## Yale University

Bulldogs over Broadway--December 4, 2004
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## Tossups

1. Unlike many carboxylases of metabolism, it does not contain a biotin coenzyme. Indeed, though it is highly conserved and probably existed in the precursors of blue-green algae that populated the oceans 3 billion years ago, it is extremely inefficient, having a relatively high affinity for oxygen that leads to wasteful photorespiration. Consequently, it constitutes nearly $50 \%$ of the protein content by weight of some plants and is thus considered the most abundant protein on earth. For ten points, name this enzyme that fixes $\mathrm{CO}_{2}$ to RUBP in the Calvin Cycle.

Answer: rubisco (accept: ribulose 1,5-bisphosphate carboxylase)
2. Its cover features a large mammal lying on a surfboard, surrounded by turtles and schools of fish. The titular character, whose surname is Patel, wrote a zoology thesis on thyroid gland of the three-toed sloth. Following a shipwreck, he is set adrift for 227 days in the Pacific with that large mammal, a Bengal tiger named Richard Parker. FTP, name this 2002 Man Booker Prize-winning novel, written by Yann Martel, about a boy who shares his first name with a number often rounded to 3.14159 .

Answer: Life of Pi
3. This man accompanied Napoleon on his 1798 expedition to Egypt, where he served as the Secretary of the Institut d'Égypte. He published the description of the expedition's findings in Description de l'Égypte. While an administrator in Grenoble, he began his Théorie analytique de la chaleur, or "Analytic Theory of Heat", in which he described the conduction of heat through a two-dimensional body in terms of an infinite mathematical series. FTP, name this mathematician, whose eponymous series are used to represent arbitrary waveforms as a set of frequency peaks.

## Answer: Joseph Fourier

4. The meeting at which party leaders decided on this tactic marked the first time Mao headed the Chinese Communist Party. During the summer of 1934, troops under Fang Zhimin and Xiao Ke started breaking through enemy lines, but Mao and Zhu De commanded the main troop movement in October. The Communist Army lost 45,000 men breaking through Koumintang lines, and the survivors faced harsh terrain and attacks from non-Chinese peoples during the journey from Jianxi to Shaanxi province. FTP, name this strategic retreat, which fewer than 10,000 ultimately survived, that covered nearly 5000 miles in 370 days.

Answer: Long March or Changzheng
5. In recent years, one particular member of this group of proteins has gained attention for its critical role in the intrinsic apoptotic pathway and caspase-9 cleavage. Traditionally, however, these light-absorbing proteins were characterized for their critical roles in both mitochondrial and chloroplast membranes, where they engage in a series of oxidation and reduction reactions through their iron-bound, heme prosthetic groups. For ten points, name these proteins including the aforementioned "C" that function in the electron transport chain.

Answer: cytochrome(s)
6. His name sounds like his language's word for pain. According to 1 Chronicles chapter 4, he was more honorable than his brothers and was a descendent of Judah. He is best known today for asking God to increase his territory and keep him from evil. FTP, name the Old Testament figure who provided the source for the Bruce Wilkinson 2001 bestseller touting the benefits of his eponymous prayer.

## Answer: Jabez (prompt on Prayer of Jabez before "figure")

7. In 1892 the town was moved and given a slightly changed name. One of its lesser known attractions is a modest cabin and a simple grave site that stands as markers to Joel Sweeney, a local man who popularized the five-string banjo that African slaves had improvised. During the Civil War, it was a railroad depot between Petersburg and Lynchburg and was the county seat for its eponymous county. Wilmer McLean had moved his family to the courthouse of this town in 1861 after Union and Confederate forces had decimated his farmhouse at Bull Run. FTP, name this Virginia town at which Robert E. Lee surrendered the Army of Northern Virginia to U.S. Grant.
Answer: Appomattox Court House (the old town) or Appomattox (the new one)
8. A student of Xenophanes, he based his metaphysics on language. Plato has a dialogue dealing with his thought, and his principle is sometimes stated "all is one." Famous for his assertion against the existence of a void, he concluded that all things were unified by a pervading, unchanging substance and that change and motion were illusions of reality. With students Melissus of Samos and Zeno, he is the founder of the Eleatic school. For ten points, name this Pre-Socratic philosopher considered to be the father of logic.

