

1. This author wrote of a successful lawyer who loses his sense of meaning in life, Omar, in *The Beggar*. A bureaucrat accused of taking bribes, Isa, appears in his *Autumn Quail*. A more controversial work by him analyzed the three Abrahamic religions and was called *The Children of Gebelawi*. Such religious controversies led to the near-fatal 1994 stabbing of this author, whose magnum opus features Yasin witnessing Ahmad with his mistress. This author's major (*) trilogy includes *Sugar Street* and *Palace Walk*. For 10 points, name this author of *The Cairo Trilogy* who became the first Egyptian winner of the Nobel Prize in Literature.

ANSWER: Naguib Mahfouz

034-09-6-05102

2. One of the primary driving forces behind this phenomenon is the high number of coordination numbers an element can have. This process can be seen when two elements are above and below the transition temperature, which feature two different crystal systems. One example of this property is exhibited by (*) iron becoming austenite at higher temperatures, but ferrite at lower. For 10 points, name this phenomenon exemplified by coal, graphite, and diamond, in which an element comes in multiple forms. ANSWER: allotropy [accept word forms]

033-09-6-05103

3. One myth attached to this man says he was loved by a princess named Scylla, who ended up drowning and being turned into a seabird. This man died at Sicily, where a special invention dumped boiling water into his bath, scalding him to death. After his athletic son Androgeos was killed, this man demanded a cruel burden from Athens, which was eventually stopped by (*) Theseus. He was ultimately killed by Daedalus, who built the Labyrinth for him. For 10 points, name this legendary king of Crete, whose name inspired that of the monster produced by his wife's mating with a bull, the Minotaur. ANSWER: Minos

052-09-6-05104

4. Late in his career, this artist painted many scenes of nude women bent over a circular metallic tub. This artist differed from other major Impressionists by not painting "en plein air." This artist created wax sculptures such as (*) Little Dancer of Fourteen Years, and depicted a melancholy woman wearing a light peach-colored dress sitting in front of a glass of alcohol in *The Absinthe Drinker*. For 10 points, name this French painter who drew bodies in motion in his many paintings of ballet dancers and racehorses. ANSWER: Edgar <u>Degas</u>

004-09-6-05105

5. This man made a pact in 1950 with Liaquat Ali Khan that allowed certain return rights to refugees and pledged not to recognize forced conversions. This man oversaw the annexation of Goa in 1961. He gave the "Tryst With Destiny" speech on the eve of his country's independence in (*) 1947. In 1929, this man presided over the Lahhore session of the Indian National Congress. For 10 points, name this father of India Gandhi and first prime minister of independent India.

ANSWER: Jawaharlal Nehru

6. One collection of six works for this ensemble are named "Sun" for the design on their first published edition. A work of this kind, written in Spillville, Iowa, is nicknamed "American" and is by Anton Dvorak (duh-VOR-jack). One of these works makes use of the melody of "Deutschland, Uber Alles" and is not for piano, but is nicknamed "The Emperor." Joseph (*) Haydn is not only called the "Father of the Symphony," but also the "Father of" these works. For 10 points, name this ensemble, which consists of two violins, a viola, and a cello.

ANSWER: string quartet

027-09-6-05107

7. Four contradictory spinoff stories were produced to explain a single line in this movie about an unpleasant encounter on Ord Mantell. One character in this movie protests that a certain action has only a 3,720 to 1 chance of success, and another character responds to an inquiry from someone looking for a "great warrior" by proclaiming (*) "wars not make one great." A group in this Irvin Kershner-directed movie escapes a giant slug disguised as a cave, shortly after the main character's life is saved using Tauntaun (TAHN-tahn) entrails on Hoth. Boba (BOH-buh) Fett tracks the *Millenium Falcon* to Cloud City in, for 10 points, what 1980 movie, featuring the first on-screen lightsaber duel between Luke Skywalker and Darth Vader?

