# 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 3 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 20 questions, and each question has equal marks.

 Click on Next to proceed further.Q1. $\qquad$ 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 $\qquad$ applauded enthusiastically after the performance was finished.
A) audience
B) spectators
C) bystanders
D) onlookers

Q11. She $\qquad$ for the upcoming tennis tournament.
a. Trains
b. Is training.
c. Will training
d. Is going to train.

Q12. I $\qquad$ New Zealand next year.
a. go
b. will go
c. going
d. will go to

Q13. There are some vacant rooms $\qquad$ in flats and shared houses.
a. both
b. between
c. either
d. neither

Q14. The sun rises $\qquad$ the east.
a. in
b. On
c. from
d. towards

Q15. Nitrogen gas is in abundance $\qquad$ the Earth.
a. in
b. On
c. Above
d. along

Q16. For good health, she $\qquad$ bed earlier.
a. Should go
b. Should go to
c. Should goes
d. Should goes to

Q17. If you have time, you $\qquad$ the nature museum.
a. should visit
b. should visited
c. have to visit
d. have to visited

Q18. It is our problem, not $\qquad$ .
a. their
b. their's
c. there
d. there's

Q19. The number of guests at the party $\qquad$ amazing.
a. was
b. were
c. had
d. had have

Q20. $\qquad$ 600 and 800 B.C, Olympics were held in Athens, Greece.
a. during
b. unless
c. until
d. between

