.

ANSWER: **Pergamum** [or **Pergamon** or **Pergamo** or **Bergama** (though look at them funny if they say this)]

[10] During his attempts at expansion across the Danube, Lysimachus was captured by, Dromichaetus, the King of these people whose capital was located at Helis and who fought a series of namesake wars with Trajan.

ANSWER: **Getae** or **Dacia**

6. Polymer chemistry doesn't always involve Ziegler-Natta catalysts. For 10 points each:

[10] Anionic polymerization is often initiated using organometallic compounds, but another method uses electron transfer from aromatic compounds. One of the first to be used was sodium combined with this compound of two fused benzene rings, which is also known for its use in mothballs.

ANSWER: **napthalene**

[10] When a linear polymer melt crystallizes it will often form these structures, in which the crystal grows out from a single nucleation point. If light is shone through the crystallizing polymer, each of these shows a pattern called a Maltese Cross, caused by birefringence.

ANSWER: **spherulite**

[10] Polymers in this class, with aromatic rings built into the chain backbone, behave as a liquid crystal when dissolved in sulfuric acid. They are better known for their high strength as fibers, marketed under names such as Kevlar.

ANSWER: para-**aramid**

7. This man argued against the determinism of Marxian structures by positing that it is intellectuals who are able to overcome the strictures of class and provide a multiform sensibility that helps shed light on society, for 10 points each:

[10] Identify this man who argued for a “Total Conception” of Sociology and stressed the importance of “relationism” in such works as 1929’s *Ideology and Utopia*.

ANSWER: Karl **Mannheim**

[10] *Ideology and Utopia* was critiqued by this thinker for undervaluing the unsocial aspect of the human spirit; this woman would go on to write *The Origins of Totalitarianism*.

ANSWER: Hannah **Arendt**

[10] Mannheim’s central work on sociological method was entitled “On the Interpretation of” this concept; a word that comes from the German for “world” and “perception.”

ANSWER: **weltanschauung**

8. Answer some questions about the study of history, for 10 points each:

[10] This man wrote about history as little more than a "register of the crimes, follies, and misfortunes of mankind" in his *History of the Decline and Fall of the Roman Empire*.

ANSWER: Edward **Gibbon**

[10] This cultural historian is best known for writing about the celebrated case of a 16th-century imposter in her book *The Return of Martin Guerre*.

ANSWER: Natalie Zemon **Davis**

[10] Another masterful work of early modern history is this book by Carlo Ginzburg, which profiled the heretical miller Menocchio. Its title refers to one of Menocchio’s teachings, in which he compared God to animals that suddenly appear in a certain food.

ANSWER: *The* ***Cheese and the Worms***: *The Cosmos of a Sixteenth-Century Miller* [or *Il* ***formaggio e l vermin***]

9. Name these things about the paintings of John Singer Sargent, for 10 points each:

[10] He is depicted in his “Bateau-Atelier” and “Painting at the Edge of a Wood” in two portraits by his friend Sargent but neither shows him painting water lilies or haystacks.

ANSWER: Claude **Monet**

[10] Sargent was even closer to this artist whom he depicted “sketching his wife Alice.” This man’s own work includes the large astrological ceiling in Grand Central Station.

ANSWER: Paul **Helleu**

[10] Two tall blue and white Japanese vases stand across from each other in this painting, and Florence, Jane, Mary Louisa, and Julia, the titular girls, are arranged from youngest to oldest in this unconventional portrait by Sargent.

ANSWER: *The* ***Daughters*** *of* ***E****dward* ***D****arley* ***Boit***

10. Etsuko is troubled by the suicide of her first daughter, Keiko, while her second daughter was Niki as a compromise between her desire for an English-sounding name and her  second husband's desire for an eastern-sounding name.  For 10 points each:

[10] This occurs in what Kazuo Ishiguro novel that also contains the story of Sachiko, which closely parallels that of Etsuko?