Answer: Parmenides
9. These agreements, also known as The Declaration of Principles on Interim Self-Government Arrangements, were started by secret talks between the belligerents, spurred on by the largely ineffectual Madrid Conference. Main architects behind these talks included Johan Jørgen Holst, Terje Rød-Larsen and Mona Juul. Today, these agreements are seen as overly dependent on incremental measures, allowing extremists to have a veto over their power's cooperation with these accords. FTP, name these 1993 accords between the PLO and Israel that is named for the Norwegian city where the talks were held.

Answer: The Oslo Accords
10. His favorite movie is "The Goonies," and he listens to Death Cab for Cutie. His grandfather is real estate mogul, and his aunt was once a stripper. In the first season, he falls in love with both Anna and Summer, and is forced to choose between the two. FTP, name this character, son of Sandy and Kirsten on "The O.C."

Answer: Seth Cohen
11. This socio-economic theory arose out of Locke's Second Treatise argument for private property within a world granted by God to humanity in common. It was extended in one direction by Ricardo with his view that the amount of work put into producing a commodity determines the price. Marx returned to the theory's Lockean roots using it to expound on the exploitative aspects of private property. FTP, name this now-discredited theory, which in the Marxian formulation states that capital owners earn profits by paying workers less than their labor is worth.

## Answer: The Labor Theory of Value

12. He first conquered the Kalinga region, but afterward began a campaign of building hospitals, resthouses, and stupas, or burial mounds. As a result of his efforts Buddhism spread throughout the Indian subcontinent and even to Sri Lanka. Indeed, he used his influence to erect pillars all across India inscribed with Buddhist edicts to educate his populace and even established laws in accordance with Buddhist doctrine. For ten points, name this ruler from the third century BCE, the most powerful Mauryan emperor, who converted to Buddhism after forsaking the horrors of the wars that built his empire.

Answer: Ashoka or Asoka
13. A fan of the Spouter Inn, he and the protagonist run across Elijah, who predicts doom for them. He sells shrunken heads, and makes sacrifices to a small wooden god. The tattoos on his body reportedly tell
the history of the world, and are carved onto a coffin which is converted into a life buoy. At one point, he rescues Tashtego from a sinking sperm whale's head. FTP, name this Kokovoko native, and best friend to Ishmael in Moby-Dick.

Answer: Queequeg
14. A controversy surrounded whether or not General Electric ought to pay to dredge it to reduce the level of PCBs. To Native Americans it was known as the Muhheakunnuk, which meant "Great Waters Constantly in Motion. It originates in Lake Tear of the Clouds, where it is known as the Opalescent River and flows roughly 315 miles until is reaches the coast. Discovered by Giovanni Verrazano and passing through cities such as Albany, Poughkeepsie, and New York City, FTE name this river which inspired a school or artists which included Thomas Cole and Frederic Church.

Answer: Hudson River
15. His most famous lecture was "The Art and Craft of the Machine," first printed in 1901. Catching the attention of Daniel Burnham, he was offered a chance to study in Europe, but passed it up, instead wishing to develop his ideas stemming from a home made for W.H. Winslow. 50 more homes were designed in this style up to about 1912 when he designed Midway Gardens, a complex of restaurants and clubs that was only briefly successful due to Prohibition. The master of "Prairie" architecture, FTP name this American architect of the Imperial Hotel in Tokyo and the home Fallingwater.

Answer: Frank Lloyd Wright
16. A half-silvered mirror split monochromatic light into two beams traveling at right angles to each other. These beams were then collected and recombined by a mirror producing a pattern of constructive and destructive interference. FTP, I have just described the apparatus of what famous physical experiment, which yielded a null result, helping to disprove the theory of luminiferous ether?
Answer: Michelson-Morley Experiment
17. This artist's nickname literally translates to "dirty little Tom", a nickname he earned for his unkempt manner. Dying young at the age of 26 he was one of the true innovators of the early Renaissance, and influenced later Renaissance artists such as Michelangelo . His fresco at Santa Maria Novella, Trinity, marks the first use of full perspective in western art, while his frescoes for the Brancacci Chapel, most notably The Tribute Money show the use of atmospheric perspective,. FTP name this Renaissance artist, painter of Expulsion from Paradise.