ANSWER: Star Wars: The <u>Empire Strikes Back</u> [or <u>Star Wars: Episode Five</u> - The Empire Strikes Back; prompt on <u>Episode Five</u>; do not accept or prompt on "Star Wars"]

020-09-6-05108

8. In one novel by this man, Stephen Wonham collapses on the railroad crossing after breaking his promise not to drink. In addition to *The Longest Journey*, this author also wrote a novel in which Charles beats Leonard Bast to death with a German sword. In that novel by this man, the romantic Schlegels eventually reconcile with the materialistic Wilcox family and live together at the title (*) estate. For 10 points, name this author of *Howards End*, who also wrote of Dr. Aziz's frustration with the British in *A Passage to India*.

ANSWER: Edward Morgan Forster

034-09-6-05109

9. The theory responsible for the existence of this location was formulated following the study of the Kulpa Valley earthquake of 1909, and P-waves increase in velocity when they reach this location.

Located about 75 km beneath the (*) Tibetan plateau, it is closer to the surface beneath the ocean, where it is only about 7 km deep. Project Mohole attempted to drill to this location, which is is named for the Croatian seismologist that discovered it. For 10 points, identify this boundary between the mantle and the Earth's crust.

ANSWER: Mohorovicic Discontinuity

051-09-6-05110

10. One of these events occurred, for reasons that are still unknown, on October 19, 1987, leading to the implementation of "circuit breaker" rules. J.P. Morgan's purchase of TC&I ended one of these events in 1907, but only after Theodore Roosevelt agreed to waive the Sherman Antitrust Act. The most momentous one of these occurred on (*) "Black Tuesday," when it became clear that the Smoot-Hawley Tariff would not be vetoed, and it ultimately sapped eighty-nine percent of the Dow's value. For 10 points, identify these events, in which stock prices drop precipitously.

ANSWER: stock market <u>crash</u>es [or <u>crash</u>es of the New York Stock Exchange or obvious equivalents; prompt on <u>panic</u>s]

11. A dimensionless number named after this man indicates whether or not convection will occur. A scattering named after this man does not change the wavelength of light. The quantity 1.22 times the wavelength over the aperture diameter, a (*) "criterion" for the resolution of two images, is named after this man. Along with Jeans, this man names an equation for blackbody radiation that applies only at long wavelengths. For 10 points, name this English physicist who won the 1904 Nobel Prize in Physics for his discovery of argon.

ANSWER: Lord **Rayleigh** [or John William **Strutt**, Third Baron Rayleigh]

003-09-6-05112

12. Perelandra is the second book in this author's Space Trilogy, which centers on Elwin Ransom. A character known as the Patient is the subject of the correspondence between Wormwood and the title demon in his The (*) Screwtape Letters, and he also wrote a work of apologetics entitled Mere Christianity. His most famous series contains works like The Magician's Nephew and follows the Pevensie children. For 10 points, name this author of The Chronicles of Narnia, which opens with The Lion, the Witch, and the Wardrobe.

ANSWER: Clive Staples **Lewis**

024-09-6-05113

13. In an oligopoly situation, the curve measuring this quantity has a unique kinked shape. Increase in price of complementary goods lowers this quantity. For Veblen goods, an increase in price (*) increases this quantity. The Slutsky Equation relates compensated and uncompensated varieties of this quantity, named after Hicks and Marshall, respectively. Keynes did extensive work on its "aggregate" form. For 10 points, identify this economic concept, which describes a willingness and ability to pay for a product, and is often contrasted with supply.

ANSWER: demand

054-09-6-05114

14. This man wrote about a figure that "launches forth filament, filament, out of itself" in "A Noiseless Patient Spider." That work, as well as one that ends with the speaker going outside to look at the sky, "When I (*) Heard the Learn'd Astronomer," is collected in the deathbed edition of this author's major book. Another of his poems, in which the narrator sounds his "barbaric yawp over the roofs of the world" features the line "every atom belonging to me as good belongs to you." For 10 points, name the poet of "Song of Myself," who also eulogized Lincoln in "When Lilacs Last in the Dooryard Bloom'd" and "O Captain! My Captain!"

