

**Foundation Course - 8**  
**ANALYTICAL SKILLS**

**Syllabus, For all Degree Programmes.**

**w.e.f. 2015-16 (Revised in April, 2016)**

**Semester – IV**

**(Total 30 Hrs)**

**UNIT - 1**

**Data Analysis:-** The data given in a Table, Graph, Bar Diagram, Pie Chart, Venn diagram or a passage is to be analyzed and the questions pertaining to the data are to be answered.

**UNIT - 2**

**Sequence and Series:-** Analogies of numbers and alphabets completion of blank spaces following the pattern in A:b::C: d relationship odd thing out; Missing number in a sequence or a series.

**UNIT - 3**

**Arithmetic ability:-** Algebraic operations BODMAS, Fractions, Divisibility rules, LCM&GCD (HCF).

**Date, Time and Arrangement Problems:** Calendar Problems, Clock Problems, Blood Relationship.

**UNIT - 4**


**Quantitative aptitude:-** Averages, Ratio and proportion, Problems on ages, Time-distance – speed.

**UNIT - 5**

**Business computations:-** Percentages, Profit & loss, Partnership, simple compound interest.

**Reference Books:**

1. Quantitative Aptitude for Competitive Examination by R S Agrawal, S.Chand publications.
2. Quantitative Aptitude and Reasoning by R V Praveen, PHI publishers.
3. Quantitative Aptitude : Numerical Ability (Fully Solved) Objective Questions, Kiran Prakashan, Pratogitaprakasan, Kic X, Kiran Prakashan publishers
4. Quantitative Aptitude for Competitive Examination by Abhijit Guha, Tata Mc Graw hill publications.
5. Old question Paper of the exams conducted by (Wipro, TCS, Infosys, Etc) at their recruitment process, source-Internet.

  
(C. SURYANARAYANA)  
BOS - ENGLISH  
SVU, TIRUPATI

## SEMESTER-END EXAMINATION

### *Pattern of the Question Paper for Analytical Skills*

Time: 2 Hours

Maximum

Marks: 50

#### Part - A

1. Comprehension - 5 Marks(Five Multiple Choice Questions)

#### Part - B

2. Objective Type Questions - 20 Marks (Twenty Multiple Choice Questions)

#### Part - C

3. One Word Answers - 10 Marks (Ten Questions)

#### Part - D

4. One Sentence Answers - 10 Marks (Five Questions)

#### Part - E

5. Matching - 5 Marks (5=6)

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## SEMESTER-END EXAMINATION

### *Pattern of the Question Paper for Analytical Skills*

#### *Model paper*

Time: 2 Hours

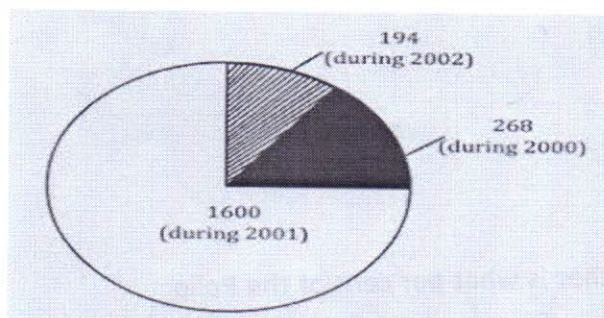
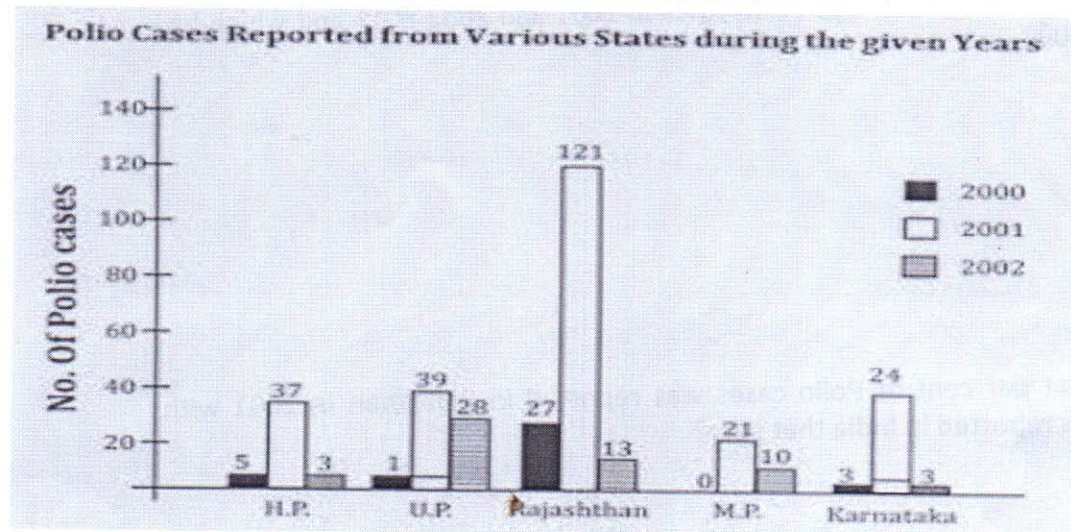
Maximum Marks: 50