Answer: Masaccio (accept: Tomasso Cassai)
18. During his youth, he was a member of the Carbonari, a resistance organization fighting Austrian domination of Northern Italy, which would play a big role in shaping his policies when he grew older. Imprisoned after an abortive coup attempt in August 1840, he escaped to the United Kingdom in May 1846. His reign included several successful interventions in Russia, Austria, and Vietnam, as well as a disastrous expedition to Mexico. FTP, name this French President of the Second Republic and Emperor then who was overthrown in the Franco-Prussian War of 1870-1871.

Answer: Napoleon III or Charles Louis-Napoleon Bonaparte
19. As a member of the Royal Navy he helped sink the German ship Bismarck, and also participated in DDay. Educated at Oxford, in addition to writing he also taught at several schools near London. Among his lesser-known works are a published volume of poems, and a play entitled The Brass Butterfly. Yet, he is better known for his novels, such as The Interiors and The Spire. However, he is best known for a novel that takes place on a desert island. FTP name this winner of the 1983 Nobel Prize for literature, author of Lord of the Flies.

Answer: William Golding
20. An 1831 choral sequel to the work known as Lelio, or the Return to Life was much less successful. It was intended as the musical embodiment of the composer's infatuation with Irish-born actress Harriet Smithson. The symphony itself invokes the theme of "idée fixe," a theme introduced in the early movements and then reiterated in a more grotesque fashion in the last two, most famous movements, March to the Scaffold and Dream of a Witches'Sabbath. FTP, name this Hector Berlioz symphony, whose original title was Episode in the Life of an Artist but today it is better known by this subtitle.

Answer: Symphonie Fantastique
21. Its first major battle occurred at Mollwitz on April 10, 1741. In 1742, the king of Bavaria was elected Holy Roman Emperor Charles VII, and later emperor Francis I's brother Charles of Lorraine was routed by Frederick II of Prussia at Hohenfreidburg in June 1745. These things occurred despite all of the European powers having agreed to Charles VI's 1713 Pragmatic Sanction. It ended in 1748 with the Treaty of Aix-la-Chappelle, which saw the transfer of Silesia to Prussian control. FTP, name the war that arose from disputes over Maria Theresa's claim to the Hapsburg throne.

Answer: War of the Austrian Succession
22. The lead singer of this band wanted the group's first single to be in two languages, but his friend who knew Greek refused to help him because of the subject matter, so they had to rely on the bassist who knew French. The band got its name when their friend Wayne suggested it to them after reading an article in TV Guide, and U2 and Dire Straits got their starts opening for them. Their songs include "Slippery People" and "Once in a Lifetime" both of which were featured in their concert movie Stop Making Sense. FTP name this band with lead singer David Byrne whose songs include "Psycho Killer" and "Burning Down the House".

Answer: The Talking Heads
23. According to Emile Durkheim, this act exists in four forms. The anomic form is the result of too little social regulation, and the fatalistic is the result of too much. The egoistic occurs when an individual is too independent, and the altruistic when they are too dependent. It is also the title of Durkheim's doctoral thesis, often lauded as the first truly sociological work. FTP, identify this act, the means by which Dido dies in The Aeneid.

Answer: Suicide (Accept Equivalents)
24. Born in 1847 this man's father was a magistrate who pushed his son to pursue the same career. He actually got his degree and became and apprentice in his father's law firm until he was corrupted by men such as Sacchetti, Boito, and Camerana and started another career as a writer. Name this person who works include Una partita a scacchi, Il Trionfo dell'Amore, Fratello d'Armi, Tristi Amori, Come le Foglie, and Il più forte who also collaborated with Luigi Illica on the libretti for Puccini's most famous operas: La Bohème, Tosca, and Madama Butterfly.

Answer: Giacosa, Giuseppe
25. An optical phenomenon first discovered by a 19th C. Scottish physicist and named for him, this is the angle is given by $\arctan (\mathrm{n} 2 / \mathrm{n} 1)$ where n 1 and n 2 are the refractive indices of the media. S-polarized light incident at this angle with the interface of two substances is entirely reflected, whereas p-polarized light is entirely refracted.
Answer: Brewster's Angle

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Bonuses

1. Name these Nobel Prize winning authors who wrote trilogies.
A. This Guatemalan author wrote The Banana Trilogy as well as Week-end in Guatemala Answer: Miguel Angel Asturias
B. This German author wrote the Danziger Trilogie whose most famous part is The Tin Drum Answer: Gunter Grass
C. This other German wrote the trilogy The Tales of Jacob, better known as Joseph and his Brothers. Answer: Thomas Mann
2. FTPE, answer these questions about chloroplasts.
A. Name the first photon acceptor in photosynthesis.