ANSWER: Walt Whitman

034-09-6-05115

15. This artist created a bronze sculpture of a headless, armless figure. In another work, he showed six men about to sacrifice themselves. *The Falling Man, The Prodigal Son*, and *Ugolino* are works included in a sculpture group by this man. This sculptor of *Monument to Balzac* was accused of using a (*) live model for his *The Age of Bronze*, and he also created *The Burghers of Calais*. Paolo and Francesca da Rimini kiss and a man holds his chin in sculptures from this man's *The Gates of Hell*. For 10 points, name this French sculptor of *The Thinker*.

ANSWER: François-Auguste-Rene Rodin

16. While Archimedes only identified three of them, Heron of Alexandria, as well as many of the scientists of the Renaissance, listed their number as five. In his work On Mechanics, Galileo became the first to realize that they do not actually create energy, they can only transform it. One of them can be constructed with a sheave and a rope, and several utilize the ability to (*) convert torque into a linear force. Screws, wedges, wheel and axles, pulleys, levers, and inclined planes are all examples of, for 10 points, which non-complex devices that provide a mechanical advantage?

ANSWER: simple machines

040-09-6-05117

17. Cave-in-Rock, a large cave on the banks of this river, was a hideout for river bandits. The Shawnee Lookout site on the banks of this river is an important archeological site, and the city of Paducah was a strategic locations on this river at the start of the Civil War. Tributaries of this river include the Licking and Kanawha, as well as the Big and Little (*) Miami Rivers. Major cities located on this river include Louisville. For 10 points, identify this river formed by the confluence of the Monongahela and Allegheny Rivers at Pittsburgh.

ANSWER: Ohio River

057-09-6-05118

18. This woman was one of three female rulers attacked, along with her British cousin and French mother, in John Knox's First Blast of the Trumpet Against the Monstrous Regiment of Women. One of this woman's husbands was strangled after growing jealous of her closeness to David Rizzio. This wife of Lord Darnley and daughter of Mary of (*) Guise (geez) was implicated in the Ridolfi Plot. Later, Francis Walsingham found evidence tying her to Anthony Babington's attempt to assassinate Elizabeth I. For 10 points, name this mother of James I who was beheaded by Elizabeth I after a lengthy imprisonment and who is commonly known by a national byname.

ANSWER: $\underline{Mary, Queen \ of \ Scots}$ [or $\underline{Mary \ I \ of \ Scotland}$; or $\underline{Mary \ Stuart}$; prompt on Queen \underline{Mary} ; prompt on $\underline{Mary \ I}$]

015-09-6-05119

19. This man established the convent at Prouille consisting of women converted from heresy. He held a meeting with sixteen colleagues known as the *capitulum fundationis* that adopted a set of regulations for his organization. His namesake organization received recognition from Pope Honorius III in 1216 and was informally known, thanks to a Latin pun, as the (*) "dogs of God." For 10 points, identify this founder of an eponymous Catholic order of preachers that was honored in the names of two Caribbean countries.

ANSWER: Saint **Dominic** [or Santo **Domingo** de Guzman]

030-09-6-05120

20. One military action led by this man is known as the Greater Wrath. This leader's forces won the battle of Lesnaya and lost decisively at Narva before signing the Treaty of Nystad. This leader abolished antiquated age-based orders of precedence by introducing the Table of Ranks. This man ordered the (*) boyars to shave their beards and traveled abroad in disguise to gather ideas about modernizing his country. For 10 points, name this Romanov winner of the Great Northern War who established the Russian Empire as an international force.

ANSWER: **Peter the Great** [or **Peter I**; prompt on **Peter**]

21. One disease that affects this entity comes in a primary biliary form, which results in xanthoma. This entity includes cavities such as the Space of Mall and the Space of Disse. Kuppfer cells in this organ degrade red blood cells. Scar tissue replaces functional tissue in (*) cirrhosis, a disease of this organ that can be caused by excessive alcohol use. For 10 points, hepatic veins drain blood from what organ, useful for detoxifying the blood?

