# Valencia Fall Invitational 2002 Round 2-Questions by Chris Borglum

1) In Pennsylvania a police dog named Dolpho has been accused of this after biting and dragging a nine-year old black bystander. The Florida Highway Patrol webpage explicitly condemns the practice and insists that all of its officers will only stop vehicles based on a violation being observed. Leading directly to violations like "driving while black," FTP what is this practice of projecting guilty intentions onto people because of their race?

## A. racial profiling

2) The low range of this woodwind instrument is called the Chalumeau register in honor of a 16<sup>th</sup> century predecessor. By 1750 it had five keys and had become a standard part of the orchestra, but keys kept being added to expand its range. In 1844 two French musicians applied the Boehm flute key system to it, creating the modern version. Usually made of ebonite or African black wood, and played by Benny Goodman, FTP name this reed instrument sometimes called the "licorice stick."

## A. clarinet

3) Among its many sights are the Yerebatan Saray, one of the excavated underground cisterns that riddle the city, and the Topkapi Palace, which includes a shrine that holds hairs from the beard of Muhammed and (supposedly) the forearm of John the Baptist. Areas in the city include Beyazit, Eminonu, Galata, and Sultanahmet, home to its best known attractions. FTP name this huge city split by the Bosporus, home to the Blue Mosque and the Hagia Sophia.

## A. Istanbul

4) The most massive stars spend the least time on it, as they exhaust their fuel in just a couple hundred thousand years and then become neutron stars or black holes. Lighter stars burn more slowly and can stay in this stage for billions of years. Our sun is only halfway through this phase, thankfully. FTP what is this area of the H-R diagram containing most mature stars and running from the upper left to the lower right?

### A. main sequence (prompt on "H-R diagram" before said in last line)

5) There are three ways one can reach this island, on which no females are allowed: it sometimes presents itself to children on the verge of sleep; baby boys who fall out of prams while nurses aren't looking are sent there if not found in a week; or visitors can be brought there by its most famous resident, who claims to have run away from his parents on the day he was born. Containing Picanniny Village and the Lost Boys' House, FTP what is this fictional island inhabited by Captain Hook and Peter Pan?

## A. Never-Never Land

6) It was written in 1892 to coincide with the Columbian Exposition in Chicago. Editors at a magazine called "The Youth's Companion" selected a former Baptist minister from Boston who'd been forced from the pulpit for his socialist sermons to write a special salute for school children. The author, Francis Bellamy, wanted the word "equality" instead of "Republic," but was overruled by the editors, and it was memorably amended again in 1954 when "under God" was added. FTP name this American flag salute.

## A. The Pledge of Allegiance

7) One of its central tenets is the concept of the emanation of entities from the infinite, or God. Another is that God can contract himself into finitude for contact with men. Originally an oral tradition, its first

written manifestation was the Zohar. Coming from the Hebrew for "tradition," FTP what is this corpus of mystical thought in Judaism?

## A. Kabbalah

- 8) Gabor won the 1971 Nobel in physics for this discovery, though he created the first ones without a laser. Typically, coherent light from a laser is reflected from an object and combined at the film with light from the reference beam. The recorded interference pattern contains much more information than a focused image and creates a 3-D image that can be viewed from any angle. FTP name this type of lensless photography.
  - A. holography (grudgingly acc. "hologram")
- 9) One of the so-called "Sea Peoples" who entered the Near East in the 13<sup>th</sup> century, this group was likely from Cyprus or Crete. Their nautical background is clear by their main deity, Dagon, a fish-god. One of their main cities was Gaza, where they put out the eyes of Samson. FTP name this enemy of the Israelites whose name has come to refer to anyone who doesn't appreciate finer things.

## A. Philistines

10) Her father Otto was an entomologist, author of a treatise on bumblebees. His German background figures prominently in a number of her poems, though he was not a Nazi, as is sometimes implied. Her first collection, *The Colossus*, appeared in 1960, the same year she moved to London with her husband, a fellow poet. FTP name this author of "Lady Lazarus" and "Daddy," an American who committed suicide in 1963.

## A. Sylvia Plath

11) Born in 1875, she was the last of 17 children and the only one born after the end of slavery in South Carolina. In the late 1930s, after successfully establishing a school for African-American children in Florida, she became special advisor to Franklin Roosevelt on minority affairs. FTP name this educator, the founder of the Daytona Normal and Industrial Institute for Negro Girls, which later became a four-year college after merging with the Cookman Institute.

#### A. Mary McLeod Bethune

12) This goddess gave Tiresias the gift of prophecy when she struck him blind because he saw her bathing. Her shield is the Aegis, made from the skin of the goat Amalthea. Her unusual birth was due to her father Zeus's swallowing of her mother, Metis. Springing fully grown from Zeus's skull, FTP name this Greek goddess of wisdom.