Answer: photosystem II
B. Name this theory concerning the origin of chloroplasts in eukaryotes.

Answer: endosymbiotic theory (accept: endosymbiont)
C. ATP synthase pumps protons into this space in the chloroplast.

Answer: stroma
3. Name the following about a Baroque artist.
A. Legend has it that Pope Urban VIII held up a mirror while this artist was carving a statue so that he could make the statue a self-portrait. He is well-known for designing the Scala Regia at the Vatican

Answer: Gianlorenzo Bernini
B. This is the statue Bernini was supposedly carving when Urban held up the mirror. It depicts a biblical character in the action of throwing.

Answer: David
C. This is the name of Bernini's biggest rival in the field of architecture. He designed the church of St. Ivo alla Sapienza.

Answer: Francesco Borromini
4. Identify these characters from Vergil's Aeneid, FTPE.
A. In Book II, this dead Trojan hero appears to Aeneas in a dream and urges him to flee Troy

Answer: Hector
B. In Book IX, Juno sends this Fury to incite war between the Trojans and the Latins

Answer: Allecto
C. In Book XI, Arruns is able to kill this virgin warrior because she is distracted by the finely crafted armor of one of her foes.

Answer: Camilla
5. Identify these dictators FTPE
A. This Portuguese dictator ruled from 1928 to 1968 , forming a corporate state and suppressing rebellions in Portugal's African colonies.

Answer: Antonio de Oliveira Salazar
B. He ruled the Dominican Republic from 1930 to 1961, some times as an elected president, other times as a dictator.

Answer: Rafael Leonidas Trujillo Molina
C. This Ugandan dictator killed more than 100,000 of his own people between 1971 and 1979 and had
strong ties to the PLO.
Answer: Idi Amin Dada Oumee
6. Name the following about crazy Moose and Squirrel FTSNOP
A. For 10 , this is the middle initial shared by both Rocky the squirrel and Bullwinkle the Moose on the show Rocky and Bullwinkle and Friends.

Answer: J
B. For five, give the name of the segment of the show, which features retellings of classic childhood stories.

## Answer: Fractured Fairy Tales

C. For another five, what is the name of the time machine invented by Mr. Peabody?

Answer: The Waybac machine
D. For 10, this is Natasha's last name.

Answer: Fatale
7. For ten points each, identify these American Gothic cathedrals
A. (10) This chuch now dwarfed by neighboring skyscrapers was designed by James Renwick, and it is located across from Rockefeller Center, serving as the seat of the Archdiocese of New York.
Answer: St. Patrick's Cathedral
B. (10) This yet-unfinished Episcopal church on $110^{\text {th }}$ street in New York is the largest Gothic church in the world. A fire ravaged parts of it in December 2001.
Answer: Cathedral of St. John the Divine
C. (10) When Rodney Winfield finished his notable creation the "Space Window" for this building he set a grubby little 3.5 billion year old moon rock in its center. It is also the resting place of Woodrow Wilson.

Answer: Washington National Cathedral
8. Identify these philosophical concepts from definitions for ten points apiece.
A. The principle that one should act only on maxims where one can will that the maxim should become a law for all rational beings

Answer: Categorical imperative
B. From the Greek for "discourse", a proposition and an opposing proposition are considered and resolved in a higher proposition, which then creates another counter-proposition, ad infinitum.

Answer: Hegelian dialectic
C. A claim that must be accepted given the prior acceptance of a weaker application of the same reasoning.

Answer: a fortiori
9. FTSNOP, name the following circuit elements:
A. [5] This device, usually constructed out of nichrome wire or a ceramic cylinder, causes a voltage drop proportional to the amount of current flowing through it.

Answer: Resistor
B. [10] Immediately after a sudden change in power flowing into this device, current stays constant. The voltage across this device is proportional to the derivative of the current flowing through it.

Answer: Inductor
C. [15] In the CMOS arrangement, an n-channel and p-type channel of this device are connected together to form a voltage-gated switch. Name this device, which is the most basic building block of modern microprocessors.

Answer: Field Effect Transistor (prompt on transistor, accept derivatives like MOSFET, JFET, or IGFET)
10. Answer the following about everyone's favorite really old epic hero, Gilgamesh
A. Gilgamesh was the king of this city.

