RIPHAH
DEPARTMENT OF
BASIC SCIENCES

University Admission Test for M.Phil

Name: .
Application ID #: .
Discipline: .
Session: .
DATE:

Student Signature	Invigilator Signature	Examiner Signature	Final Score

Q	Ans	Q	Ans
1		23	
2		24	
3		25	
4		26	
5		27	
6		28	
7		29	
8		30	
9		31	
10		32	
11		33	
12		34	
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14		36	
15		37	
16		38	
17		39	
18		40	
19			
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21			
22			

University Admission Test for M.Phil

Instructions

1. The exam would be of 1 hour without any extra time.
2. DONOT unstapled your sheet under any circumstance. If found the paper will be canceled immediately.
3. Do not Mark anything on Question Book. Use sheets provided by Examinations Invigilators for computation.
4. Use of CALCULATOR AND MOBILE PHONES is not permissible in exam. If a student is found using, it would result is disciplinary action and immediate expulsion from exam.
5. Mark your answers on Answer Book provided by Putting the letter of your answer in CAPITAL LETTER in front of the question number.
6. Overwriting and duplication of answer would be considered as an incorrect answers.
7. There are no negative marks
8. Read the questions carefully before answering.

GOOD LUCK

(1-6) Five Cartoon videos A, B, C, D, E are to be played to kids in a sequence meeting the condition given below:

- A must be played earlier than C
- B must be played earlier than D
- E must be fifth video played.

1. Choose the correct sequence of videos played to kid
   A. (A,C,B,D,E)
   B. (A,E,D,C,B)
   C. (B,D,C,A,E)
   D. (B,D,C,A,E)

2. If C is played earlier than E, then which one of following will be true
   A. A is first video played
   B. C is the third video played
   C. D is the fifth video played
   D. B is the second video played

3. Which videos CANNOT be played earlier than E
   A. A and D
   B. A and B
   C. C and D
   D. B and C

4. If D and E are played far apart from each other (as much as possible), which one stands true?
    A. A is played earlier than B
    B. E is played earlier than B
    C. B is played earlier than C
    D. C is played earlier than E

5. If B,D and E are played one after another in a sequence, when can A be played in the remaining two positions ?
    A. First and Second
    B. First and Fourth
    C. Third and Fifth
    D. Second and Third

6. In How many ways can the videos can be played under given constraints ?
    A. one
    B. three
    C. two
    D. six

Complete the following summary with suitable answers.

When you can measure (7)_____ you are speaking about, and express it (8)_____ numbers, you know something (9)_____ it; when you cannot measure it, when you cannot (10)_____ it in numbers, your knowledge is of a meager and unsatisfactory kind; it may be the beginning of knowledge, but you have (11)_____, in your thoughts, advanced to the stage of science.

7.
    A. when
    B. what
    C. where
    D. whom

8.
    A. in
    B. to
    C. from
    D. with

9.
    A. for
    B. within
    C. about
    D. nearly

10.
A. tell
B. ask
C. say
D. express

11.
A. immature
B. scarcely
C. arrogantly
D. lack

Choose from the following options the answer that is most appropriate.

12. Anas, Umar and I _____ going.
A. am
B. was
C. are
D. have been

13. If I _____ time, I would have purchased it yesterday.
A. had had
B. would had
C. would have
D. had have

Complete the following sentences with the correct option given below.

14. The board was amazed to see such an outstanding research by a mere _____ .
A. doctorate student
B. doctor
C. scientist
D. amateur

15. In the Middle Ages, returning prisoners in exchange for money became common instead of putting to death. Though the act was humane, the primary reasons behind it were _____ rather than _____ .
A. humanitarian, economic
B. economic, humanitarian
C. customs, humanitarian
D. customs, economic
E. customs, promise

16. The Arithmetic mean of the numbers 10,15 and 5 is
A. 12 B. 16 C. 10 D. 13

17. The largest number which divides 24 other than 24 itself is

A. 8 B. 6
C. 12 D. 15

18. The area of the rectangle having length x and with x^2

A. x^2 B. x^4
C. x^3 D. x

19. Which of the following order pair lies on the circle $x^2 + y^2 = 1$

A.(1,1) B.(0,1)
C. (1,2) D. $(\frac{1}{2}, \frac{1}{2})$

20. Which of the following order pair lies on the line $x+y = 2$

A.(1,2) B.(1,1)
C. (3,2) D. $(\frac{1}{2}, \frac{1}{2})$

21. If $x > 0$ and $y < 0$ then

A.$2xy > 0$ B. $-2xy > 0$

22. The circumference of the circle whose radius is π is

A.$2\pi^2$ B. 2π
C. 4π D. 6π

23. The area of the circle whose radius is π is

A.π^2 B. $2\pi^2$
C. π^3 D. 6π

24. Annual fees of school children is 100000 Rs. If the fees is paid quarterly what fee should be paid in each quarter

A.29000 B. 10000

C. 25000 D. 9000

25. Annual fees of school children is 100000 Rs. If the student is entitled scholarship of 50% per annum and the fees is paid bimonthly what fee is paid after each 2 months?

A.8300 B. 4500

C. 4100 D. 8333

26. Compute $\lim_{x\to 2} \frac{x^2-4}{x-2}$

A. 4 B. 5

C. 7 D. 6

27. what is the area of a circle whose diameter is 10

A. 100π B. 50π

C. 25π D. 40π

28 The following series $\sum_{n=1}^{\infty} \frac{\sin n}{n^{5/2}}$ is

A. Convergent B. Divergent

29. What is the time required by a car travelling at 100 km/h to cover a distance of 10km ?

A. 10 min B. 100 min

C. 60 min D. 6 min

30. What is the L.C.M of numbers 5, 15 and 25

A. 75 B. 5

C. 60 D. 25

31. The area of rectangle whose sides length is "x" and width is 25 is

A. $50x$ B. $255x$

C. $25x$ D. $100x$

32. The geometric mean of 1 and 4 is

A. 4 B. 2

C. 5 D. 16

33. which of the among measurement is largest

A. 1001cm B. 1 meters

C. 1.1 meters D. 1002cm

34. find x such that $x^2 - 4x + 4 = 0$

A. 21 B. 5

C. 4 D. 2

35. The inequality $\max\{4, x\} > 9$ is true for which values of x

A. $1 < x < 4$ B. $1 < x < 8$

C. $x > 9$ D. $1 < x < 3$

36. The pair of points (x, y) satisfying the set of equations $x - y = 0$ and $x + y = 0$ are

A. (1,2) B. (2,1)

C. (0,0) D. (3,0)

37. The pair of points (x, y) satisfying the set of equations $x - y = 1$ and $x + y = 3$ are

A. (4,5) B. (2,3)

C. (2,1) D. (3,3)

38. The radius of the circle having area of π is

A. 1 B. 3

C. 9 D. 2

39. A Product was sold at 50 Rs per unit. Find the new price is price is elevated by 50%

A. 70 B. 60

C. 75 D. 80

40. A Product was sold at 50 Rs per unit. Find the new price is price is depricated by 10%

A. 45 A. 40

C. 35 D. 85