#### A. Athena

13) Botanically classified as laphophora williamsii, it has probably been used in spiritual rituals for over 2,000 years by various tribal peoples, including the Nahuatl and Aztecs. Its ingestion by Carlos Castaneda in the first of his Don Juan books led him to urinate all over himself while wrestling with a dog, but he still dug it. Featuring the psychoactive alkaloid mescaline, FTP this describes what southwestern cactus?

A. peyote (early buzz on mescaline is just wrong)

14) Representative works of this movement from American authors include Garland=s *Main-Travelled Roads* and Norris=s *McTeague*. Better examples might include any of the novels of Emile Zola, who

suggested that the Anovelist must be only a scientist. @ The movement is defined by the explicit determinism shown in characters who behave as their circumstances dictate they behave. FTP this describes what late-19th century literary movement whose best-known American practitioner was Stephen Crane?

## A. Naturalism

15) It names both a novel by historian Shelby Foote and a poem by Melville, in which the "swallows fly low" over the eponymous battlefield. After leading his troops from Corinth, Mississippi, Confederate General Albert Johnston attacked somewhat oblivious Union forces on the morning of April 6, 1862, telling his fellow officers "Tonight we will water our horses in Tennessee." Site of the sunken road and the hornet's nest, FTP name this Civil War battle called Pittsburg Landing by Confederates.

### A. Shiloh

16) Only two of this band's four founding members remain, 21 years after they formed in Los Angeles, putting four songs on an L.A. compilation called "Metal Massacre I." Original bassist Ron McCovney was replaced by Cliff Burton, who was killed in a bus crash in 1986, and was replaced by Jason Newsted. Original guitarist Dave Mustaine left the band to found Megadeth and was replaced by Kirk Hammet. FTP name this band whose two remaining founding members are James Hetfield and Lars Ulrich.

### A. Metallica

17) He referred to the mind as the "black box," insisting that psychologists should focus on overt actions, as they can be observed. He built a special chamber for his infant daughter which was clean, safe, and temperature controlled, so as an infant she had no need for clothes besides a diaper. Heavily influenced by J. B. Watson, FTP name this psychologist who believed that various types of reinforcement led to changes in behavior.

### A. B. F. Skinner

18) Claiming the mysterious cityscapes of Giorgio di Chirico as his inspiration, this painter had his first one-man show in Brussels in 1927. He spoofed David's portrait of Madame Recamier by placing a coffin in her place, showing the wit that pervades more well known works like "The Human Condition" and "Time Transfixed," which depicts a train leaving a fireplace. FTP name this Belgian surrealist best known for his painting of a pipe, which may not be one.

#### A. Rene Magritte

19) In Robinson's "Mr. Flood's Party," the protagonist paraphrases this famous work when he says "The bird is on the wing." Really a collection of short verses rather than a connected long work, its name simply means "quatrains." Translated most famously by Edward Fitzgerald in 1859, FTP what is this collection of verse by the 12<sup>th</sup>-century Persian poet Omar Khayyam?

## A. The Rubaiyat

20) Members of this phylum are hermaphroditic but are not usually capable of self-fertilization. They have mouths which lead to a simple branched gut without an anus. Characterized by a flattened, unsegmented body, and including flukes and planaria, this is, FTP, what phylum of flatworms?

#### A. platyhelminthes

#### VFI 2002-Round 2 Boni

1) Name these groups who mixed it up with the Romans FTPE.

A. Under Genseric these people formed a vast North African empire, and in 455 CE they sacked Rome, probably doing lots of damage to businesses and homes.

A. Vandals

B. These guys defeated Roman armies at Adrianople in 378 CE, and under Alaric I they also sacked Rome in 410.

A. Visigoths

C. Led by Theodoric, these people forged an alliance with Eastern Roman Emperor Zeno in 471 CE, and of course they too sacked Rome in 488, after its fall.

A. Ostrogoths

- 2) Provide the following terms from the art which Homer Simpson pictured as bears driving around in little cars; yes, I'm talking about ballet. FTPE:
- A. This common pose involves extending the leg behind the torso parallel to the floor while the other leg stands straight or bent.

A. arabesque

B. This is a high jump in which the legs are kept at 90 degrees to one another.

A. grand jete

C. In case you've blown the first two, this is just French for a dance for two.

A. pas de deux

- 3) Answer the following about John Updike FTPE.
- A. Updike wrote the "Talk of the Town" section of this magazine in the 1950s.

A. The New Yorker

B. What Updike novel was turned into a movie starring Cher, Michele Pfeiffer, and Susan Sarandon as the title characters?

A. The Witches of Eastwick

C. What is the only Updike novel to share its name with a nation?

A. Brazil

- 4) Answer the following about superconductivity FTPE.
- A. The BCS theory of superconductivity was formulated by these three scientists (all or nothing).

A. John Cooper, John Bardeen and Robert Schrieffer

B. Coupled electrons condensed into the ground state are called what (Hint: they take the name of one of the BCS developers).