ANSWER: *A* ***Pale View of Hills***

[10] Kazuo Ishiguro also wrote the novel *An Artist of the FloatingWorld* which centers on this protagonist, a painter, who struggles to accept the decline of his reputation since the end of World War II.

ANSWER: **Masuji** **Ono** [accept either name]

[10] This other Ishiguro novel centers on the pianist Ryder, whose concert is expected to revitalize an unnamed European town; it is unusual for its use of omnipotent first-person narration.

ANSWER: *The* ***Unconsoled***

11. 1906 was a very progressive year for Theodore Roosevelt.  Name some acts passed during that year, for 10 points each.

[10] Long championed by Harvey Wiley, this act required most medicinal products to be properly labeled as to their true contents.

ANSWER: **Pure Food and Drug** Act

[10] This successor to the Elkins Act extended the Interstate Commerce Committee's power to impose fines and maximum rates to ferries and bridges, among other transportation venues.

ANSWER: **Hepburn** Act

[10] Intended to aid in the preservation of Indian archaeological sites, this act authorized the president to be able to create national monuments; Roosevelt named Devil's Tower as the first national monument three months after its passage.

ANSWER: **Antiquities** Act

12. The last lines of the seventh section were addressed to the author’s friend Wilhelm Heinze to whom this poem is dedicated, for 10 points each:

[10] Identify this work by Friedrich Holderlin that begins, “Round about the city rests,” an elegy celebrating Jesus and Dionysus.

ANSWER: **“Bread and Wine”**

[10] Unlike Holderlin’s “Bread and Wine,” this man’s 1936 novel of the same name centers on Pietro Spina’s relationship with the priest Don Benedetto.

ANSWER: Ignazio **Silone**

[10] Perhaps the most celebrated literary conjunction of bread and wine occurs in this Persian author’s *Rubaiyat*.

ANSWER: Omar **Khayyam**

13. The serial position curve shows an increase in recall accuracy for items from the end of a list, which is ascribed to this construct.  For 10 points each:

[10] Identify this aspect of cognition, whose capacity may be tested by forward and backwards digit span, N-back tasks, or delayed matching-to-sample.

ANSWER: **working memory** (do not accept short term memory)

[10] Alan Baddeley proposed a tripartite model of working memory, involving the central executive processor, visuospatial sketchpad, and this aspect responsible for acoustic coding.

ANSWER: **phonological loop**

[10] The capacity of the phonological loop varies based on speed of speech and whether or not chunking is employed.  Generally, this range defined by George Miller gives the "magic number" of items that can be stored.

ANSWER: **7 plus or minus 2** (also accept **5 to 9**)

14. He was told by an oracle that he would be killed by his grandson, so he locked his only daughter in a tower. For 10 points each:

[10] First, name this king of Argos whose plan was thwarted when Zeus impregnated Danae as a golden shower.

ANSWER: **Acrisius**

[10] After Danae was impregnated; Acrisius put her and her son, this man, in a casket and threw them out to sea.

ANSWER: **Perseus**

[10] Perseus killed Acrisius with a discus during the funereal games that this Thessalian king was hosting in honor of his father.

ANSWER: **Teutamides**

15. This work is divided into such sections as “The Scarecrow,” “The Sleep-Walkers,” and “The Wise Dog,” for 10 points each:

[10] Identify this work where the titular character wakes from a deep sleep to find his masks stolen and after running through the streets yelling “Thieves, thieves, the cursed thieves” is indentified as the titular character.

ANSWER: ***The Madman***

[10] *The Madman* is a collection of short parables by this Lebanese American writer and poet of *The Prophet*.

ANSWER: Kahlil **Gibran**

[10] Gibran also wrote this long poem in which a philosopher comments on the world outside his window whose line, “Half of what I say is meaningless, but I say it so that the other half may reach you”, was placed into the song *Julia* on The Beatles’ *White Album*.

