SAMPLE TEST PAPER
FOR (ENTRY TEST)
APPLIED PHYSICS / BSCS / BSSE
ENGLISH

Complete the sentences by choosing the most appropriate word, from the given lettered choices (A to D) below each.

1. Ahmad always seeks ______ wealth.
   
   A. from
   B. with
   C. to
   D. for

Each question below consists of a related pair of words, followed by five lettered pairs of words. Select the lettered pair that best expresses a relationship similar to that expressed in the original pair.

2. PAGE: BOOK::
   
   A. sailors: crew
   B. petal: flower
   C. leaf: stalk
   D. singers: chorus

Choose the lettered word or phrase that is most nearly opposite in meaning to the word in capital letters.

3. PARTICULAR:
   
   A. general
   B. widespread
   C. diffused
   D. common

Choose the word most similar in meaning to the capitalized ones.

4. CHANGE:
   
   A. alter
   B. church
   C. complete
   D. decide
   E. agree
Read the passage to answer questions 5-6

The vast multitude of stars are wandering about in space. A few form groups which journey in company, but the majority are solitary travelers. And they travel through a universe so spacious that it is an event of almost unimaginable rarity for a star to come anywhere near to another star. For the most part each voyages in splendid isolation, like a ship on an empty ocean. In a scale model in which the stars are ships, the average ship will be well over a million miles from its nearest neighbor, whence it is easy to understand why a ship seldom finds another within hailing distance.

5. Which of the following is incorrect according to the passage?
   A. Most of the stars travel in isolation
   B. The universe is very large
   C. A star very frequently comes near to another one
   D. A star very rarely comes near to another one
   E. Some stars travel in groups

6. In the passage the “ship” symbolizes:
   A. space
   B. traveler
   C. universe
   D. ocean
   E. star
7. If $4 \times 5 = 1620$, $3 \times 8 = 924$ then $7 \times 6 = ?$

A. 1740  
B. 1880  
C. 4949  
D. 4942

8. A father is 5 times as old as his son. In 18 years, the father will be twice as old as his son. How old is the father at present?

A. 20 years  
B. 30 years  
C. 50 years  
D. 40 years

9. When was Sui Gas first discovered in Pakistan?

A. 1959  
B. 1952  
C. 1981  
D. 1989

10. Sun is a(n):

A. star  
B. asteroid  
C. planet  
D. satellite
CHEMISTRY

17. Viscosity of liquids depends upon:
   A. Temperature
   B. Size of molecule
   C. Shape of molecule
   D. Inter-molecular forces
   E. All of the above

18. Which pair of gases have same rate of diffusion at STP?
   A. H₂ and Ne
   B. O₂ and CO
   C. CO₂ and C₃H₈
   D. CO₂ and SO₂
PHYSICS

11. Which of the following quantities is a scalar?

A. magnetic moment  
B. acceleration due to gravity  
C. electric field  
D. electrostatic potential

12. A particle is projected at an angle of 45° with a velocity of $9.8\text{ms}^{-1}$. The horizontal range will be:

A. $9.8/\sqrt{2}\text{m}$  
B. $9.8\sqrt{2}\text{m}$  
C. $9.8\text{m}$  
D. $4.9\text{m}$
MATHS

13. If \(\cos \theta + \sin \theta = \sqrt{2} \cos \theta\), then \(\cos \theta - \sin \theta = ?\)

   A. \(\sqrt{2} \sin \theta\)
   B. \(\frac{1}{\sqrt{2}} \cos \theta\)
   C. \(\frac{1}{\sqrt{2}} \sin \theta\)
   D. None of the above

14. The probability of getting the product a perfect square (square of a natural number), when two dice are thrown together, is:

   A. \(\frac{2}{9}\)
   B. \(\frac{4}{9}\)
   C. \(\frac{1}{3}\)
   D. 5
15. Relational database is previewed by user as:

A. a collection of tables
B. a collection of attributes
C. a collection of rows and columns
D. a collection of rows only

16. Pointer variables are used for storing:

A. Data values
B. Address of another variable
C. Both data values and address
D. None of the above
21. Zahid received the following scores on his math tests during the last semester: 82, 83, 78, 90, 94, 91, 91, 89, 82. What was his median score?

A. 83.5  
B. 86  
C. 86.6  
D. 89  

22. The probability of ‘happening’ or ‘not happening’ of an event is:

A. 1  
B. 2  
C. 1/3  
D. 5  
E. 8
Economics

1. When the rate of tax increases as the tax base increases it is called:
   A. Proportional tax
   B. Progressive tax
   C. Regressive tax
   D. Diversity of tax

2. The goods, the benefits of which are available in a non-rival fashion are termed as:
   A. Private goods
   B. Public goods
   C. Commercial goods
   D. Usual goods
   E. Government goods