SECTION – A

1. In a class composed of x girls and y boys what part of the class is composed of girls
A. y/(x + y) B. x/xy C. x/(x + y) D. y/xy

2.What is the maximum number of half-pint bottles of cream that can be filled with a 4-gallon can of cream(2 pt.=1 qt. and 4 qt.=1 gal)
A. 16 B. 24 C. 30 D. 64

3.If the operation,^ is defined by the equation x ^ y = 2x + y,what is the value of a in 2 ^ a = a ^ 3
A.0 B.1 C.-1 D.4

4.A coffee shop blends 2 kinds of coffee, putting in 2 parts of a 33p. a gm. grade to 1 part of a 24p. a gm.If the mixture is changed to 1 part of the 33p. a gm. to 2 parts of the less expensive grade, how much will the shop save in blending 100 gms.
A.Rs.90 B.Rs.1.00 C.Rs.3.00 D.Rs.8.00

5.There are 200 questions on a 3 hr examination. Among these questions are 50 mathematics problems. It is suggested that twice as much time be spent on each maths problem as for each other question. How many minutes should be spent on mathematics problems
A.36 B.72 C.60 D.100

6.In a group of 15,7 have studied Latin, 8 have studied Greek, and 3 have not studied either. How many of these studied both Latin and Greek
A.0 B.3 C.4 D.5

7. If a and b are positive integers and (a-b)/3.5 = 4/7, then
(A) b < a (B) b > a (C) b = a (D) b >= a

8.In june a baseball team that played 60 games had won 30% of its game played. After a phenomenal winning streak this team raised its average to 50% .How many games must the team have won in a row to attain this average?
A. 12 B. 20 C. 24 D. 30

9.M men agree to purchase a gift for Rs. D. If three men drop out how much more will each have to contribute towards the purchase of the gift/
A. D/(M-3) B. MD/3 C. M/(D-3) D. 3D/(M2-3M)

10.A company contracts to paint 3 houses. Mr.Brown can paint a house in 6 days while Mr.Black would take 8 days and Mr.Blue 12 days. After 8 days Mr.Brown goes on vacation and Mr. Black begins to work for a period of 6 days. How many days will it take Mr.Blue to complete the contract?
A. 7 B. 8 C. 11 D. 12

11.2 hours after a freight train leaves Delhi a passenger train leaves the same station travelling in the same direction at an average speed of 16 km/hr. After travelling 4 hrs the passenger train overtakes the freight train. The average speed of the freight train was?
A. 30 B. 40 C.58 D. 60

12.If 9x-3y=12 and 3x-5y=7 then 6x-2y = ?
A.-5 B. 4 C. 2 D. 8

13.If the value of x lies between 0 & 1 which of the following is the largest?
(a) x b) x2 (c) ?x (d) 1/x

14.Which of the following fractions is less than 1/3
(a) 22/62 (b) 15/46 (c) 2/3 (d) 1

15.Three types of tea the a,b,c costs Rs. 95/kg,100/kg and70/kg respectively.How many kgs of each should be blended to produce 100 kg of mixture worth Rs.90/kg, given that the quntities of band c are equal
a)70,15,15 b)50,25,25 c)60,20,20 d)40,30,30

16.In a class, except 18 all are above 50 years.15 are below 50 years of age. How many people are there
(a) 30 (b) 33 (c) 36 (d) none of these.

17.If a boat is moving in upstream with velocity of 14 km/hr and goes downstream with a velocity of 40 km/hr, then what is the speed of the stream ?
(a) 13 km/hr (b) 26 km/hr (c) 34 km/hr (d) none of these

18. Find the value of (0.75 * 0.75 * 0.75 - 0.001) / (0.75 * 0.75 - 0.075 + 0.01)
(a) 0.845 (b) 1.908 (c) 2.312 (d) 0.001

19. A can have a piece of work done in 8 days, B can work three times faster than the A, C can work five times faster than A. How many days will they take to do the work together ?
(a) 3 days (b) 8/9 days (c) 4 days (d) can't say

20. A car travels a certain distance taking 7 hrs in forward journey, during the return journey increased speed 12km/hr takes the times 5 hrs.What is the distancetravelled
(a) 210 kms (b) 30 kms (c) 20 kms (c) none of these

21. Instead of multiplying a number by 7, the number is divided by 7. What is the percentage of error obtained ?
Find (7x + 4y) / (x-2y) if x/2y = 3/2 ?
(a) 6 (b) 8 (c) 7 (d) data insufficient

22. If on an item a company gives 25% discount, they earn 25% profit. If they now give 10% discount then what is the profit percentage.
(a) 40% (b) 55% (c) 35% (d) 30%

23. A certain number of men can finish a piece of work in 10 days. If however there were 10 men less it will take 10 days more for the work to be finished. How many men were there originally?
(a) 110 men (b) 130 men (c) 100 men (d) none of these

24. In simple interest what sum amounts of Rs.1120/- in 4 years and Rs.1200/- in 5 years ?
(a) Rs. 500 (b) Rs. 600 (c) Rs. 800 (d) Rs. 900

25. If a sum of money compound annually amounts of thrice itself in 3 years. In how many years will it become 9 times itself.
(a) 6 (b) 8 (c) 10 (d) 12

