# Pak-Austria Fachhochschule: Institute of Applied Sciences \& Technology Mang, Haripur, Khyber Pakhtunkhwa 

| Test 1 | Test 2 | Test 3 |
| :---: | :---: | :---: |
| 1. Test duration is 2 hours. <br> 2. Test consists of 100 MCQs <br> 3. Test consists of 3 sections. <br> - English: 20\% <br> - Biology: $40 \%$ <br> - Chemistry: $40 \%$ | 1. Test duration is 2 hours. <br> 2. Test consists of 100 MCQs . <br> 3. Test consists of 3 sections. <br> - English: 20\% <br> - Math: $40 \%$ <br> - Physics: $40 \%$ | 1. Test duration is 2 hours. <br> 2. Test consists of 100 MCQ . <br> 3. Test consists of 3 sections. <br> - English: 20\% <br> - General Math: $40 \%$ <br> - Computer: $40 \%$ |
| Test 4 | Test 5 | Test 6 |
| 1. Test duration is 2 hours. <br> 2. Test consists of 100 MCQs <br> 3. Test consists of 2 sections. <br> - Drawing: 50\% <br> - Aptitudes: 50\% | 1. Test duration is 2 hours. <br> 2. Test consists of 100 MCQs . <br> 3. Test consists of 5 sections. <br> - English: $10 \%$ <br> - General Math: 20\% <br> - Analytical: $20 \%$ <br> - Drawing: $25 \%$ <br> - Aptitudes: 25\% | 1. Test duration is 2 hours. <br> 2. Test consists of 100 MCQs . <br> 3. Test consists of 3 sections. <br> - English: 20\% <br> - Arithmetic: $40 \%$ <br> - Analytical: $40 \%$ |

## Section 1

## ENGLISH

## Guidelines

This section has 10 questions, and each question has equal marks. Click on Next to proceed further.

Q1. me, I would be happy to dedicate a few extra hours for the humanitarian cause.
A) As of
B) As for
C) As from
D) As to

Q2. They have a(n) $\qquad$ on the top prize in the competition.
A) advantage
B) edge
C) eye
D) vision

Q3. Ahmed was true to his $\qquad$ when he saved the child's life in the accident but asked for money as a favor from the child's parents.
A) colors
B) tones
C) character
D) self

Q4. Are we $\qquad$ to leave on vacation?
A) already
B) altogether
C) all together
D) all ready

Q5. He is very careful. He $\qquad$ his children to drive his car in rush hour traffic.
A) does not allow
B) did not allow
C) allowed
D) allow

Q6. The coach's insistence on fitness has become $\qquad$ He yells at players all the time.
A) emotional
B) dilatory
C) obsessive
D) rational

Q7. They $\qquad$ just reaching the office at 5 p.m. when I finished off my work.
A) have been
B) will be
C) had been
D) were

Q8. Would he like the dinner? I $\qquad$ very hard to make it delicious.
A) will be working
B) will work
C) worked
D) had worked

Q9. Our group will be $\qquad$ by your group at next intersection but the goal of both groups will remain same.
A) joined
B) replaced
C) ignored
D) influenced

Q10. The applauded enthusiastically after the performance was finished.
A) audience
B) spectators
C) bystanders
D) onlookers