#### Part - A

##### 1. Comprehension

- 5 Marks(Five Multiple Choice Questions)

Study the following graph and pie chart carefully to answer the questions





1. What is the average difference between Polio cases in 2001 and that in 2002?

- (A) 35
- (B) 37
- (C) 38
- (D) 39
- (E) None of these

2. In which state the difference between Polio cases in 2001 and 2002 is 11 and which had zero incidence in 2000?

- (A) Rajasthan
- (B) U.P.
- (C) M.P.
- (D) Karnataka
- (E) H.P.

3. Approximately what per cent of Polio cases was reported in Rajasthan in 2001 with respect to total cases reported in India that year?

- (A) 6%
- (B) 6.5%
- (C) 7%
- (D) 7.5%
- (E) None of these

4. Polio cases in H.P. in 2002 and Rajasthan in 2000 together is what per cent of the Polio cases in Karnataka in 2001?

- (A) 120%
- (B) 80%
- (C) 125%
- (D) 75%
- (E) 95%

5. Find the ratio between the total number of cases in the five states to that in the rest of country in 2000.

- (A) 9 : 67
- (B) 2 : 29
- (C) 29 : 4
- (D) 9 : 58

Part - B

2. Objective Type Questions - 20 Marks (Twenty Multiple Choice Questions)

- 1) The difference between the local value and the face value of 7 in the numeral 32675149 is
- a) 75142                      b) 64851                      c) 5149  
d) 69993                      e) None of these
- 2) If the number  $91876 * 2$  is completely divisible by 8, then the smallest number in place of \* will be :
- a) 1                              b) 2                              c) 3  
d) 4                              e) None of these
- 3) The average monthly income of P and Q is Rs. 5050. The average monthly income of Q and R is Rs. 6250 and the average monthly income of P and R is Rs5200.

The monthly income of P is:

- a) 3500                      b) 4000                      c) 4050  
d) 5000                      e) None of these
- 4) The average age of husband, wife and their child 3 years ago was 27 years and that of wife and the child 5 years ago was 20 years. The present age of the husband is:
- a) 35 years                      b) 40 years                      c) 50 years  
d) Data inadequate      e) None of these
- 5) A car owner buys petrol at Rs.7.50, Rs. 8 and Rs. 8.50 per liter for three successive years. What approximately is the average cost per liter of petrol if he spends Rs. 4000 each year?
- a) Rs. 7.98                      b) Rs. 8                      c) Rs. 8.50  
d) Rs. 9                      e) None of these

6) The maximum numbers of students among them 1001 pens and 910 pencils can be distributed in such a way that each student gets the same number of pens and same number of pencils is

- a) 91                      b) 910                      c) 1001  
d) 1911                      e) None of these

7) 252 can be expressed as a product of prime as

- a)  $2 \times 2 \times 3 \times 3 \times 7$                       b)  $2 \times 2 \times 2 \times 3 \times 7$                       c)  $3 \times 3 \times 3 \times 3 \times 7$   
d)  $2 \times 3 \times 3 \times 3 \times 7$                       e) None of these

8) Three different containers contain 496 litres, 403 litres and 713 litres of mixtures of milk and water respectively. What biggest measure can measure all the different quantities exactly?

