

1. (NGC/CS) The formula for determining it involves taking the square root of the quantity “two times the mass of the larger object times the Universal Gravitational Constant”, divided by the distance between the two objects. For a satellite being launched from the Earth, it is 11,200 meters per second. For ten points, name this value that expresses the speed needed for an object to overcome a planet’s gravitational pull.

Answer: Escape velocity

2. (DU/JV) He is said to have met Jean Paul Sartre who called him “the most complete human being of our era. He earned his medical degree in Buenos Aires, Argentina in 1953, and later toured the countryside of his native place, writing *The Motorcycle Diaries*. This man served Castro's forces as a physician and military commander during the Cuban Revolution of 1956-59. After Castro gained power, he became president of the National Bank of Cuba. FTP; name this revolutionary who met his demise leading a leftist force against the Bolivian Government in 1967 and is now featured on many T-shirts.

Answer: Ernesto “Che” **Guevara**

3. (UNC/CS) His career began with the publication of the story “Odour of Chrysanthemums.” He spent much of his life in self-imposed exile, leading to novels like *Kangaroo* about Australia and *The Plumed Serpent* about Mexico. Many of his works were suppressed as obscene, such as *The Rainbow*, sequel to *Women in Love*. FTP, persecution for obscenity was a constant theme in the life of what author of *Lady Chatterley's Lover* and *Sons and Lovers*?

Answer: David Herbert Lawrence

4. (UNC/CS) His 1807 work *Phenomenology of Spirit* claimed that philosophy’s purpose was to first discover the contradictions in human existence and then to make the contradictions compatible. In order to do this it is necessary to take one idea – a thesis – and its opposite – the antithesis – and create a synthesis of the two. For ten points, name this German philosopher; the process of creating a synthesis is known as his namesake dialectic.

Answer: Georg Wilhelm Friedrich Hegel

5. (UNC/CS) First and last name, please. The owner and operator of a Rhode Island delicatessen, his speech was altered in an accident at an auction. Among his neighbors are a paralyzed police officer, a nymphomaniac, and an Ivy League-educated dog. For ten points, name the Family Guy character bearing the funniest name this side of Token Black.

Answer: Cleveland Brown

6. (NGC/CS) He wrote two symphonies and was working on a third when, one year after being promoted to Knight Grand Cross, he died in 1933. He gave his oratorios *The Apostles* and *The Kingdom* a less overtly Catholic flavor than the initially unsuccessful *The Dream of Gerontius*. His first acclaimed orchestral work was *Enigma Variations*, which premiered in 1899. For ten points, name this composer most famous for his 1901 *Pomp and Circumstance Marches*.

Answer: Sir Edward Elgar

7. (NGC/CS) It is one of the few structures in adults derived from all three germ layers – endoderm, ectoderm, and mesoderm. Parts of it include the umbo where it attaches to the malleus bone. In frogs it is a small disk behind the eye, but in humans it separates the external ear from the middle ear.. For ten points identify this structure also called the eardrum.

Answer: Tympanic membrane or tympanum (accept **eardrum** before mentioned)

8. (Sh/SK/CS) Less famous engagements of this war were fought at the Ticinus River and Ilipa, while historian Edward Creasy placed among his Fifteen Most Decisive Battles of World History the Battle of the Metaurus River. One of the war’s heroes, Marcus Claudius Marcellus, earned the nickname “Sword” for aggressive actions in Sicily, while his more cautious counterpart known as the “Shield” became dictator after the mammoth defeats at the Trebia river and Lake Trasimene. But it was a third leader who finally won the war by removing the theater of operations from Italy to Africa. Featuring the exploits of Quintus Fabius Maximus and such disasters at Cannae, for 10 points name this war fought 218 and 202 BCE before Scipio Africanus finally defeated the Carthaginians under Hannibal at Zama.