ANSWER: <u>liver</u>

033-09-6-05122

22. This country's independence movement began after a performance of an opera about a revolution in Naples, *The Mute Girl of Portici*. Swedish U.N. leader Dag Hammarskjold (HAM-err-skyold) was attempting to reach a settlement between this European country and one of its colonies during the 1961 plane crash which claimed Hammarskjold's life. This country was responsible for the (*) "rubber atrocities" and supplied the United States with uranium during its time governing the Congo. For 10 points, name this country, led by three kings named Leopold, which continues to suffer linguistic struggles between French and Flemish speakers.

ANSWER: Kingdom of **Belgium**

052-09-6-05123

23. One part of this work closes with a man on opium being put in a chest that is stolen by two userers. This work closes with the Marquis of Saluzzo being tricked by his wife. This book begins with Ciapelletto lying about being a priest. Some of the most noted stories from this work describe a woman who loyalty is tested by her husband, (*) Griselda, and a man who kills a prized falcon in order to serve a meal to his guest. For 10 points, name this collection of tales told by refugees fleeing Florence during the Black Death, written by Giovanni Boccaccio.

ANSWER: the **Decameron**



1. This novel includes parts titled "The Seventh Day" and "The Prayer of the Saints." For 10 points each:

[10] John Grimes's fourteenth birthday is the focus of what novel, the first and most widely read by the African-American author of *Giovanni's Room* and *Tell Me How Long the Train's Been Gone*?

ANSWER: Go Tell it on the Mountain

[10] This expatriate in Paris is the author of the play A Deed From the King of Spain. He wrote the aforementioned novels, including Go Tell it on the Mountain.

ANSWER: James Baldwin

[10] In this collection of two essays, Baldwin describes his meeting with Malcolm X and expresses his views on the civil rights movement. This landmark of American nonfiction writing takes its title from a line in the spiritual "Mary Don't You Weep."

ANSWER: The Fire Next Time

034-09-6-05201

2. This man advanced the use of tenebrism in works such as *The Calling of St. Matthew*. For 10 points each: [10] Name this painter of *The Cardsharps* and *The Supper at Emmaus*.

ANSWER: Michelangelo Merisi da Caravaggio

[10] Caravaggio depicted this figure holding his hands to his eyes, as an angel holds up another person, in his painting about "The Conversion of" this figure.

ANSWER: Saint Paul

[10] In one painting, Caravaggio depicted an almost bored-looking Judith beheading this Babylonian general.

ANSWER: Holofernes

015-09-6-05202

3. It was officially defined in a bull issued by Pius IX, and its feast day is December 8. For 10 points each: [10] Name this Catholic belief that the Virgin Mary was born without original sin.

ANSWER: Immaculate Conception

[10] Catholics also believe that this event happened at the end of Mary's earthly life. This also happened to Enoch and Elijah, and Jude, Verse 9, claims it also happened to Moses.

ANSWER: **Assumption** [or "being **assumed** into heaven" or other word forms]

[10] This 431 ecumenical council decreed that Mary is the *Theotokos*, or Mother of God. It also condemned the Pelagian heresy, but was most chiefly concerned with condemning Nestorianism.

ANSWER: First Council of Ephesus

003-09-6-05203

- 4. Their chieftains included Ivar the Boneless and Ragnar Hairy-Pants. For 10 points each:
- [10] Name these seafaring people originally from Norway, who wore horned helmets and terrorized medieval Europe.

ANSWER: Vikings

[10] According to legend, some Vikings were these especially frenzied warriors who may have been named for wearing shirts made from bears.

ANSWER: berserkers

[10] In the early eleventh century, this Viking sailed to the coast of Canada and established the colony of Vinland.

ANSWER: **Leif** Erikson [or Leif **Erikson**]

- 5. It is defined as being perpendicular to the tangent of the mirror surface at its center. For 10 points each:
- [10] Name this axis of a mirror, along which the reflected ray is exactly the opposite direction of the incident ray, which passes through the center of curvature.