A. Cooper Pairs

C. Cooper Pairs display the characteristics of this class of particles which have integer spin and include photons.

A. bosons

- 5) Name the museum in which you'd find the following pairs of works FTPE.
- A. Sunday Afternoon on the Island of La Grand Jatte; The Old Guitarist

A. Art Institute of Chicago

B. Liberty Leading the People; Luncheon on the Grass

A. Louvre

C. Las Meninas; Third of May, 1808

A. Prado

- 6) Name these concepts from the dismal science, economics, FTPE.
- A. This is the relative response of one variable to changes in another, usually given as a percent change. Price and income show this quality with demand and supply.

A. elasticity

B. This is a disruption in market equilibrium caused by a change in the supply determinant and causing a

shift in the supply curve.

A. supply shock

- C. This is a good bought by a consumer that lasts more than a year, like a car or a piano. During a recession, consumers hold off on buying these, so their consumption is closely watched.
  - A. durable good
- 7) Answer the following about a big 19<sup>th</sup> century building project FSNOP.
- A. (5 pts.) Connecting Troy to Buffalo in New York, what man-made waterway was built in the 1820s.
  - A. Erie Canal
- B. (10 pts.) Early on the Erie Canal was dismissed as "[blank's] folly," with the blank filled by the name of this man, the New York governor who advocated its building.
  - A. DeWitt Clinton
- C. (15 pts.) All or nothing, name the two rivers connected by the canal.
  - A. Hudson and Niagara (any order)
- 8) Given some common polyatomic ions, give their charge, F5P each with a bonus of 5 for all correct:

A. Carbonate

A. <u>-2</u>

B. Nitrate

A. <u>-1</u>

C. Phosphate

A.  $\frac{-3}{-3}$ 

D. Ammonium

A.  $\frac{-}{+1}$ 

E. Permanganate

A. -1

- 9) Identify these body parts prominent in various myths FTPE.
- A. The Norse god Tyr lost this part of his body during the binding of Fenrir, the wolf.
  - A hand
- B. The Norse god Odin gave up this body part in order to drink from the wisdom of Mimir's well.
  - A. eve
- C. Pelops, son of Tantalus in Greek Myth, had to have this body part fashioned out of ivory after Demeter accidentally ate his flesh.
  - A. shoulder
- 10) Identify these forms of Japanese theater FTPE.
- A. The oldest form, it originated in the 1400s and actors traditionally wear wooden masks.
  - A. Noh
- B. Developed in the 1600s, actors often paint their faces white, and subject matter may include love, jealousy, and heroism.
  - A. Kabuki
- C. This is the traditional puppet theater of Japan.
  - A. Bunraku
- 11) Answer the following about the early history of airplanes FTPE.
- A. First, in what year did the Orville Wright manage 120 feet and Wilbur 852 feet in their flying machine?
  - A 1903
- B. Though the Wright brothers made their first flight in North Carolina, they build much of the plane in their hometown in what other state?

- A. Ohio (Akron, specifically)
- C. Frenchman Louis Bleriot in 1908 became the first man to fly over what body of water?
  - A. English Channel
- 12) Answer the following about our recent 2002 elections FTPE.
- A. In Georgia, Vietnam war hero Max Cleland, who lost his legs in battle, lost to this Republican, who called Cleveland "soft on defense."
  - A. Saxby Chambless
- B. This Maryland man won the gubenatorial race against Kathleen Kennedy Townsend.
  - A. Robert Ehrlich
- C. In New Hampshire, this son of a cabinet member under Bush Senior defeated former governor Jeanne Shaheen to join the senate.
  - A. John Sununu
- 13) Answer the following about your friend, the virus, FTPE.
- A. This is the protein shell that encloses the viral genome.
  - A. capsid
- B. Viruses that infect bacteria are known as what?
  - A. bacteriophages
- C. The first virus, identified by Wendell Stanley in 1935, was what phage that attacked plants?
  - A. tobacco mosaic virus
- 14) Identify these nations from clues FTPE. Hint: they all begin with the same letter.
- A. Its currency is the quetzal and it has coasts on the Caribbean and Pacific.
  - A. Guatemala
- B. Its capital is Conakry.
  - A. Guinea
- C. This small nation is completely surrounded by Senegal and the Atlantic.
  - A. (The) Gambia
- 15) Given figures from the Old Testament, name their father FTPE.
- A. Jacob and Esau

A. Isaac

B. Reuben, Dan, Joseph

A. Jacob

C. Ham, Shem, Japeth

A. Noah

- 16) Given characters, name the American novel in which they appear 5-10-15.
- A. (5 pts.) George Milton; Lenny Small

A. Of Mice and Men

B. (10 pts.) Jake Barnes; Robert Cohn

A. The Sun Also Rises

C. (15 pts.) Newland Archer; May Welland

A. The Age of Innocence

- 17) Name these scandals that occurred during U.S. Grant's administration FTPE.
- A. Oakes Ames bribed dozens of members of congress to keep them from stopping him and his cohorts from skimming millions from the building of the Union Pacific railroad.
  - A. Credit Mobilier
- B. Grant's personal secretary accepted bribes to help a group of distillers avoid paying excise taxes on the namesake libation.
  - A. Whiskey Ring