Answer: Second Punic War [prompt on Punic War/Wars]

9. (UNC/CS) In Part III, the narrator meets the struldbrugs, people who age but cannot die, and visits a magician who enacts a debate between the ancients and the moderns. In Part I he is a vital part of a war effort due to his size, but in Part II he is unable to affect anything due to the size of everybody around him. FTP, these occur in the lands of Balnibarbi, Brobdingnag and Lilliput in what novel by Jonathan Swift.

Answer: **Gulliver's Travels**

10. (TV/CS) The first compiler for this language was developed for the IBM 704 by a programming team led by John Backus. Used extensively by scientists and engineers for its speed in computations, several standards of the language have appeared, including 90, which added array operations and dynamic memory allocation to the familiar palette of IF, DO, and GO TO statements. Originally developed between 1954 and 1958, FTP, what is this father of high-level computer languages designed for "Formula Translation?"

Answer: **Fortran**

11. (SG/CS) The night before giving birth, Buddha's mother reputedly dreamed of one of these presenting her a lotus. Prized by the traditional kings of Siam and Burma, they are hard to breed or find. Several people looking to gain royal favor were bankrupted when their animals were viewed as insufficient, thus providing this two-word term its popular modern meaning. FTP give this term used to refer to any large, useless burden as well as an albino pachyderm.

Answer: **White Elephant**

12. (UNC/CS) Most of its stories were pulled together in oral tradition in the 8th century AD, then collected into a book. It is said to have been translated into Arabic by Abu abd-Allah Muhammed el-Gahshigar in the ninth century, but the characteristic frame story was not added until the fourteenth. The now famous tales of Ali-Baba and Aladdin were not added until the eighteenth century. FTP, what collection of Sassanid Persian tales is framed by the story of Scheherazade and King Shahryar?

Answer: The Book of **One Thousand and One Nights** (also accept **1001 Arabian Nights**, just **Arabian Nights**, etc.)

13. (JK) The degeneracy pressure exhibited by both white dwarf stars and neutron stars can be attributed to this concept. It also is a cause of ferromagnetism. Bosons are not subject to this, but particles that possess a unique, intrinsic angular momentum. Stating that no two fermions can exist in the same quantum state, FTP, identify this principle named after an Austrian-Swiss physicist.

Answer: **Pauli exclusion principle**

14. (OK/SK) It's often associated with a similar measure from 9 years earlier, the Fordney-McCumber Act. It was passed over the objections of over 1000 experts in the field. Its effect was to contribute to a deepening financial catastrophe since it incited reciprocal measures passed by other countries and thus deprived America of vital partners at a time when markets were desperately needed. Despite the fact that a reduction in rates had been asked for, it resulted instead in tariff rates reverting back to the heights of the Payne-Aldrich tariff. For 10 points name this disastrous tariff signed into law by Herbert Hoover in 1930 which significantly contributed to the Great Depression.

Answer: **Hawley-Smoot** Tariff Act or **Smoot-Hawley** Tariff Act

15. (JV/SK) One mythological figure with this name was the daughter of the centaur Cheiron who was seduced by Aeolus and gave birth to the talking horses of the son of the most famous figure with this name. The better known one retrieved the Hecatoncheires to release Zeus when the rest of the Olympians revolted and took in Hephaestus when Hera cast him out of Olympus, but for all that she could find no divine husband due to a prophecy that any son born to her would be greater than his father, resulting in her marriage to the Myrmidon king Peleus. For 10 points name this sea nymph, who thereby became the mother of Achilles.

Answer: **Thetis**

16. (UNC/CS) Konrad Lorenz conducted studies of this behavior, which he named *Pragung*, in the greylag goose. It is a variety of learning that takes place during a critical period, and is considered to be more or less permanent. Lorenz's work dealt mainly with the filial variety of what sort of animal behavior, evident when goslings try to follow the first thing they see after hatching?

