1. The set of intelligent students in a class is

(a) A null set

(b) A singleton set

(c) A finite set

(d) Not a well defined collection

1. The set  and  equals

(a)  (b) {14, 3, 4}

(c) {3} (d) {4}

1. The number of proper subsets of the set {1, 2, 3} is

(a) 8 (b) 7

(c) 6 (d) 5

1. If *A*  and *B* are any two sets, then is equal to

(a) *A* (b) *B*

(c)  (d) 

1. If *A* and *B*  are two given sets, then  is equal to

(a) A (b) B

(c)  (d) 

1. If the sets *A* and *B* are defined as



, then

(a)  (b) 

(c)  (d) None of these

1. If  and  then  is equal to

(a) *X* (b) *Y*

(c) *N* (d) None of these

1. Let  and  then 

(a) 400 (b) 600

(c) 300 (d) 200

1. In a city 20 percent of the population travels by car, 50 percent travels by bus and 10 percent travels by both car and bus. Then persons travelling by car or bus is

(a) 80 percent (b) 40 percent

(c) 60 percent (d) 70 percent

1. If *A*, *B* and *C* are any three sets, then *A* – (*B* ∪ *C*) is equal to

(a) (*A* – *B*) ∪ (*A* – *C*) (b) (*A* – *B*) ∩ (*A* – *C*)

(c) (*A* – *B*) ∪ *C* (d) (*A* – *B*) ∩ *C*

1. If *A*, *B* and *C* are non-empty sets, then (*A* – *B*) ∪ (*B* – *A*) equals

(a) (*A* ∪ *B*) – *B* (b) *A* – (*A* ∩ *B*)

(c) (*A* ∪ *B*) – (*A* ∩ *B*) (d) (*A* ∩ *B*) ∪ (*A* ∪ *B*)

1. If  then

 is equal to

(a) *A* ∩ (*B* ∪ *C*) (b) *A* ∪ (*B* ∩ *C*)

(c) *A* × (*B* ∪ *C*) (d) *A* × (*B* ∩ *C*)

1. In rule method the null set is represented by

(a) {} (b) 

(c)  (d) 

1. If , then

(a)  (b) 

(c)  (d) 

1. Which set is the subset of all given sets

(a) {1, 2, 3, 4,......} (b) {1}

(c) {0} (d) {}

1. Let . Then the total number of subsets of *S* is

(a) 64 (b) 32

(c) 40 (d) 20

1. The smallest set *A* such that *A* ∪ {1, 2} = {1, 2, 3, 5, 9} is

(a) {2, 3, 5} (b) {3, 5, 9}

(c) {1, 2, 5, 9} (d) None of these

1. If *A* and *B* are two sets, then  if

(a)  (b) 

(c)  (d)None of these

1. Let *A* and *B* be two sets. Then

(a) *A* ∪ *B*  *A* ∩ *B* (b) *A* ∩ *B*  *A* ∪ *B*

(c) *A* ∩ *B* = *A* ∪ *B* (d) None of these

1. If *A* = {2, 3, 4, 8, 10}, *B* = {3, 4, 5, 10, 12},

*C* = {4, 5, 6, 12, 14} then (*A* ∩ *B*) ∪ (*A* ∩ *C*) is equal to

(a) {3, 4, 10} (b) {2, 8, 10}

(c) {4, 5, 6} (d) {3, 5, 14}

1. If *A* and *B* are any two sets, then *A* ∩ (*A* ∪ *B*) is equal to

(a) *A* (b) *B*

(c)  (d) 

1. Let *A* = {*a*, *b*, *c*}, *B*  = {*b, c, d*}, *C* = {*a, b, d, e*}, then *A* ∩ (*B* ∪ *C*) is

(a) {*a, b, c*} (b) {*b, c, d*}

(c) {*a, b, d, e*} (d) {*e*}

1. If *A* and *B* are sets, then *A* ∩ (*B* – *A*) is

(a)  (b) *A*

(c) *B* (d) None of these

1. If *A* and *B* are two sets, then  is equal to

(a) *A* (b) *B*

(c)  (d) None of these

1. If  then 

(a)  (b) *N*

(c)  (d) 

1. If *A* and *B* are two sets then (*A* – *B*) ∪ (*B* – *A*) ∪ (*A* ∩ *B*) is equal to

(a) *A* ∪ *B* (b) *A* ∩ *B*

(c) *A* (d)

1. If ,  and . Then the number of elements in  is equal to

(a) 3 (b)9

(c) 6 (d)None of these

1. Let *A* and *B* be two sets such that . Then  is equal to

(a) 0.3 (b) 0.5

(c) 0.05 (d) None of these

1. In a battle 70% of the combatants lost one eye, 80% an ear, 75% an arm, 85% a leg, *x*% lost all the four limbs. The minimum value of *x* is

(a) 10 (b) 12

(c) 15 (d) None of these

1. 20 teachers of a school either teach mathematics or physics. 12 of them teach mathematics while 4 teach both the subjects. Then the number of teachers teaching physics only is

(a) 12 (b) 8

(c) 16 (d) None of these