ANSWER: principal axis

[10] For small mirrors, rays parallel to the principal axis reflect and meet at this point.

ANSWER: **focus** [or **focal** point]

[10] If a mirror has a radius of curvature of two meters, then this is the focal length of the mirror.

ANSWER: <u>one</u> meter (the focal length is half the radius of curvature)

003-09-6-05205

- 6. This ruler blamed the stormy seas that nearly caused his demise upon witches, and ordered a witch hunt as a result. For 10 points each:
- [10] Name this tobacco-hating king of England, who was targeted by the Ruthven Raid and the Bye Plot.

ANSWER: <u>James I</u> of England [or <u>James VI of Scotland</u>; prompt on <u>James</u>; prompt on <u>James VI</u>]

[10] James was also the target of the Gunpowder Plot, which was to be carried out by this man, whose holiday is now celebrated by wearing grotesque masks.

ANSWER: Guy Fawkes [prompt on John Johnson]

[10] James was also notable for debating the Puritans at the Hampton Court Conference, which led to the royal convening of a group for performing this task.

ANSWER: <u>translating the Bible</u> into English [or <u>creating the King James Bible</u>; accept equivalents to either]

026-09-6-05206

- 7. In June 2009, this band embarked on their 360 degree Tour. For 10 points each:
- [10] Name this Irish rock group that has produced songs such as "Sunday Bloody Sunday" and is led by Bono (BAHN-oh).

ANSWER: <u>U2</u>

[10] Watermark and A Day Without Rain are albums by this other Irish artist, who may be best-known for the new age song "Orinoco Flow."

ANSWER: **Enva** Brennan [or Eithne Patricia Ni **Bhraonain**]

[10] This Irish folk artist's singles include "9 Crimes" and "The Blower's Daughter," which were released on his albums 9 and O.

ANSWER: Damien Rice

036-09-6-05207

- 8. Molecular orbital theory states that these are formed by the hybridization of orbitals. For 10 points each: [10] Name this class of chemical bonds, which require the sharing of electrons, in stark contrast to ionic
- bonds.

ANSWER: covalent bonds

[10] In this kind of covalent bonding situation, four electrons are shared. These kinds of covalent bonds alternate with single bonds in benzene.

ANSWER: double bonds

[10] When more than one Lewis dot structure can accurately represent all covalent bonds between atoms in a molecule, the molecule is said to experience this stabilizing effect.

ANSWER: resonance

- 9. This man successfully helped the Argonauts overcome the Sirens. For 10 points each:
- [10] Name this ultra-talented Greek musician, who unsuccessfully descended into the underworld to rescue his wife Eurydice (yur-ID-uh-see).

ANSWER: Orpheus

[10] Orpheus's sad music moved both Hades and this queen of the underworld. This daughter of Demeter performs a cyclic descent and return from Hades, which explains the seasons.

ANSWER: Persephone [or Kora]

[10] This muse was Orpheus's mother. She was credited with inspiring Homer to write the Iliad and the Odyssey as the muse of epic and heroic poetry, and she shares her name with a steam-powered musical instrument.

ANSWER: Calliope

052-09-6-05209

- 10. Felix Mendelssohn led a revival of this man's music with a performance of the *St. Matthew's Passion* in 1829. For 10 points each:
- [10] Name this composer, who wrote concerto grossos for differing ensembles in the *Brandenburg Concertos*.

ANSWER: Johann Sebastian Bach

[10] J.S. Bach wrote many works in this contrapuntal style, which opens with one voice playing the theme, then others repeating it in different keys. Bach paired them often with toccatas and preludes.

ANSWER: fugue

[10] This work by Bach is a collection of two volumes of preludes and fugues for the keyboard. The link between all of the works is that both volumes have one prelude and fugue in each key.