Answer: **imprinting**

17. (BB/SK) Having a population of more than thirty thousand, this region includes Mount Hermon in the north and a crater lake called Birkat Ram, as well as cities such as Odem, Majdal Shams, and Qatzrin. Bordered east by a plain known as the Hauran, on the south by the Yamuk River, on the west by the Jordan River, and on the southwest by Lake Tiberias, also known as the Sea of Galilee, it has been the source of much friction between the country which controls it and the country which lost it for taking part in the Six Day War. For 10 points name this 500 square mile plateau sandwiched between Lebanon and Jordan formerly owned by Syria and currently controlled by Israel.

Answer: **Golan Heights**

18. (JK) Despite not playing baseball in high school, he was drafted in the 30th round of the 2000 MLB draft by the Colorado Rockies. Before then he played two years in college playing his preferred sport, football, where he threw to such targets as Emmett Johnson and Andre Davis. Since his collegiate days as a Hokie, he has been under much scrutiny in the NFL to learn a modified version of the west coast offense installed by the coaching staff led by Jim Mora, Jr., but he is likely destined to fame more for his mobility and ability to make plays than his skills as a pocket passer. FTP, name this brother of the Miami Dolphins' Marcus who wears #7 as the starting quarterback for the Atlanta Falcons.

Answer: **Michael Vick**

19. (UNC/CS) The manuscript of this novel was on display at the University of North Carolina last year, in a special exhibit case stretching across a room. The original manuscript is one long roll of paper, written straight through in only three weeks, though it was based on painstaking notes and later revised heavily. Those revisions involved changing names, for example Carlo Marx instead of Allen Ginsberg, and Dean Moriarty instead of Neal Cassady. FTP, name this magnum opus of Jack Kerouac, describing his travels around the United States.

Answer: **On the Road**

20. (SG/SK) Following service in the Mexican War this man resigned his army commission in 1853 and found himself at the head of the state military academy of Louisiana on the outbreak of the Civil War, a job he quit to return to the Union. Placed in charge of Louisville, Kentucky, his apparent overestimation of Confederate strength led to such constant questioning of his sanity that he actually did suffer a nervous breakdown, but when placed under the command of his friend Ulysses S. Grant he proved a fine officer at such battles as Pittsburgh Landing before embarking on the first campaign of "total war" in Georgia. FTP name this man famous for burning Atlanta during his "March to the Sea".

Answer: William Tecumseh **Sherman**

21. (DF/SK/CS) One of the more influential members of this organization, the late Victor Serebriakoff, helped popularize it in England after it was founded by Roland Berrill and Dr. Lancelot Ware. Its name denotes an even surface around which anyone with the necessary qualifications may sit equal to the others despite race, creed, or economic background. Its members have ranged from the bizarre, such as boxer Bobby Czyz [*Chazz*], actress Geena Davis and porn star Asia Carrera, to the predictable like Norman Schwarzkopf, Steven Hawking, Buckminster Fuller and Isaac Asimov. But all of these alike have in common an IQ test which puts them in the top 2 percentile. For 10 points name this society of intellectuals, whose name is Latin for "table".

Answer: **Mensa**

22. (NGC/CS) The first recorded ascent of this mountain was in 1786 by Jacques Balmat and Michel Paccard, and future president Theodore Roosevelt climbed it during his honeymoon in 1886. An 1860 act set the mountain's peak as the boundary between France and Italy though both claim the peak as theirs. For ten points, name this highest mountain in Western Europe.

Answer: Mont **Blanc**

1. (UNC/CS) It just isn't a high school tournament without at least one bonus on Nathaniel Hawthorne. Name these works FTPE:

10: This novel revolves around the titular home of the Pyncheon Family.

Answer: The House of the Seven Gables

10: This short story's title character, whose name is Beatrice, breathes poison and is killed by its antidote.

Answer: Rappacini's Daughter

10: This short story's title character is disillusioned after following a sinister stranger into the woods and witnessing the supposedly pious people of his town in a demonic ritual.

