Hard General Knowledge

Choose one answer per question. Circle A, B, C, or D.

1. Astronomers noticed that Uranus did not move exactly as expected. Which planet was found in 1846 after mathematicians predicted where a body causing that difference might be?
   A. Neptune
   B. Jupiter
   C. Saturn
   D. Mercury

2. What crosses the bridge in J. M. W. Turner’s painting Rain, Steam, and Speed – The Great Western Railway?
   A. A team of draft horses
   B. A covered wagon
   C. A steam train
   D. A line of pedestrians

3. Which painting technique produces the many small points of color in Georges Seurat’s A Sunday on La Grande Jatte – 1884?
   A. Sgraffito
   B. Pointillism
   C. Fresco
   D. Woodcut printing

4. Which observatory was chosen as the reference for zero longitude at the 1884 International Meridian Conference?
   A. The U.S. Naval Observatory
   B. The Paris Observatory
   C. The Berlin Observatory
   D. The Royal Observatory at Greenwich

5. A fictional mineral scratches feldspar but is scratched by quartz. Feldspar is 6 and quartz is 7 on the Mohs scale. Where does the sample fit?
   A. Below 6
   B. Between 6 and 7
   C. Above 7
   D. Exactly 7

6. Phobos completes roughly three circuits around Mars in a Martian day. Which description fits the orbit of Deimos?

A. It takes longer than a Martian day to make one circuit.
B. It takes about one-third as long as Phobos’s orbit.
C. It completes one orbit in the same time as Phobos.
D. It completes a circuit each time Mars rotates halfway around.

7. The 1874 Treaty of Bern created the General Postal Union. What name did that organization take in 1878?

A. International Maritime Organization
B. International Telecommunication Union
C. World Customs Organization
D. Universal Postal Union

8. A telegraph cable linked Ireland and Newfoundland briefly in 1858. In which year did a laid cable provide a lasting link after further attempts?

A. 1874
B. 1861
C. 1866
D. 1888

9. An instrument report gives magnetic flux density in webers per square meter. Which named SI unit means the same thing?

A. Tesla
B. Henry
C. Farad
D. Coulomb

10. In Jan van Eyck’s Arnolfini Portrait, what does the convex mirror show in addition to the backs of the couple?

A. A person playing a lute
B. A second chandelier
C. A boat on a distant river
D. Two figures in the doorway

11. A ship follows a constant true bearing that crosses several meridians. On a normal Mercator chart, how is this route drawn between those crossings?

A. As a circle centered on the North Pole
B. As a curve that bends at each meridian
C. As one straight line
D. As separate straight segments with a different angle at each meridian

12. Bibliographers often use B42 for the Gutenberg Bible. What does the number describe?

A. The total number of printed illustrations
B. The number of lines of type in a standard column
C. The number of books in its New Testament
D. The weight in pounds of one bound volume

13. The original edition of Audubon’s The Birds of America used sheets called double elephant folios. Which goal explains the unusually large paper?

A. Folding the pages into envelopes for single specimens
B. Adding the full written description to every plate
C. Printing each plate as an uncut sheet of postage stamps
D. Showing birds at life size where possible

14. Columbia University holds the mathematical record known as Plimpton 322. What physical form does the original artifact take?

A. A Babylonian clay tablet with cuneiform marks
B. A Greek papyrus roll with inked diagrams
C. A Roman wax board with Latin labels
D. A medieval European parchment leaf

15. An early Edison phonograph in the Smithsonian has a brass cylinder with a replaceable surface where the sound was recorded. What material covered that cylinder?

A. Waxed fabric
B. Celluloid film
C. Tin foil
D. Paper coated with lampblack