# SECTION: 2 <br> GENERAL MATH 

## Guidelines

## This section has 20 questions, and each question has equal marks. Click on Next to proceed further.

11. A number exceeds another number by 6 .the sum of the numbers is 18 . find the smaller number?
A. 6
B. 8
C. 10
D. 12
12. What is the Arithmetic Mean of the following data 3,6,9,12,15.
A. 6
B. 9
C. 12
D. 15
13. Find two number whose sum is 30 and the difference is 6 $\qquad$ ?
A. 12,16
B. 12,18
C. 16,12
D. 14,16
14. How much $\mathbf{6 0 \%}$ of 50 is greater than $\mathbf{4 0 \%}$ of 30 ?
A. 14
B. 16
C. 18
D. 20
15.After decreasing $24 \%$ in the price of an article costs Rs.912. Find the actual cost of an article?
A. 1500
B. 1400
C. 1300
D. 1200
16.If 6 men can make 10 sofas in 2 days, then 8 men can make 8 sofas in $\qquad$ ?
A. 1 day
B. 1.2 days
C. 1.5 days
D. 1.8 days
15. A rectangular carpet has an area of 120 square meters and a parameter of 46 m . The length of it's diagonals is $\qquad$ ?
A. 17 m
B. 15 m
C. 13 m
D. 11 m
18.The Ratio of the length and breadth of a plot is $3: 2$. If the breadth is 40 m less than the what is the parameter of the plot?
A. 320 m
B. 400 m
C. 440 m
D. 480 m
19.The circumferences of two concentric circles are 176 m and 132 cm respectively. What is the difference between their radii?
A. 7 m
B. 8 m
C. 12 m
D. 20 m
20.If the diameter of a circle is increased by $100 \%$ its area is increased by: $\qquad$ ?
A. $100 \%$
B. $200 \%$
C. $300 \%$
D. $400 \%$
21.If the diagonal of a square is doubled. How does the area of the square change?
A. Become twofold
B. Become threefold
C. Become fourfold
D. No Change
22.If the ratio of the areas of two squares is $9: 1$ ratio of their perimeters is $\qquad$ ?
A. $1: 9$
B. $1: 3$
C. $9: 1$
D. $3: 1$
16. 15 cattle can graze a field in 20 days 20 cattle can graze 3 such field in how many days?
A. 30
B. 45
C. 60
D. 75
24.If $\mathbf{1 2}$ members family spend Rs. $\mathbf{8 5 0}$ in $\mathbf{1 0}$ days. Then a family of $\mathbf{8}$ people will spend Rs. 340 in how many days.
A. 6
B. 7
C. 8
D. 9
25.A train 240 m long passes a pole in 24 seconds. How long will it take to pass a platform 650 m long?
A. 78 sec
B. 80 sec
C. 89 sec
D. 92 sec
26.Rayan crosses a 400 m bridge in $\mathbf{3}$ minutes. What is speed?
A. 4 kmph
B. 8 kmph
C. 12 kmph
D. 15 kmph
27.The average weight of $A, B$ and $C$ is 45 kg . If the average weight of $A$ and $B$ be 40 kg and that of $B$ and $C$ be 43 kg , then the weight of $B$ is $\qquad$ ?
A. 15 kg
B. 21 kg
C. 27 kg
D. 31 kg
17. $0.004 \times 0.02=$ ?
A. 0.008
B. 0.0008
C. 0.00008
D. 0.000008
18. What is the average of the numbers: $\mathbf{0 , 0 , 4}, \mathbf{1 0}, \mathbf{4}$, and $\mathbf{6}$ ?
A. 4
B. 8
C. 12
D. 16
19. $|-3|+|3|-3+3=$ ?
A. 3
B. 6
C. 9
D. 12

## ANALYTICAL

## Guidelines

This section has $\mathbf{2 0}$ questions, and each question has equal marks. Click on Next to proceed further.

Question (31-35)

7 persons live in a street, having houses in line. Consider the following:

1. A lives in the corner's house
2. $C$ is between $E$ and $G$
3. There is $\mathbf{1}$ house between $D$ and $F$
4. $F$ is neighbor of $G$
5. There are two houses between $A$ and $G$
6. Who lives in the second corner?
(A) B
(B) C
(C) D
(D) E
7. Who lives in the middle?
(A) C
(B) D
(C) E
(D) F
8. Who lives between $B$ and $G$ ?
(A) C
(B) D
(C) E
(D) F
9. $\qquad$ is neighbor of $\mathbf{A}$ ?
(A) B
(B) C
(C) E
(D) F
10. There are $\qquad$ houses between B and E?
(A) 0
(B) 1
(C) 2
(D) 3

Questions (36-38)
In a college, if a student taking Mathematics, then he has to choose 2 courses from three: Physics, Statistics and Computer Science. The students who are taking Physics, Statistics and Computer Science, must have to take Mathematics. And students taking Biology must have to take Chemistry and Physics.
36. Which from the following is/are true:
I. A student taking Mathematics must has to take Physics
II. A student taking Mathematics can take Physics
III. A student taking Mathematics can take Chemistry
(A) I only
(B) II only
(C) I and II only
(D) I and III only
37.
I. A student taking Chemistry must also has to take Physics
II. A student taking Chemistry must also has to take Mathematics
III. A student taking Chemistry must also has to take Biology
(A) I only
(B) II only
(C) III only
(D) I and II only
38.
(A) A student taking Biology can take Physics
(B) A student taking Biology can take Chemistry
(C) A student taking Biology can take Computer Science
(D) A student taking Biology must also has to take Mathematics
(E) A student taking Biology must also has to take Chemistry

Q39. If both $K$ and $N$ are reduced, which one of the following is a pair of areas neither of which could be reduced?
A. I,L
B. $\mathrm{J}, \mathrm{L}$
C. J,J
D. J,I

Q40. What is the number of rectangles in the following figure?