## SECTION: 2 <br> ARITHMATIC

## Guidelines

This section has 40 questions, and each question has equal marks.
Click on Next to proceed further.
21. Masood purchased a plot for Rs. 8,000 . He sells the plot to Aftab at a profit of $\mathbf{2 0 \%}$. Aftab in turn sells that plot to Zahid at a loss of $\mathbf{2 0 \%}$. The plot costs Zahid?
A. Rs. 12,000
B. Rs. 10,000
C. Rs. 8670
D. Rs. 7680
22. If a car is sold for Rs. 50000 the profit is 17 percent, what would be profit percentage if sold for Rs. 47000?
A. $14.85 \%$
B. $9.98 \%$
C. $16.20 \%$
D. $14.50 \%$
23. If the average marks of three batches of 55,60 and 45 students respectively is $50,55,60$, then the average marks of all the students is:
A. 53.33
B. 54.68
C. 55
D. None of these
24.Two automobiles are 150 kilometers apart and traveling toward each other. One automobile is moving at $60 \mathrm{~km} / \mathrm{h}$ and the other is moving at $40 \mathrm{~km} / \mathrm{h} \mathbf{~ m p h}$. In how many hours will they meet?
A. 2.5
B. 2.0
C. 1.75
D. 1.5
E. 1.25
25. The average of first 10 even numbers is $\qquad$ ?
A. 18
B. 22
C. 9
D. 11
26. The average of 11 numbers is $\mathbf{1 0 . 9}$. If the average of first six is 10.5 and that of the last six is 11.4 the sixth number is $\qquad$ ?
A. 11.0
B. 11.3
C. 11.4
D. 11.5
27.The average of first ten prime numbers which are odd is $\qquad$ ?
A. 12.9
B. 13.8
C. 15.8
D. 17
28.The average of first 10 natural numbers is $\qquad$ ?
A. 5
B. 5.5
C. 6.5
D. 6
29.The average of first 10 odd numbers is $\qquad$ ?
A. 11
B. 10
C. 12
D. 17
30.The average age of three boys is 15 years and their ages are in proportion 3:5:7. What is the age in years of the youngest boy?
A. 15
B. 9
C. 18
D. 21
31. The average of 1 st 3 of 4 numbers is 16 and of the last 3 are 15 . If the sum of the first and the last number is $\mathbf{1 3}$. What is the last numbers?
A. 8
B. 6
C. 5
D. 2
32. The average of 9 observations was 9 , that of the 1 st of 5 being 10 and that of the last 5 being 8. What was the 5th observation?
A. 9
B. 8
C. 7
D. 6
33.The average of first five prime numbers greater than 20 is $\qquad$ ?
A. 31.00
B. 31.01
C. 32.00
D. 32.2
34.The average age of 8 men increases by 2 years when two women are included in place of two men of ages 20 and 24 years. Find the average age of the women?
A. 36 years
B. 24 years
C. 30 years
D. 18 years
35.The average salary of workers in an industry is Rs. 200 the average salary of technicians being Rs. 400 and that of non-technicians being Rs.125. What is the total number of workers?
A. 250
B. 275
C. 550
D. 400
36. A team of eight entered for a shooting competition. The best marks man scored 85 points. If he had scored 92 points, the average scores for. The team would have been 84 . How many points altogether did the team score?
A. 625
B. 665
C. 632
D. 656
37. The average age of $M$ boys is ' $b$ ' years and of ' $n$ ' girls ' $c$ ' years. The average age of all together is $\qquad$ ?
A. $(m b-n c) /(m+n)$ years
B. $(\mathrm{mb}+\mathrm{nc}) /(\mathrm{m}-\mathrm{n})$ years
C. $(m b+n c) /(m+n)$ years
D. $(m b-n c) /(m-n)$ years
38. The average age of a husband and a wife is 23 years when they were married five years ago but now the average age of the husband, wife and child is $\mathbf{2 0}$ years(the child was born during the interval). What is the present age of the child?
A. 1 year
B. 2 years
C. 3 years
D. 4 years
39. A batsman in his 17th innings makes a score of 85 and their by increasing his average by 3 . What is his average after the 17th innings?
A. 34
B. 35
C. 36
D. 37
40. In a hostel there were 100 students. To accommodate 20 more students the average is decreased by rupees 5. But total expenditure increased by Rs.400. Find the total expenditure of the hostel now?
A. Rs. 5000
B. Rs. 4600
C. Rs. 5400
D. Rs. 2300
41. Visitors to show were charged Rs. 15 each on the first day. Rs. 7.50 on the second day, Rs. 2.50 on the third day and total attendance on the three days were in ratio $2: 5: 13$ respectively. The average charge per person for the whole show is $\qquad$ ?
A. Rs. 3
B. Rs. 4.50
C. Rs.5.00
D. Rs. 7.50
42. A building contractor employs 20 male, 15 female and 5 child workers. To a male worker he pays Rs. 25 per day, to a female worker Rs. 20 per day and a child worker Rs. 8 per day. The average wage per day paid by the contractor is $\qquad$ ?
A. Rs. 20
B. Rs. 21
C. Rs. 22
D. Rs. 23
43. A man purchased 3 blankets @ Rs. 100 each, 5 blankets @ Rs. 150 each and two blankets at a certain rate which is now slipped off from his memory. But he remembers that the average price of the blankets was Rs.150. Find the unknown rate of two blankets?
A. Rs. 150
B. Rs. 225
C. Rs. 250
D. None
44.The average temperature for Monday, Tuesday, Wednesday and Thursday was 48 degrees and for Tuesday, Wednesday, Thursday and Friday was 46 degrees. If the temperature on Monday was 42 degrees. Find the temperature on Friday?
A. 40 degrees
B. 38 degrees
C. 36 degrees
D. 34 degrees
45. The average age 9 members of a committee are the same as it was 2 years ago, because an old number has been replaced by a younger number. Find how much younger is the new member than the old number?
A. 7 years
B. 11 years
C. 18 years
D. 27 years
46.Nine men went to a hotel. Eight of them spent Rs. 3 each over their meals and the ninth spent Rs. 2 more than the average expenditure of all the nine. Determine the total money spent by them?
A. Rs. 29.25
B. Rs. 30.25
C. Rs. 32
D. Rs. 35
47. The average marks in mathematics scored by the students of a school at the public examination were 39 . If four of these students who actually scored $5,12,15$ and 19 marks at the examination had not been sent up, the average marks for the school would have been 44 . Find the number of students sent up for examination from the school?
A. 20
B. 25
C. 30
D. 32
48.The average weight of 25 persons sitting in a boat had some value. A new person added to them whose weight was 46 kg only. Due to his arrival, the average weight of all the persons decreased by 5 kg . Find the average weight of first 25 persons?
A. 55 kg
B. 62 kg
C. 56 kg
D. None
49.The average salary per head of the entire staff of an office including the officers and clerks is Rs.90. The average salary of officers is Rs. 600 and that of the clerks is Rs. 84 . If the number of officers is 2 , find the number of officers in the office?
A. 1540
B. 960
C. 840
D. 1020
50.Three years ago the average age of a family of six members was 19 years. A boy have been born, the average age of the family is the same today. What is the age of the boy?
A. 1 year
B. 1.5 years
C. 2 years
D. 2.5 years
51. The average of five results is 46 and that of the first four is 45 . The fifth result is $\qquad$ ?
A. 1
B. 10
C. 12.5
D. 50
52. The average of 11 results is 50 , if the average of first six results is 49 and that of the last six is 52. Find the sixth result?
A. 46
B. 56
C. 34
D. 57
53.Find the average of the first 20 natural numbers?
A. 10
B. 11.5
C. 12
D. 10.5
54. The average of 13 numbers is 60 . Average of the first 7 of them is 57 and that of the last 7 is 61. Find the 8th number?
A. 46
B. 32
C. 68
D. 51
55.A batsman makes a score of 64 runs in the 16th innings and thus increased his average by 3. Find his average after the 16th inning?
A. 17
B. 29
C. 18
D. 19
56.The average marks of a class of 30 students is $\mathbf{4 0}$ and that of another class of 50 students is 60. Find the average marks of all the students?
A. 50
B. 47.5
C. 59
D. 52.5
57.The average salary of a person for the months of January, February, March and April is Rs. 8000 and that for the months February, March, April and May is Rs.8500. If his salary for the month of May is Rs.6500, find his salary for the month of January?
A. 3000
B. 2500
C. 4500
D. 5000
58.The average of 35 numbers is 25 . If each number is multiplied by 5 , find the new average?
A. 125
B. 134
C. 170
D. 98
59.The average of 10 numbers is 23 . If each number is increased by 4 , what will the new average?
A. 22
B. 27
C. 25
D. 29
60.The average of the marks of 12 students in a class is 36 . If the marks of each student are doubled, find the new average?
A. 72
B. 45
C. 37
D. 79