- a) 1 litre                      b) 7 litre                      c) 31 litre  
d) 41 litre                      e) None of these

9) If 40% of a number is equal to two-third of another number, what is the ratio of first number to the second number?

- a) 2 : 5                      b) 3 : 7  
d) 7 : 3                      e) None of these

10) An amount of Rs.735 was divided between A, B and C. If each of them had received Rs.25 less, their shares would have been in the ratio of 1 : 3 : 2. The money received by C was :

- a) Rs.195                      b) Rs.200                      c) Rs.225  
d) Rs.245                      e) None of these

11) A shopkeeper buys 100 eggs at Rs.1.20 per piece. Unfortunately 4 eggs got spoiled during transportation. The shopkeeper sells the remaining eggs at Rs.15 a

dozen. Find his profit or loss?

- a) Rs.120                      b) 102                      c) 201  
d) 121                      e) None of these

12) The speeds of three cars are in the ratio 5 : 4 : 6. The ratio between the time taken by them to travel the same distance is :

- a) 5 : 4 : 6                      b) 6 : 4 : 5                      c) 10 : 12 : 15  
d) 12 : 15 : 10                      e) None of these

13) A, B and C started a shop by investing Rs.27,000, Rs.72,000 and Rs.81,000 respectively. At the end of the year, the profits were distributed among them. If C's

share of profit be Rs.36,000, then the total profit was :

- a) Rs.80,000                      b) Rs.95,600                      c) Rs.1,08,000  
d) Rs.1,16,000                      e) None of these

14) A, B, C enter into a partnership investing Rs.35,000, Rs.45,000 and Rs.55,000 respectively. The respective shares of A, B, C in an annual profit of Rs.40,500 are :

- a) Rs.10,500, Rs.13,500, Rs.16,500                      b) Rs.11,500, Rs.13,000, Rs.16,000  
c) Rs.11,000, Rs.14,000, Rs.15,500                      d) Rs.11,500, Rs.12,500, Rs.16,500  
e) None of these



15) In how many ways can 21 books on English and 19 books on Hindi be placed in a row on a shelf so that two books on Hindi may not be together?

- a) 3990                      b) 1540                      c) 1995  
d) 3672                      e) None of these

16) A bag contains 2 red, 3 green and 2 blue balls. Two balls are drawn at random.

What is the probability that none of the balls drawn is blue?

- a)  $10/21$                       b)  $11/21$                       c)  $2/7$   
d)  $5/7$                       e) None of these

17) In a box, there are 8 red, 7 blue and 6 green balls. One ball is picked up randomly. What is the probability that it is neither red nor green?

- a)  $1/3$                       b)  $\frac{3}{4}$                       c)  $7/19$   
d)  $8/21$                       e) None of these

18) A father said to his son, "I was as old as you are at present at the time of your birth." If the father's age is 38 years now, the son's age five years back was

- a) 14 years                      b) 19 years                      c) 33 years  
d) 38 years                      e) None of these

19) I gain 70 paise on Rs.70. My gain percent is



- a) 0.1%                      b) 1%                      c) 7%  
d) 10%                      e) None of these

20) A book was sold for Rs.27.50 with a profit of 10%. If it were sold for Rs.25.75, then what would have been the percentage of profit or loss?

