

# RPF Constable Exam 2013

## General Intelligence and Reasoning

Directions : In questions no. 1 to 5, select the related letters/word from the given alternatives.

1. VAB : UCD :: TEF : ?

- RIJ
- SKL
- SIJ
- SGH

2. Room : Floor :: River : ?

- Crocodile
- Bed
- Water
- Fish

3. Sea : Shore :: River : ?

- Delta
- Bank
- Sand
- Dam

4. Satyajit Ray : Films :: Picasso : ?

- Poetry
- Painting
- Literature
- Drama

5. ABC : ZYX :: DEF : ?

- UVW
- GHI
- VUT
- WVU

Directions : In questions no. 6 to 9, select the one which is different from the other three responses .

6.

- 27
- 64
- 8
- 9

7.

- Cotton
- Jute
- Nylon
- Silk

8.

- Eye
- Nose
- Ear
- Brain

9.

- 24, 32
- 34, 51
- 32, 48
- 10, 15

Directions : In questions no. 10 to 12, which one of the given responses would be a meaningful order of the following ?

10.

1. Arrest 2. Theft 3. Punishment 4. Judgement 5. Court

- 2, 1, 5, 4, 3
- 1, 5, 2, 3, 4
- 1, 2, 3, 4, 5
- 1, 2, 3, 5, 4

11.

1. Presentation 2. Recommendation 3. Arrival 5. Discussion 5. Introduction

- 3, 5, 1, 4, 2
- 5, 3, 1, 2, 4
- 5, 3, 4, 1, 2
- 3, 5, 4, 2, 1

12.

1. Set 2. Go 3. Ready 4. Target 5. Start

- 2, 3, 1, 4, 5
- 1, 4, 3, 2, 5
- 4, 3, 2, 1, 5
- 3, 5, 1, 2, 4

13.

Which one set of the letters when sequentially place at the gaps in the given letter series shall complete it ?

a \_ b \_ \_ \_ aa \_ bc \_

abccbc

cdabcd

abcabc

abccba

Directions : In the questions no. 14 to 16, a series is given, with one or more number/letter missing. Choose the correct alternative from the given ones that will complete the series .

14.

16, 13, 17, 12, 18, 11, 19, 10, ?

- 20
- 14
- 9
- 13

15.

A D G J M P S V ?

- B
- C
- Y
- X

16.

7, 10, 8, 11, 9, 12, ? , ?

- 12, 15
- 13, 14
- 7, 11
- 10, 13

17.

If 'x' means '+', '+' means '/', '-' means 'x', and '/' means '-', the  $8 \times 7 - 8 + 40 / 2 = ?$

- 44
- $7 \frac{2}{5}$
- 1
- $8 \frac{3}{5}$

18.

A is two years older than B who is twice as old as C . If the total of the ages of A, B and C be 27 years, then how old is B ?

- 9 years
- 10 years
- 7 years
- 8 years

19.

X is taller than Z, but not as tall as C, F is taller than X but shorter than one amongst the group. Who is the tallest in the group ?

- C
- Z
- X
- F

20. Roshan starts from the home and walks 2 km towards East, turns right and walks 1 km, turns right again and walks 1 km. What is the direction he is now facing from home ?

- East
- West
- North
- South

21. If '+' stands for '÷', '÷' stands for '×', '×' stands for '-' and '-' stands for '+', then which one of the following equations is correct ?

- $15/3-2+2 \times 2 = 10$
- $15/3-2+2 \times 2 = 7$
- $15 \times 3 + 4 - 2/2 = 20$
- $15 \times 3 + 4 - 2/2 = 14$

Directions : In questions no. 22 and 23 , from the given alternatives, select the word which can not be formed using the letters of the given word .

22.

SIMULTANEOUS

- SINGLE
- SMILE
- STEAL
- SILENT

23.

PREDOMINANTLY

- REAP
- NEAT
- POST
- MINE

24.

Which of the numbers does not fit into the following group of numbers ?

1961 6119 6699 6898 8118

- 8118
- 6699
- 6898
- 6119

25.