## SECTION: 3

## ANALYTICAL

## Guidelines

This section has 40 questions, and each question has equal marks.

## Click on Next to proceed further.

61. If $A B<, B<A$ and $C<B$ Then, which from the following is true?
(A) $\mathrm{C}<\mathrm{A}(\mathrm{B}) \mathrm{AC}=(\mathrm{C}) \mathrm{B}=\mathrm{C}(\mathrm{D}) \mathrm{AC}$

Question (62-66)

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 $A$ ?
(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 (67-69)

In a college, if a student taking Mathematics, then he has to choose $\mathbf{2}$ 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.
67. 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
68.
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
69.
(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

Q71. 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. J,L
c. J,J
d. J,I

Q72. What is the number of rectangles in the following figure?

a. 6
b. 7
c. 9
d. 11
Q. 73 Find the number of triangles in the given figure.

a. 8
b. 10
c. 11
d. 12

Q74. What is Latus Rectum of Parabola?
a. Line Swgment
b. Vertex
c. Focus
d. Major axis

Q75. 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

Q76. A can work twice as fast as B. A and C together can work three times as fast as $B$. if $A, B$ 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. $40,80,100$

Q77. What does this symbol mean ' $\&$ '?
a. Aret
b. Bar
c. Ampersand
d. Reversed Caret