Answer: Young Goodman Brown

2. (UNC/CS) In 1905, a Swiss patent office worker published papers that would earn him fame. For your bonus correctly identify the topic of these papers by Albert Einstein.

10: The paper on this subject is what ultimately won him the 1921 Nobel Prize and required that energy be thought of as discrete packets.

Answer: Photoelectric effect

10: Another paper discussed this phenomenon where minute particles move about randomly in a fluid.

Answer: Brownian motion

10: His paper introducing this theory presented a solution for reconciling existing equations for electricity and magnetism with the laws of mechanics. The changes occurred near the speed of light.

Answer: Special Relativity [prompt on relativity]

3. (TV/CS) Given a country's highest point, identify the country FTPE:

[10] Mount Fuji

Answer: Japan

[10] Mount Kosciuszko

Answer: Australia

[10] Kanchenjunga

Answer: India

4. (UNC/CS) If it's fall, it must be time for ESPN to start broadcasting World Series of Poker reruns every single afternoon. Answer the following questions about the 2006 WSOP, 10-5-15:

10) This semi-amateur player, a former talent agent from Malibu, California, was the winner of the 2006 WSOP Main Event.

Answer: Jamie Gold

5) With his two queens beating runner-up Paul Wasicka's two tens, Gold became the first person since 1994 to win the Main Event with this common poker hand.

Answer: a pair

15) The event with the highest tournament fee in the history of the World Series of Poker was in this game, a mix of Hold'em, Omaha, Razz, Seven Card Stud, and Stud Eight-or-lower.

Answer: HORSE (do not accept 'HOSE' or 'SHOE')

5. (NGC) Identify the following about the Red Scare of the 1950s, for ten points each.

a) Despite some questions concerning the fairness of the trial, this couple was executed in 1953 for passing information to the USSR about constructing nuclear weapons.

Answer: Julius and Ethel Rosenberg

b) In February 1950, this Wisconsin senator charged that the State Department had been infiltrated by communists.

Answer: Joseph McCarthy

c) On the basis of suspect testimony from Whitaker Chambers implicating him as a Soviet spy, this high-ranking diplomat was convicted of perjury in 1950.

Answer: Alger Hiss

6. (UNC/CS) For 10 points each, name these techniques for separating chemical mixtures:

A. It involves a column of stationary phase and a mobile mixture separated by how long they take to elute (be released) from the column

Answer: chromatography

B. This method separates mixtures by boiling points, using a heated container of known temperature and a condenser

Answer: distillation [accept forms of the word]

C. Often used for large biomolecules in a gel medium, this separates molecules by charge to mass ratio under an electric field

Answer: electrophoresis

7. (UNC/CS) Name these 19th century American artists FTPE:

While she spent most of her life in France with her fellow Impressionists, this painter of "Mother and Child" was born in Pittsburgh.

Answer: Mary Cassatt

Booted from West Point for failing chemistry, this painter moved to France and eventually settled in London. His most famous painting is properly titled "Arrangement in Gray and Black."

Answer: James Macneill Whistler

In 1840 this leader of the Hudson River School painted "The Voyage of Life" series. While not as critically acclaimed today as Cassatt or Whistler, at least he stayed in the U.S.

Answer: Thomas Cole

8. (NGC/CS) Like father, like son. Name these historic fathers, for ten points each.

a) Considered the greatest statesman and general of his time, he reorganized the Macedonian army after the Theban phalanx and laid the military foundation for his son Alexander's empire.

Answer: Philip II or Philip of Macedon (prompt on just "Philip")

b) The first European to explore and found a colony on Greenland, he was too sick to accompany his son Leif on a voyage to Vinland in North America.

Answer: Eric the Red or Eric Thorvaldson (prompt on just "Eric")

c) King of the Franks from 751-768, he was crowned by Pope Stephen II, beginning the Carolingian dynasty. His son Charles would be crowned by Pope Leo III, making him the first Holy Roman Emperor.