ANSWER: ***Sand and Foam***

16. Answer the following about plant anatomy, for 10 points each:

[10] This is the protective sheath around the shoot in grasses such as wheat and barley. It stops growing when it reaches the surface, and gives a general limit on how deep to plant seeds.

ANSWER: **coleoptile**

[10] This waxy band found in plant roots prevents the diffusion of water and minerals into the root between the cells.

ANSWER: **Casparian** Strip or band

[10] The Casparian Strip is made of this substance, which gets its name from the cork oak. Consisting of both aliphatic and phenolic domains, a common building block is ferulic acid.

ANSWER: **suberin**

17. He wrote that "time itself is being, and all being is time" in an essay entitled *Uji*.  For 10 points each:

[10] Identify this author of*Treasury of the Eye of the True Dharma*, a former Tendai monk who went on to found Soto Zen Buddhism.

ANSWER: **Dogen**

[10] Dogen wrote that studying zen is this practice, which involves "thinking of not thinking."  This term refers to the Zen practice of seated meditation.

ANSWER: **zazen**

[10] The ultimate goal of zazen and contemplation of koans is this term, contrasted with the briefer *kensho*, which refers to enlightenment or understanding.

ANSWER: **satori**

18. Identify the following about a certain data structure, for 10 points each.

[10] This data structure is a collection of min-heap ordered trees with siblings organized in cyclic doubly-linked lists.  They perform unions in constant time and any reordering of these structures occurs as late as possible.
ANSWER: **Fibonacci** heap

[10] Fibonacci Heaps can be used to achieve a runtime of Big O of E + V log V in Prim's algorithm, which finds one of these properties for a graph.  All nodes in a graph are connected using the least total edge costs in one of these.
ANSWER: **minimum spanning tree** [or **MST**or **minimum weight spanning tree**]

[10] Insertions and deletions in this other type of heap are achieved using its speedy merge process, giving operations an amortized runtime of Big O of log n.  Their merge algorithm is similar to leftist heaps, but they tend to be faster in practice.

ANSWER: **skew** heap

19. He served in the Napoleonic Wars before he was summoned by James Busby to reduce tensions amongst the British and their colonial subjects. For 10 points each:

[10] Name this captain whose namesake bay is now located in the northern part of Port Phillip.

ANSWER: William **Hobson**

[10] William Hobson negotiated this 1840 agreement, an article of which guaranteed the Maori rights equal to other British citizens.

ANSWER: Treaty of **Waitangi**

[10] This Maori chief was the first to sign the Treaty of Waitangi. Five years later he would challenge British authority in the Flagstaff War.

ANSWER: **Hone** **Heke**

20. The Tuilieries Gardens can be seen in background of this painting, which also shows a man in a top hat holding an umbrella under his arm. For 10 points each:

[10] Name this painting, which depicts the artist's friend Vicomte Lepic, his two similarly-dressed daughters, and his dog in the titular location.

ANSWER: ***Place de la Concorde***

[10] *Place de la Concorde* is a painting by this French artist, who rumor has it was fond of painting and sculpting ballet dancers.

ANSWER: Hilaire-Germain Edgar **Degas** (de-GAH)

[10] A group of topless girls stand on a grassy plain on the left and one of them points to a group of fully nude boys in various poses on the right in a Degas painting purportedly depicting the youth of this city.

ANSWER: **Sparta** [The painting is known as *Spartan Girls Challenging Boys* or *The Young Spartans Exercising*]

Answer the following about calculating statics, for 10 points each:

[10] The simplest pieces in a structure to calculate forces for are usually these. Common examples include pinned truss members and chains. The forces are necessarily collinear in this case.

ANSWER: **two-force member**

[10] When a beam is supported on only one end, it is given this name. If a force acts on the end, its deflection is proportional to its length cubed.

ANSWER: **cantilever**

[10] To find the principle and shear stresses experienced by each plane of an object, this construction can be used. It clearly shows that the maximum shear stress occurs at a 45 degree angle from the maximum principal directions.

ANSWER: **Mohr's** Circle