Q78. $8(6+5)-10=$ ?
a. 76
b. 78
c. 80
d. 82

Q79. 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

Q80. 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

Q81. 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
a. Raman
b. Vineet
c. Deepak

Q82. 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

Q83.Find the number of triangles in the given figure.

a. 28
b. 32
c. 36
d. 40

Q84. 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

Q85. Find the number of triangles in the given figure.

a. 27
b. 25
c. 23
d. 21

Q86. Count the number of squares in the given figure.

a. 32
b. 30
c. 29
d. 28

Q87. $A, P, R, X, S$ and $Z$ are sitting in a row. $S$ and $Z$ are in the center. $A$ and $P$ are at the ends. $R$ is sitting to the left of $A$. Who is to the right of $P$ ?
a. A
b. X
c. S
d. Z

Q88. $A, B, C, D$ and $E$ are sitting on a bench. $A$ is sitting next to $B, C$ is sitting next to $D$ is not sitting with $E$ who is on the left end of the bench. $C$ is on the second position rom the right. $A$ is to the right of $B$ and $E$. $A$ and $C$ are sitting together. In which osition A is sitting?
a. Between B and D
b. Between B and C
c. Between E and D
d. Between C and E

Q89. There are 5 materials to make perfume: Lilac, Balsamic, Lemon, Woody and Mimosaic. To make a perfume that is in demand the following conditions are to be followed: Lilac and Balsamic go together. Woody and Mimosaic go together; Woody and Balsamic never go together. Lemon can be added with any material. All of the following combinations are possible to make a perfume EXCEPT:
a. Balsamic and Lilac
b. Woody and Lemon
c. Mimosaic and Lilac
d. Lemon and Lilac

Q90. If $A B<, B<A$ and $C<B$ Then, which from the following is true?
a. $\mathrm{C}<\mathrm{A}$
b. $\mathrm{A}=\mathrm{C}$
c. $\mathrm{B}=\mathrm{C}$
d. A C
(Q91-95) 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 1 house between $D$ and $F 4$. $F$ is neighbor of $G 5$. There are two houses between $A$ and $G$
Q91. Who lives in the second corner?
a. B
b. C
c. D
d. E

Q92. Who lives in the middle?
a. C
b. D
c. E
d. F

Q93. Who lives between B and G?
a. C
b. D
C. E
d. F

Q94. $\qquad$ is neighbor of $A$ ?
a. B
b. C
c. E
d. F

Q95. There are $\qquad$ houses between B and E?
a. 0
b. 1
c. 2
d. 3
(Q96-100) Michael attends Saddle Rock School on the 9:00-3:00 session, except on Thursdays when he is dismissed at noon so the teachers can conduct special help classes and parent conferences. Michael takes a piano lesson at home on Mondays from 3:30-4:30. On Tuesdays he goes to a karate class from 4:00-6:00. His art class meets from 4:00-6:00 on Wednesdays. He remains in school after dismissal on Fridays to participate in a ninety minute club program

Q96. The most convenient afternoon for Michael to do library research is
a. Tuesday
b. Wednesday
c. Thursday
d. Friday

Q97. Keeping the same 3:30-4:30 schedule, Michael can conveniently change his piano lesson to which of the following days?
a. Tuesday
b. Wednesday
c. Thursday
d. Friday

Q98. Michael was invited to join an advanced art class instead of his regular art class. He could accept this advancement without interfering with his other activities, if the class met on which of the following days?
a. Mondays and Wednesdays
b. Tuesdays and Wednesdays
c. Wednesdays and Thursdays
d. Thursdays and Fridays

Q99. . Michael is chosen to play for the varsity basketball team. To attend daily 5:00 practice session, he will have to suspend which of the following activities?
a. piano instruction and karate
b. karate and the club program
c. the art class and the club program
d. piano instruction and the art class

Q100. Michael attends Saddle Rock School on the $\qquad$ session.
a. 9:00-1:00
b. 9:00-2:00
c. 9:00-3:00
d. 9:00-4:00