ANSWER: The Well Tempered Clavier [or Das Wohltemperierte Klavier]

027-09-6-05210

- 11. The originator of this concept outlined five main classes of it, including self, shadow and persona. For 10 points each:
- [10] Name these innate, universal elements of the psyche, examples of which include the hero and the trickster.

ANSWER: archetypes

[10] Archetypes were developed by this Swiss psychiatrist, who also theorized the collective unconscious.

ANSWER: Carl Gustav Jung

[10] Jung is also associated with this concept, which he described as an "acausal connecting principle." It deals with causally unrelated events occurring together meaningfully.

ANSWER: synchronicity

024-09-6-05211

- 12. He attempts to forget all history after 1602 and fight Turks and Moors in order to live out a dream sparked by a fragment of Novalis. For 10 points each:
- [10] Name this fictional author, who plans to rewrite *Don Quixote* word-for-word in a short story that dubs him the "author of the *Quixote*."

ANSWER: Pierre **Menard** [or **Pierre** Menard]

[10] Like another work about a fictitious writer, "An Examination of the Work of Herbert Quain," "Pierre Menard, Author of the *Quixote*" appears in this collection of short stories that also features "The Garden of Forking Paths" and "The Lottery in Babylon."

ANSWER: *Ficciones* [or *Fictions*]

[10] This blind Argentinian author of Ficciones also wrote "Shakespeare's Memory" and "The Aleph."

ANSWER: Jorge Luis **Borges**

- 13. They develop from oocytes. For 10 points each:
- [10] Name this female gamete.

ANSWER: egg [or ovum]

[10] The meiotic division of an oocyte yields one egg and three of these short-lived cells, which contain the genetic material but little to no cytoplasm.

ANSWER: **polar bodies** [or **polar body**]

[10] The zona pellucida of an egg interacts with this organelle of the sperm, which has digestive enzymes to allow for the cells to merge.

ANSWER: acrosome

001-09-6-05213

- 14. A christian army won the Battle of Las Navas de Tolosa in this country, leading to the final defeat of its Moors. For 10 points each:
- [10] Name this country whose kingdoms of Castile and Aragon were united by the marriage of its rulers Ferdinand and Isabella.

ANSWER: **Spain** [or **Espana**]

[10] The territories located in this modern-day country revolted against Spain in the Eighty Years War under the leadership of the House of Orange.

ANSWER: the **Netherlands** [or **Holland**]

[10] This Spanish general brutally repressed Protestants in the Spanish Netherlands during the second half of the sixteenth century. He led the so-called "Council of Blood," and was known as the Iron Duke.

ANSWER: the third Duke of <u>Alba</u> [or Fernando <u>Alvarez</u> de Toledo]

004-09-6-05214

- 15. This sculptor created the lost *Theseus and the Minotaur* group. For 10 points each:
- [10] Name this Ancient Greek sculptor best known for a creation in which a nude youth with his left hand on his knee is about to hurl a discus.

ANSWER: Myron

[10] Another Greek sculptor, Phidias, sculpted a seated statue of this deity at Olympia. That statue of this deity is one of the seven ancient wonders of the world.

ANSWER: Zeus

[10] Agesander, Athenodoros, and Polydoros sculpted a group of this priest and his sons, who are all about to be devoured by serpents sent by Poseidon as punishment.

ANSWER: Laocoon

020-09-6-05215

- 16. Female characters in this novel include the motherly Norah Nesbitt and the cold Mildred Pierce. For 10 points each:
- [10] Name this novelm centering on the education and experiences of Philip Carey.

ANSWER: Of Human Bondage

[10] *Of Human Bondage* was written by this British author, who told of Larry Durrell's unusual quest for happiness in *The Razor's Edge*.

ANSWER: William Somerset Maugham

[10] In the novel, Philip suffers from this lower-extremity affliction that also pains Kashiwagi in Yukio Mishima's *The Temple of the Golden Pavilion*.