Answer: Pepin [or Pippin] the Short or Pepin III (prompt on just "Pepin")

9. (UNC/CS) Wang Lung works his way from peasant farmer to rickshaw driver to aristocrat, but ultimately loses touch with what made him successful. FTP:

10) This is a ridiculously simplistic plot summary of what 1931 Pulitzer Prize-winning novel?

Answer: The Good Earth

10) Who wrote *The Good Earth*?

Answer: Pearl S. Buck

10) Name Wang Lung's long-suffering, hard-working wife whom he ignores in favor of the concubine Lotus.

Answer: O-Lan

10. (UTK/SK) It concerns the daughter-in-law of an Ephraimite from Bethlehem named Elimelech, who goes to the country of Moab with his two sons Mahlon and Chilion, one of whom this woman marries. When Elimelech, Mahlon, and Chilion all die, the wife of Elimelech tries to get her widowed daughters in law to go home; Orpah obeys but this woman does not. For 10 points each:

1. Name this namesake of a book of the Bible, who pledged, "Where you go, I will go; where you lodge, I will lodge; your people shall be my people, and your God shall be my God."

Answer: Ruth

2. This is Ruth's mother-in-law, who later conspires to have Ruth marry a rich relative in whose fields she was allowed to glean leftover wheat.

Answer: Naomi

3. This is Ruth's second husband, by whom she becomes an ancestor of David and ultimately Jesus.

Answer: Boaz

11. (AR/JV/CS) He still has one less Oscar than Three Six Mafia. Name these Martin Scorsese films FTPE.

(10) This 2002 movie stars Leonardo Di Caprio, Daniel Day Lewis, and Cameron Diaz; it centers on Amsterdam Vallon as he seeks revenge against Bill the Butcher, his father's killer. It takes place in the Five Points area of the title city.

Answer: **Gangs of New York**

(10) This 1988 film, based on a Nikos Kazantzakis novel, starring Willem Dafoe as the title character and gives a controversial but sympathetic portrayal of Judas Iscariot.

Answer: **The Last Temptation of Christ**

(10) This 1980 movie, based on the central character's autobiography, won an Oscar for Robert DeNiro as the physically-tough but emotional train-wreck of a former middleweight champ, Jake LaMotta.

Answer: **Raging Bull**

12. (DF/SK) Identify the following possibly related musical terms.

1. This term literally means "at ease", and is a direction for play at a slow tempo

Answer: **Adagio**

2. Literally meaning "merry", this directs for played at a lively and fast tempo

Answer: **Allegro**

3. This term means "in the manner of a harp" and directs for the notes of a chord to be played one at a time either ascending or descending.

Answer: **Arpeggio**

13. (DU/JV) FTPE, name these figures of the Holocaust.

(10) This was the name of the secret police of Nazi Germany, whose main role was to look into and fight "all tendencies dangerous to the State." Their actions weren't subject to judicial review.

Answer: **Gestapo (Do not accept SS)**

(10) This man had the final authority for the carrying out of the genocide of over 11 million victims of the Holocaust. He was the leader of both the Gestapo and the SS. He poisoned himself to avoid being part of the Nuremberg Trials in 1945.

Answer: **Heinrich Himmler**

(10) This man was responsible for the deportation of millions of victims to the ghettos and work camps. After WWII, he fled to Argentina and was then found and captured in 1960 to stand trial in Jerusalem. He remains the only man ever sentenced to death in Israel's history.

Answer: **Adolph Eichmann**

14. (NGC/CS) From a description, name the Galilean moon of Jupiter, for ten points each.

a) The innermost of Galilean moons, it is the most volcanically active body in the solar system.

Answer: **Io**

b) The smallest of the Galilean moons, it is the smoothest object in the solar system, having few craters. It may have a layer of water beneath its permanently frozen surface.

Answer: **Europa**

c) The largest moon in the solar system, this satellite may have a similar internal structure as Io and, like Europa, may have a layer of water beneath its surface.