A. 6
B. 7
C. 9
D. 11
Q. 41 Find the number of triangles in the given figure.

A. 8
B. 10
C. 11
D. 12

Q42. What is Latus Rectum of Parabola?
A. Line Swgment
B. Vertex
C. Focus
D. Major axis

Q43. Pankaj is taller than Vinod, who is shorter than Pramod. Usha is taller then priyanka but shorter than Vinod. Pramod is shorter than Pankaj. Who is the tallest?
A. Priyanka
B. Paramod
C. Vinod
D. Pankoj

Q44. A can work twice as fast as B. A and C together can work three times as fast as B. if $\mathbf{A}, \mathrm{B}$ and C complete a job in 30 days working together, in how many days can each of them complete the work.
A. $50,100,120$
B. $60,120,120$
C. $60,100,80$
D. $40,80,100$

Q45. 8(6+5) - $10=$ ?
A. 76
B. 78
C. 80
D. 82

Q46. What is the number of triangles that can be formed whose vertices are the vertices of an octagon but have only one side common with that of octagon?
A. 64
B. 32
C. 24
D. 16

Q47. What is the number of triangles that can be formed whose vertices are the vertices of an octagon but have only one side common with that of octagon?
A. 64
B. 32
C. 24
D. 16

Q48. Vineet is taller than Raman but shorter than Jyoti. Sumit is the shortest. deepak is taller than Sumit but shorter than Raman. Who is the tallest?
A. Jyoti
B. Raman
C. Vineet
D. Deepak

Q49. If white is called black, black is called red, red is called yellow, yellow is called green, green is called blue, blue is called violet and violet is called orange, what would be the colour of human blood?
A. green
B. black
C. red
D. yellow

Q50. Find the number of triangles in the given figure.

A. 27
B. 25
C. 23
D. 21

## SECTION 04

## DRAWING

Note: You will be asked for Live Sketching.

## SECTION 05

APTITUDES

## Guidelines

This section has $\mathbf{2 5}$ questions, and each question has equal marks.

## Click on Next to proceed further.

Q. 1 Write a short essay ( 500 words) on any one of the topics given below. ( 15 Marks)

Essay to be written on answer sheet given to you
A. How education changes the life of a person?
or
B. Why you missed your childhood?

## Part: 2

## Q. 2 Select the right figure:

(10 Marks)

- Which set of symbols should replace the question marks? ? ? ? ? ?

a.
b.
c.
d.


2. Which two symbols are missing?
$\Omega \#-\Omega \Omega \# \#-? \Omega \#-\Omega \Omega \# \#-=\# \Omega \#$
$-\Omega \Omega \# \#-$ ? $\Omega \#-\Omega \Omega \# \#-=\# \Omega \#-\Omega$
$\Omega \# \#-? \Omega \#-\Omega \Omega \# \#-\Omega \#-\Omega \Omega \# \#-$ ?
$\Omega \#-\Omega \Omega \# \#-=\#$
a. $\Omega$ \#
b. $-\Omega$
c. \# \#
d. $=$ \#
3. Which is the odd one out?
a.

b.
$\left\|_{1}\right\|_{1}^{1}\| \|_{\square}^{\Perp}$
c. ${ }^{\pi}$


4. Which is the odd one out?
a.

b.


d.

5. Which does not belong in this sequence?
a.

b.

c.

c.

6. A large volume of water is gushing through a pipe which narrows at the outlet. At which point, $A, B, C$ or $D$ will the water flow fastest?

a. A
b. B
c. C
d. D
7. Which circle below should replace the question mark?

$$
\begin{aligned}
& \left(\begin{array}{ll}
\square & 0 \\
0 & \square
\end{array}+\begin{array}{ll}
0 & 0 \\
\square & \square \\
0 & 0
\end{array}\right] \\
& \begin{array}{ll}
\bullet \bullet \\
\square & \bullet \\
\square & 0 \\
\bullet & \square
\end{array}=\begin{array}{ll}
\square & 0 \\
0 & 0
\end{array} \\
& \begin{array}{ll}
0 & \square \\
0 & \bullet
\end{array}+\quad=\begin{array}{ll}
0 & \square \\
0 & 0 \\
0 & \square
\end{array}
\end{aligned}
$$

a.

c.

d.

8.


Is to
a.

b.

c.

d.

9. Which symbol is missing in following figure?

10. The below set of six numbers has a relationship to the set of six numbers below. The two sets of six boxes on the left have the same relationship as the two sets of six boxes on the right. Which set of numbers should therefore replace the question marks?

| 12 | 3 | 7 | 8 | 10 | 18 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | 6 | 14 | 4 | 5 | 9 | $?$ | 11 | 2 | 5 | 6 | 13 |

a. | 8 | 6 | 4 | 10 | 3 | 22 |
| :--- | :--- | :--- | :--- | :--- | :--- |

b. | 2 | 22 | 1 | 10 | 3 | 26 |
| :--- | :--- | :--- | :--- | :--- | :--- |

c. | 8 | 22 | 4 | 8 | 12 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |

d. | 2 | 5 | 6 | 13 | 11 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |

