

ANALYTICAL SKILLS

(Common with B.A, B.Sc, B.Com, B.B.A., B.C.A., B.A. (OL) & BHM & CT)

Time : 2 Hours

Maximum : 50 Marks

Answer all questions. Each question carries 1 mark

(50 × 1 = 50)

1. $18 - [5 - \{6 + 2(7 - \sqrt{8-5})\}] = ?$
 - a) 27
 - b) 26
 - c) 25
 - d) 24

2. What is the value of $\frac{P+Q}{P-Q}$ if $\frac{P}{Q} = 7$?
 - a) $\frac{3}{7}$
 - b) $\frac{7}{3}$
 - c) $\frac{4}{3}$
 - d) $\frac{3}{4}$

3. $b - [b - (a+b) - \{b - (b - (a-b))\} + 2a] = ?$
 - a) 2a
 - b) 0
 - c) b
 - d) -b

4. Which of the following are in descending order of their values ?
 - a) $\frac{5}{9}, \frac{7}{11}, \frac{8}{15}, \frac{11}{17}$
 - b) $\frac{5}{9}, \frac{8}{15}, \frac{11}{17}, \frac{7}{11}$
 - c) $\frac{11}{17}, \frac{7}{11}, \frac{8}{15}, \frac{5}{9}$
 - d) $\frac{11}{17}, \frac{7}{11}, \frac{5}{9}, \frac{8}{15}$

5. $\frac{(893+786)^2 - (893-786)^2}{893 \times 786} = ?$
 - a) 2
 - b) 4
 - c) 1
 - d) 0

6. The sum of first 45 natural numbers is
 - a) 1280
 - b) 2070
 - c) 1035
 - d) 2140

7. LCM of two numbers is 120 and their HCF is 10. What is the product of those two numbers ?
 - a) 1200
 - b) 12
 - c) 130
 - d) 110

8. The H.C.F. of $\frac{1}{3}, \frac{5}{6}, \frac{2}{9}, \frac{4}{27}$ is
 - a) $\frac{1}{54}$
 - b) $\frac{1}{27}$
 - c) $\frac{10}{3}$
 - d) $\frac{3}{10}$

9. L.C.M. of 6, 12, 18, 36 is ?
 - a) 6
 - b) 12
 - c) 18
 - d) 36

10. H.C.F. of 6, 12, 18, 36 is ?
 - a) 6
 - b) 12
 - c) 18
 - d) 36

11. Find the value of $\left(1 - \frac{1}{3}\right)\left(1 - \frac{1}{4}\right)\left(1 - \frac{1}{5}\right) \dots \left(1 - \frac{1}{100}\right) ?$
 - a) $\frac{1}{60}$
 - b) $\frac{1}{50}$
 - c) $\frac{1}{40}$
 - d) $\frac{1}{70}$

12. 4, 7, 12, 19, 28 ? (adding odd numbers)
 - a) 37
 - b) 38
 - c) 39
 - d) 40

13. 1, 4, 9, 16, 25, ?
 a) 35 b) 49 c) 64 d) 36
 14. What is the angle between two hands of a clock at 7 : 30 ?
 a) 30° b) 40° c) 45° d) 50°
15. How many times in a day are the hands of a clock at right angle ?
 a) 48 b) 44 c) 24 d) 22
16. P3C, R5F, T8L, V12L, ?
 a) X170 b) X17M c) X160 d) X17K
17. NEAT : TAEN :: DRINK : ?
 a) KNIDR b) KNRID c) KNIRD d) KNDIR
18. If a certain code CAT = 24 and BAT = 23, then how will you code BALL ?
 a) 24 b) 25 c) 26 d) 27
19. A : B = 1 : 2, B : C = 2 : 3 then A : B : C is ?
 a) 1 : 3 : 2 b) 1 : 2 : 3 c) 2 : 1 : 3 d) 3 : 2 : 1
20. A and B are brothers, C and D are sisters. A's son is D's brother. How is B related to C ?
 a) Uncle b) Father c) Grand Father d) Son
21. If 26-01-2002 is Monday, then which day of the week on 26-01-2004 ?
 a) Tuesday b) Friday c) Wednesday d) Sunday
22. What was the day of the week on 15-8-1947 ?
 a) Friday b) Monday c) Sunday d) Tuesday
23. The average of first five multiples of 3 is ?
 a) 3 b) 6 c) 15 d) 9
24. Find the average of all prime numbers between 10 to 30.
 a) 17.66 b) 18.66 c) 19.66 d) 20.66
25. A cyclist covers a distance of 750 min 2 min 30 sec. What is the speed in km/hr of the cyclist ?
 a) 20 km/hr b) 25 km/hr c) 10 km/hr d) 18 km/hr
26. A car moves at the speed of 30 km/hr. What is the speed of the car in meter per second ?
 a) 15 m/sec b) 17 m/sec c) 18 m/sec d) $22\frac{2}{9}$ m/sec
27. 28% of 450 + 45% of 280 is ?
 a) 250 b) 252 c) 260 d) 262
28. A bag contains 50 p, 25 p, 10 p coins in the ratio 5 : 9 : 4, amounting to Rs. 206. Find the number of 25p coins.
 a) 360 b) 200 c) 160 d) 216
29. Rohit was 4 times as old as his son 8 years ago. After 8 years, Rohit will be twice as old as his son. What are their present ages ?
 a) 15, 30 b) 18, 48 c) 16, 40 d) 19, 50

- 30.** One year ago, the ratio of Gaurav's and Sachin's age was 6 : 7 respectively. Four years hence, this ratio would become 7 : 8. How old is Sachin ?
- a) 16 years b) 26 years c) 30 years d) 36 years
- 31.** A man sold an article for 96 rupees, when he gains 20%. Find his cost price ?
- a) 70 b) 80 c) 90 d) 100
- 32.** A, B and C started a business investing Rs. 20,000, Rs. 35,000 and Rs. 40,000 respectively out of total profit of Rs. 3,800. What was 'C' share in the profit ?
- a) 1600 b) 1400 c) 800 d) 1500
- 33.** At what time between 5 and 6 O' clock will the hands of a clock be together ?
- a) $20\frac{3}{11}$ min. past 5 b) $22\frac{3}{11}$ min. past 5 c) $25\frac{3}{11}$ min. past 5 d) $27\frac{3}{11}$ min. past 5
- 34.** $16\frac{2}{3}\%$ of 600 - $33\frac{1}{3}\%$ of 180 = ?
- a) 20 b) 30 c) 40 d) 50
- 35.** An inspector rejects 0.08% of the machines as defective. How many machines will be examined to reject 2 ?
- a) 2000 b) 2500 c) 3000 d) 3500
- 36.** A vendor bought banana at 6 for Rs. 10 and sold them at 4 for Rs. 6. Find his gain or loss percent.
- a) 10% loss b) 10% profit c) 15% loss d) 15% profit
- 37.** A person incurs 5% loss by selling a watch for Rs. 1140. At what price should the watch be sold to earn 5% profit ?
- a) 1200 b) 1220 c) 1240 d) 1260
- 38.** If the cost price is 96% of the selling price, then what is the profit percent ?
- a) $\frac{25}{2}\%$ b) $\frac{25}{3}\%$ c) $\frac{25}{6}\%$ d) $\frac{25}{8}\%$
- 39.** Find the simple interest on Rs. 68,000 at $16\frac{2}{3}\%$ per annum for 9 months.
- a) Rs. 8000 b) Rs. 8500 c) Rs. 9000 d) Rs. 9500
- 40.** The difference between the compound interest and simple interest on a certain sum at 10% per annum for 2 years is Rs. 631. Find the sum.
- a) Rs. 63,100 b) Rs. 62,100 c) 60,100 d) Rs. 60,000

I (A). The circle graph drawn here shows the spendings of a country on various sports during a particular year. Study the graph carefully and answer the questions given below it.



41. How much percent of the total spending is spent on tennis ?

- a) $22\frac{1}{2}$ b) 25° c) $12\frac{1}{2}$ d) 45°

42. How much percent more is spent on hockey than that on golf ?

- a) 27% b) 35% c) 37.5% d) 75%

43. How much percent less is spent on football than that of cricket ?

- a) 27% b) $33\frac{1}{3}\%$ c) $37\frac{1}{2}\%$ d) $22\frac{1}{9}\%$

44. If the total amount spent on sports during the year Rs. 2 crores. The amount spent on cricket and hockey together was ?

- a) Rs. 8,00,000 b) Rs. 80,00,000 c) Rs. 1,20,00,000 d) Rs. 1,60,00,000

45. If the total amount spent on sports during the year be Rs. 1,80,00,000 the amount spent on basket ball exceeds that on tennis by.

- a) Rs. 2,50,000 b) Rs. 3,60,000 c) Rs. 3,75,000 d) Rs. 4,10,000

II.(A) The following table gives the percentage of marks obtained by seven students in six different subjects in an examination. The numbers in the brackets give the maximum marks in each subjects.

Student	Subject (Max. Marks)					
	Maths (150)	Chemistry (130)	Physics (130)	Grography (100)	History (60)	Computer Science (40)
Ayush	90	50	90	60	70	80
Aman	100	80	80	40	80	70
Sajal	90	60	70	70	90	70
Rohit	80	65	80	80	60	60
Muskan	80	65	85	95	50	90
Tanvi	70	75	65	85	40	60
Tarun	65	35	50	77	80	80

46. What was the aggregate of marks obtained by Sajal in all the six subjects ?

- a) 400 b) 425 c) 449 d) 459

47. What is the over all percentage of Tarun ?

- a) 30% b) 40% c) 50% d) 60%

48. What are the average marks obtained by all the seven students in physics ?

- a) 80.14 b) 89.14 c) 90.14 d) 100.14

49. The number of student who obtained 60% and above marks in all the subjects.

- a) 2 b) 3 c) 4 d) 5

50. In which subject is the over all percentage the best ?

- a) Maths b) Chemistry c) History d) Computer science