Answer: **Ganymede**

15. (DU/JV) He is considered the founder of modern prose drama. FTPE:

(10) Name this Norwegian playwright, famous for works like *Hedda Gabler* and *A Doll's House*.

Answer: **Henrik Ibsen**

(10) This play by Ibsen tells the story of a Norwegian anti-hero who travels around the world in a fairy-tale-like fashion. Its incidental music was composed by Edvard Grieg and includes the famous piece "In the Hall of the Mountain King."

Answer: **Peer Gynt**

(10) In this Ibsen work, a woman builds an orphanage, then finds out her son has syphilis and is in love with his half-sister

Answer: **Ghosts**

16. (NGC/CS) Name these parasitic creatures, for ten points each.

A) With the scientific class name of Cestoda, these parasites live in the intestines of vertebrate animals, and can range in length from half an inch to 30 feet.

Answer: Tapeworms

B) This jawless fish has a funnel-like mouth that it uses to suck the blood of other fishes. It is most often found in coastal and freshwater areas.

Answer: Lamprey

C) This parasite infects, and often kills, many varieties of trees; however, it is most common for its use as a Christmas decoration.

Answer: Mistletoe

17. (MSU/SK) It is described as a long field of ice formed by the tears of the figure located at the center of it who is occupied chewing on the three figures believed to be the consummate example of the sinners punished here. FTPE:

1. Name this circle of Hell according to Dante.

Answer: Ninth Circle

2. The ninth circle of Hell is reserved for this type of individual.

Answer: traitors

3. 10 for three, five for any two, name the three traitors whom Lucifer is gnawing in the Ninth Circle.

Answer: Marcus Brutus, Caius Cassius, Judas Iscariot

18. (UNC/CS) For ten points each, give the first derivative of the following functions:

10: $y = \sin(x)$

Answer: $\cos(x) + C$

10: $y = \ln|x|$

Answer: $1/x + C$

10: $y = \sec(x)$

Answer: $\sec(x)\tan(x) + C$

19. (BB/SK) Timothy Pickering was a Representative and Senator from Massachusetts has faded into obscurity, but he held pretty important positions in the American government at one time. Answer some questions about his career FTPE:

1. Pickering was the nation's third Secretary of State, succeeding this man, an attorney and diplomat perhaps most famous for introducing Madison's Virginia Plan to the Constitutional Convention.

Answer: Edmund Randolph

2. Pickering has moved to the State Department after his brief tenure as Secretary of War succeeding this man, a Revolutionary War artilleryman and namesake of a Fort in Kentucky and a city in Tennessee.

Answer: Henry Knox

3. Pickering was in turn succeeded as Secretary of State by this man, who held the position under Washington and Adams before leaving the state department to become Chief Justice in 1801.

Answer: John Marshall

20. (BB/SK) Among the religions practiced in this Asian nation is Cao Dai, whose beliefs state that God and Humans are one, knowledge revealed by such sages as Lao Tzu and Saints like Jesus. For 10 points each:

1. Name this nation, whose other native religions include Hoa Hao, which like Cao Dai originated in the delta of the Mekong river.

Answer: Vietnam

2. Also popular in Vietnam is this religion known for stressing humanity, known as jen, and propriety, known as li, and named for the purported author of the "Five Classics."

Answer: Confucianism

3. While the Theravada form also is practiced in Vietnam, the Mahayana form of this religion is perhaps the nation's most popular sect.

Answer: Buddhism

21. (UNC/CS) FTPE, answer these questions about Bizet's opera Carmen.

10: This is the author who wrote the novel Carmen, upon which the opera is based.

Answer: Prosper Mérimée

10: This song, performed by the gypsy siren herself, is probably the most well-known song from the opera. Carmen tells of how love is unpredictable, and warns those who may fall in favor with her.

Answer: Habanera or L'amour est un oiseau rebelle or Havanaise

The part of Carmen is to be played by an actress with this type of voice; please be specific.

Answer: Mezzo-soprano