Answer: Uruk
B. Name this friend of Gilgamesh who was sent to Earth as a subhuman beast and only gained human qualities after a harlot offered herself to him at a watering hole.

Answer: Enkidu
C. This is the old man who tells Gilgamesh where to find a plant that will make him young again after he fails to gain immortality.

Answer: Utnapishtim
11. FTPE, what are the costs of expected inflation?
A. This term captures the cost of going to the bank very often in order to avoid holding much cash.

Answer: Shoeleather costs
B. Businesses constantly change listed prices, leading to this cost of printing up new sales materials.

Answer: Menu Costs
C. Inflation can worsen to this condition, in which the costs of inflation are so high that money loses its value and people revert to barter, which hit Bolivia in 1985 and Germany in 1923.

Answer: Hyperinflation
12. FTPE name these Russian Symphonies
A. This Tchaikovsky symphony, notable as the first to end with a slow movement, , was premiered in St. Petersburg on October 28, 1893.

Answer: Symphony no. 6 (Accept: Pathetique)
B. When this symphony was performed in the city of the same name in 1942, extra players were drafted in to replace those fighting, evacuated or dead.

## Answer: Symphony no. 7 (Accept: Leningrad)

C. This Shostakovich symphony, written after Stalin's death in 1953, is remarkable for its so-called Elmira theme, in which Shostakovich uses notes to spell out the name of a student that he fell in love with.

## Answer: Symphony no. 10

13. FTPE name these Civil War guerrilla fighters:
A. The Bushwhackers under this man sacked Lawrence, Kansas in 1863, highlighting the climax of the border conflict between Missouri and Kansas.

Answer: William Quantrill
B. This psychopathic lieutenant of Quantrill was so reviled by the North that when he was killed in October 1864, Union soldiers hung his head on a telegraph pole to ensure the citizens of Missouri that he was actually dead.

Answer: William "Bloody Bill" Anderson
C. These brothers, led by the eldest Cole, were part of Quantrill's Bushwhackers at the sack of Lawrence, Kansas, but later gained notoriety as outlaws and robbers on par with the James brothers.

Answer: Younger brothers
14. FTPE, name these subatomic particles with integral spin:
A. These are particles with spins 0,1 , and 2, named after an early twentieth-century Indian physicist and mathematician.

Answer: Bosons
B. Sometimes called the God particle, this as of yet unobserved spin-zero particle with an estimated mass of $117-251 \mathrm{GeV}$ was first predicted by a British company.

Answer: Higgs Boson
C. These gauge bosons that mediate the electromagnetic force are described by the theory of Quantum Electrodynamics.

## Answer: photons

15. FTPE name these British actions concerning the collapse of the Ottoman Empire
A. Name the statement issued to Lord Rothschild by the British Foreign Secretary promising a "national home for the Jewish people"

Answer: The Balfour Declaration
B. Name the secret 1916 agreement between Britain and France defining their respective areas of postWorld War I influence and control in the Middle East.

Answer: Sykes-Picot Agreement
C. Name the exchange of letters between the Hejazi and the British High Commissioner in Egypt in which the British seemed to pledge immediate Arab independence.

Answer: Hussein-MacMahon Correspondence
16. FTSNOP, answer these questions about that most ornamented period of American history, the Gilded Age.
A. For 5 points each, name the two authers of The Gilded Age

Answers: Mark Twain (accept Samuel Langhorne Clemens with a sigh) and Charles Dudley Warner
B. For 10 points, name the article written by Andrew Carnegie in which he encouraged the rich to use their money to establish and administer public institutions

Answer: The Gospel of Wealth
C. For 5 points, identify the leader of the "Half-Breed" Republicans whose opponents nicknamed him "The continental liar from the state of Maine"

Answer: James Gillespie Blaine
D. For 5 points, name the financial downturn that started at the end of the second Cleveland administration when the Reading railroad went bankrupt, bringing down hundreds of banks that depended on it.

Answer: Panic of 1893
17. FTPE, How many programming languages do you know?
a) [10] One programmer said that this language "is history repeated as tragedy, whereas Java is history repeated as farce." Which baroque language, originally called "C with Classes," was designed by Bjarne Stoustrup in the early ' 80 s at Bell Labs?

Answer: $\mathbf{C + +}$
[10] Implementations of it include PLT, Bigloo, Kawa, and SCM. Name this language, a minimalist subset of Common Lisp, which was introduced by Sussman and Steele in the "Lambda the Ultimate" Papers.