26. Two trains move in the same direction at 50 kmph and 32 kmph respectively. A man in the slower train observes the 15 seconds elapse before the faster train completely passes by him. What is the length of faster train ?
(a) 100m (b) 75m (c) 120m (d) 50m

27. How many mashes are there in 1 squrare meter of wire gauge if each mesh is 8mm long and 5mm wide ?
(a) 2500 (b) 25000 (c) 250 (d) 250000

28. x% of y is y% of ?
(a) x/y (b) 2y (c) x (d) can't be determined

29. The price of sugar increases by 20%, by what % should a housewife reduce the consumption of sugar so that expenditure on sugar can be same as before ?
(a) 15% (b) 16.66% (c) 12% (d) 9%

30. A man spends half of his salary on household expenses, 1/4th for rent, 1/5th for travel expenses, the man deposits the rest in a bank. If his monthly deposits in the bank amount 50, what is his monthly salary ?
(a) Rs.500 (b) Rs.1500 (c) Rs.1000 (d) Rs. 900

SECTION B

31. What SQL command will allow you to change the table STUDENT to add the constraint named
Grade Check that states that the values of the
Grade column must be greater than 0?

(a) ALTER TABLE STUDENT ALTER CONSTRAINT Grade Check (Grade > 0); **(b**) ALTER TABLE STUDENT ADD CONSTRAINT Grade Check (Grade > 'O); **(c)** ALTER TABLE STUDENT ADD CONSTRAINT Grade Check CHECK (Grade> O); **(d)** ALTER TABLE STUDENT ADD CONSTRAINT Grade Check (Grade < 0);

32. Input, output and processing devices grouped together represent a (n) ………
(1) Mobile device (2) Information processing cycle (3) Circuit board (4) Computer system (5) None of the above

33. ………… is the process of carrying out commands.
(1) Fetching (2) Storing (3) Executing (5) None of these

34. The role of a… generally determine a buyer's needs and match it to the correct hardware and software.
(1) Computer scientist (2) Computer sales representative (2) Keyboard (4) Printer (2) Storing (4) Decoding

35. A(n) …………… contains commands that can be selected.
(1) Pointer (2) Menu (3) Icon (4) Button (5) None of these

36. An error is also known as
(1) Bug (2) Debug (3) Cursor (4) Icon (5) None of these

SECTION C

37. Which of the following will not combine strings $s1 and $s2 into a single string?
A) $s1 + $s2 B) "{$s1}{$s2}" C) $s1.$s2 D) implode(' ', array($s1,$s2)) E) All of the above combine the strings

38. Given a variable $email containing the string user@example.com, which of the following statements would extract the string example.com?
A) substr($email, strpos($email, "@"));
B) strstr($email, "@");
C) strchr($email, "@");
D) substr($email, strpos($email, "@")+1);
E) strrpos($email, "@");

39. Given a comma-separated list of values in a string, which function from the given list can create an array of each individual value with a single call?
A) strstr() B) Cannot be done with a single function C) extract() D) explode() E) strtok()

40. What is the best all-purpose way of comparing two strings?
A) Using the strpos function B) Using the == operator C) Using strcasecmp() D) Using strcmp()

41. Which of the following PCRE regular expressions best matches the string php|architect?
A) .* B) …|……… C) \d{3}\|\d{8} D) [az]{3}\|[az]{9} E) [a-z][a-z][a-z]\|\w{9}

42.Which of the following functions can be used to determine the integrity of a string?
A) md5() B) sha1() C) str_rot13() D) crypt() E) crc32()

43. What happens if you add a string to an integer using the + operator?
A) The interpreter outputs a type mismatch error B) The string is converted to a number and added to the integer
C) The string is discarded and the integer is preserved D) The integer and string are concatenated together in a new string E) The integer is discarded and the string is preserved

44. The _____ function can be used to compare two strings using a case-insensitive binary algorithm
A) strcmp() B) stricmp() C) strcasecmp() D) stristr() E) None of the above

45. Which of the following functions can be used to convert the binary data stored in a string into its hexadecimal representation?
A) encode_hex() B) pack() C) hex2bin() D) bin2hex() E) printf()

46.^[A-Za-z].* matches
A) play it again B) I C) 123 D) ?

47. ^[0-9]{5}(\-[0-9]{4})?$ matches
A) 90001 and 90002-4323
B) 9001 and 12-4321

48. Array values are keyed by _____ values (called indexed arrays) or using _____ values (called associative arrays). Of course, these key methods can be combined as well.
A) Float, string B) Positive number, negative number C) Even number, string D) String, Boolean E) Integer, string

49.What will the following script output?
<?php
$array = array (1, 2, 3, 5, 8, 13, 21, 34, 55);

```php
$sum = 0;
for ($i = 0; $i < 5; $i++) {
$sum += $array[$array[$i]];
}
echo $sum;
?>
```
A) 78 B) 19 C) NULL D) 5 E) 0

50.What elements will the following script output?
```php
<?php
$array = array (true => 'a', 1 => 'b');
var_dump ($array);
?>
```
A) 1 => 'b' B) True => 'a', 1 => 'b' C) 0 => 'a', 1 => 'b' D) None E) It will output NULL