ANSWER: he has a **clubfoot** [accept obvious equivalents]

- 17. Name these European mountains, for 10 points each:.
- [10] The highest peak in this European mountain range, which is traditionally a home of werewolves, is Mount Gerlach. Its southern branch is known as the Transylvanian Alps, and it links the Alps with the Balkans.

ANSWER: Carpathian Mountains

[10] This mountainous plateau covers about a sixth of France. Puy de Sancy is its highest point, and the Loire River flows out of this region.

ANSWER: Massif Central

[10] This highest peak in the British Isles is located in the Scottish Highlands. Its summit includes the remains of an observatory.

ANSWER: Mount Ben-Nevis

030-09-6-05217

- 18. In his poem "The Children's Hour," he wrote of his daughters Alice, Edith, and Anne Allegra. For 10 points each:
- [10] Name this author whose poems about finding a marriage include "Hyperion" and "The Courtship of Miles Standish."

ANSWER: Henry Wadsworth **Longfellow**

[10] Henry Rowe Schoolcraft is recognized by Longfellow as the source of much of the material in this epic poem, based upon the legends of the Ojibway Indians.

ANSWER: The Song of Hiawatha

[10] This other Longfellow epic tells of the beloved of Gabriel Lajeunesse, who is separated from him during the Great Upheaval of the Acadians.

ANSWER: **Evangeline**, A Tale of Acadie

040-09-6-05218

- 19. One candidate for Vice-President during this election was Nicholas Butler, who filled in for James Sherman. For 10 points each:
- [10] Give the year of this election, in which former President Theodore Roosevelt lost while running with Hiram Johnson, but did become the last candidate to finish in second place while running for a party that was not the Democrats or Republicans.

ANSWER: election of 1912

- [10] Theodore Roosevelt ran under the banner of this political party. A different party with this same name was a factor in the election of 1924 after it nominated Robert La Follette.
- ANSWER: <u>Progressive</u> Party [do not accept "Bull Moose Party," as La Follette's party was not known by that name]
- [10] Progressive VP candidate Hiram Johnson held this position at one point in his career. Future Supreme Court Chief Justice Earl Warren was elected to this office three times, once on a joint Democratic-Republican nomination.

ANSWER: **governor of California** [accept obvious equivalents]

033-09-6-05219

- 20. An example of this type of wave is a sound wave. For 10 points each:
- [10] Name this type of wave where the oscillation is parallel to the direction of propagation.

ANSWER: longitudinal wave [or compression wave]

[10] This other type of wave has the oscillations perpendicular to the direction of propagation.

ANSWER: transverse wave

[10] For both transverse and longitudinal waves, this quantity is equal to two pi divided by the wavelength.

ANSWER: wavenumber

21. His first play was a dramatization of the life of the Roman conspirator Catiline. For 10 points each:

[10] Name this playwright, whose other plays include *The Master Builder* and *A Doll's House*.

ANSWER: Henrik Ibsen

[10] The manipulative, and ultimately suicidal, title character of this Ibsen play is married to Jurgen Tesman, a scholar who has a rivalry with Eilert Lovborg.

ANSWER: Hedda Gabler

[10] The title character of this Ibsen play is Thomas Stockmann, who has a dispute with the mayor over the healthiness of the town's public baths.

ANSWER: An *Enemy of the People* [or En *folkefiende*]

024-09-6-05221

22. One mechanism of this hormone involves adding aquaporin-2s into some apical membranes. For 10 points each:

[10] Name this peptide hormone that regulates the body's water retention and allows for the reabsorption of urea in the collecting duct.

ANSWER: arginine <u>vasopressin</u> [or <u>AVP</u>; or <u>argipressin</u>; or <u>antidiuretic</u> hormone; or <u>ADH</u>]

[10] ADH comes into contact with several portions of these excretory system organs, which sit below the adrenal glands and contain ascending and descending loops of Henle.

ANSWER: kidneys

[10] These functional units of the kidney each contain a glomerulus and Bowman's capsule. A kidney comprises 800,000 of these units, which excrete waste as urine.

ANSWER: nephron