Answer: Scheme
[10] First developed by an IBM team led by John Backus in the 1950s, this programming language is still widely used for heavy-duty scientific processing due to its excellent optimizing compiler and built in mathematics support.

Answer: Fortran
18. Name these Peter Jackson Movies that aren't part of the Lord of the Rings Trilogy. FTPE
A. This movie, detailing the life of some Muppet-like puppets, involves a heroin addicted crocodile, a nymphomaniac rabbit, and a binge eating hippo who goes on a shooting spree at the end of the movie.

Answer: Meet the Feebles
B. This movie, having the highest body count of any movie yet made, involves some body-snatching aliens, and a vomit drinking scene that makes the title seem all too appropriate.

## Answer: Bad Taste

C. This movie has it all; a zombie killing priest, an infected monkey, and some wild zombie sex which results in a zombie baby that eventually ends up in a blender.

Answer: Dead/Alive
19. Contemporary American Literature, FTPE
A. "Te Occidere Possunt, sed te edere non possunt, nefas est." is the motto of the Enfield Tennis Academy in this novel which derives its name from a phrase in "Hamlet." Name this 1079 page 1996 work.

Answer: Infinite Jest
B. Name the author of Infinite Jest, also author of the essay collection A Supposedly Fun Thing I'll Never Do Again.

Answer: David Foster Wallace
C. Name the founder of the Enfield Tennis Academy, and maker of such films as "Tennis, Everyone?" and "Dark Logics"

Answer: George Incandenza
20. The 2004 election was a hotly contested one. FTPE,
A. Name this governor of North Carolina, a Democrat.

Answer: Mike Easley
B. Name this senator from New York, reelected by a wide margin in 2004.

Answer: Charles Schumer
C. For ten points, name three of the 11 states to pass bans on same-sex marriage in 2004.

Answer: (and three) Arkansas, Georgia, Kentucky, Michigan, Mississippi, Montana, North
Dakota, Ohio, Oklahoma, Oregon, Utah.
21. FTSNOP, name these early social thinkers.
A. For five points, name this author of "The Eighteenth Brumaire," "Critique of the Gotha Program," and a multi-volume study of value and capital.

Answer: Karl Marx
B. For ten points, name this author of The Protestant Ethic and the "Spirit" of Capitalism.

Answer: Max Weber
C. For fifteen points, name this wife and biographer of Max Weber, who also wrote Reflections of Women and Women's Issues.

Answer: Marianne Weber
22. FTSNOP name the following related to German Chancellor Bismarck
A. For 15 points for both, 10 for either, name these two duchies which were administered by Prussia and Austria following the Treaty of Gastein, and which were also the cause of the Prussian-Austrian War.

Answer: Schleswig and Holstein
B. For 10 points, name the British prime minister who famously said that only 3 people understood the Schleswig-Holstein situation, and of the three, one was dead, one was insane, and he himself had forgotten it.

## Answer: Lord Palmerston

C. This single decisive battle of the Prussian-Austrian War was won by the superiority of the Prussian needle-gun over the slower to reload Austrian musket-loading rifle.
Answer: Battle of Koniggratz (Accept: Battle of Sadowa)
23. Ponder these questions about Pre-Socratic philosophers FTSNOP.
A. For 5, name the so-called "first" philosopher.

Answer: Thales
B. For 5, name this philosopher who believed everything was made up of a combination of the four elements.

Answer: Empedocles
C. For 10, Protagoras founded this infamous school of philosophy.

Answer: Sophism (accept: Sophists)
D. 5 for one, 10 for both, name the two co-founders of Atomism. Answer: Leucippus, Democritus
24. FTPE, answer these questions about immunoglobulins.
A. Name the immunoglobulin that exists as a pentamer.

Answer: IgM (accept: $\underline{\mathbf{M}}$ )
B. Name the immunoglobulin generally responsible for allergies. Answer: IgE (accept: $\underline{\mathbf{E})}$
C. For 20, name these proteins that catalyze the genetic recombination required for antibody diversity. Answer: RAG proteins
25. Name that Greek philosopher, 30-20-10.
A. He was influenced by Pythagoras, Parmenides, and Anaxagoras.
B. The school he founded was closed by Justinian I in 529 CE.
C. Among his many works are: Phaedo, Meno, Critias, and Timaeus Answer: Plato