- a) 2%                      b) 3%                      c) 4%  
d) 5%                      e) None of these

### 3. One Word Answers

- 10 Marks (Ten Questions)

- 1) R is sister of M who is brother of H. D is mother of K who is brother of M. How is R related to D?
- 2) K is brother of T. M is mother of K. W is brother of M. How is W related to T?
- 3) T is taller than only S. R is taller than P. P is taller than S. Who is second tallest?
- 4) Simplify -  $12.05 \times 5.4 \div 0.6 - .45$
- 5) If the difference between SI and CI for 2 years is 4 Rs. and Principal is 2500 Rs. then find out the rate of Interest?
- 6) 8, 12, 24, 60, ?, 630
- 7) BOATS : HGZLY :: STREAM : ?
- 8) 8, 52, 13, 47, 18, 42, 23, ?, 28
- 9) Find the odd one. 3, 5, 7, 9, 11, 13
- 10) C, A, G, E, K, I, O, M, \_!\_, \_!\_

### 4. One Sentence Answers

- 10 Marks (Five Questions)

- 1) If 'black' is called 'red', 'red' is called 'yellow', 'yellow' is called 'green', 'green' is called 'white' and 'white' is called 'orange'; then what is the colour of blood?
- 2) A man goes 4 km east and after that he turns right and goes 5 km. Then he turns left and moves another 5 km. Which direction is he facing now?

3) If '+' means ' $\div$ ', '-' means ' $\times$ ', ' $\times$ ' means '+' and ' $\div$ ' means '-' then find out the value of  $36 + 3 \times 4 \div 2 - 3$  ?

4) If the perimeter of a rectangle is increased by 20%, by how much percent its area will increase?

5) In what ratio must tea at Rs. 62 per kg be mixed with tea at Rs. 72 per kg so that the mixture must be worth Rs. 65 per kg?

## 5. Matching

- 5 Marks (5=5)

1. Identify the figure that completes the pattern.



(X)



(1)



(2)



(3)



(4)

A.1

B.2

C.3

D.4

2. Identify the figure that completes the pattern.



(X)



(1)



(2)



(3)



(4)

A.1

B.2

C.3

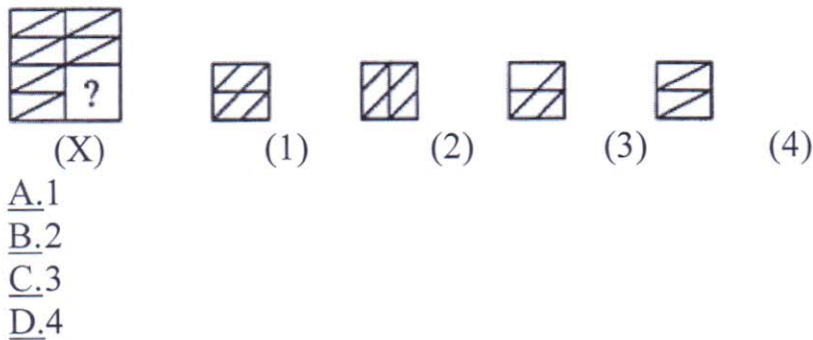
D.4

3. Identify the figure that completes the pattern.

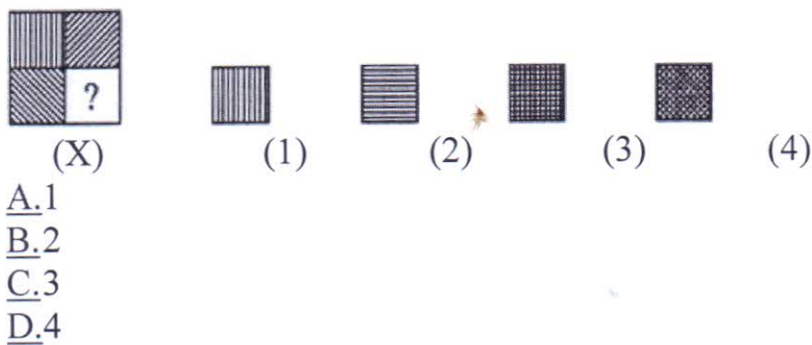


- (X)                      (1)                      (2)                      (3)                      (4)
- A.1  
B.2  
C.3  
D.4

4. Identify the figure that completes the pattern.



5. Identify the figure that completes the pattern.



*Chyrs*  
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 CVR University, Tirupati