If OUTLINE can be written in a certain code as 5132946, how can TOO LITTLE be written in that code ?

- 533 926632
- 355 293326
- 355 293362
- 533 296632

**Direction: In questions no. 26 to 28, select the related letters/words/number from the given alternatives.**

26. 85 : 42 : 139 : ?

1. 68

- 2. 69
- 3. 70
- 4. 67

27. AGMS : CIOU :: DJPV : ?

- 1. BHNY
- 2. STUV
- 3. FLRX
- 4. MNOP

28. CAT : DDY :: BIG : ?

- 1. CLL
- 2. CLM
- 3. CML
- 4. CEP

**Direction: In questions no. 29 and 30, find the odd number from the given alternatives.**

29. 1.  $80 - 9$
2.  $64 - 8$
3.  $36 - 6$
4.  $7 - 49$

30. 1. 111
2. 242
3. 551
4. 383

31. 52, 42, 30, 20, \_\_?\_\_, 6

1. 15
2. 12
3. 18
4. 14

32. ASY, BRX, CQW, \_\_?\_\_

1. DVP
2. DPV
3. PDV
4. PQD

33. Y, S N, J, G, \_\_?\_\_

1. F
2. E
3. H
4. I

34. If 'x' means '-', '-' means 'x', '+' means '+' and '+' means '+', then  $(15 \times 10) + (130 + 10) \times 50 = ?$

1. 1800
2. 113
3. 2000
4. 123

35. Substitute the correct mathematical symbols in place of \* in the following equation:  $16 * 4 * 5 * 14 * 6$

1.  $\div - = +$
2.  $- \times + =$
3.  $\div \times = +$

## Arithmetic

1.

In a shop, a watch carried a price tag of Rs. 825 . The salesman offered a discount of 20% on the marked price . If on the sale he got a profit of 10%, the cost price ( in rupees ) is

- 500
- 600
- 400
- 660

2.

The ratio of boys and girls in a school is 3 : 2 . When 6 more girls join, this ratio becomes 6 : 5 . Then the number of boys in the school is

- 42
- 36
- 24
- 30

3.

A bag contains rupee, 50 paise and 25 paise coins in the ratio 5 : 6 : 8 . If the total amount is Rs. 240, the number of 25 paise coins is

- 144

- 192
- 48
- 120

4.

In two types of brass, ratio of copper and zinc are 8 : 3 and 15 : 7 respectively . The ratio, in which these two types of brass should be mixed, so that the ratio of copper and zinc in this new type of brass becomes 5 : 2, is

- 7 : 4
- 2 : 5
- 3 : 2
- 5 : 2

5.

The mean weight of 180 students in a school is 50 kg. The mean weight of boys is 60 kg., while that of girls is 45 kg. Find the number of boys and girls in the school .

- 80, 100
- 65, 115
- 60, 120
- 70, 110

6.

A school has 2 sections. The average marks of one section is 60 and its strength is 40 . If the total number of students in both the sections is 100 and the overall average is 72, find the average marks of the second section .

7.

The 25th term of the series

2, 5, 10, 17, 26, \_\_\_\_

8.

The smallest positive integer which is to be deducted from 108070210 to make the difference a perfect square is

9.

The value of under root of  $1.296 \times 0.081 \times 5.776 / 1.5625 \times 0.0361 \times 72.9 \times 64$  is

10.

Pipes P and Q can fill a tank in 12 minutes and 16 minutes respectively. Both are kept open for x minutes and then Q is closed and P fills the rest of the tank in 5 minutes. The value of x is

11.

A man can complete a piece of work in 9 days but with the help of his son, he can do it in 6 days. The time taken by his son to do it alone is

12.

A shop offers 5% discount to all customers and for members it offers 15% additional discount. If the shopkeeper, by mistake, took Rs. 40,000 from a member for an article whose original price was Rs. 50000, how much did the member gain ?

13.

A dealer offers successive discounts of 20%, 10% and 5% . A single equivalent rate of discount is

14.

A man is walking at a speed of 10 km./hr After every kilometre , he takes rest for 4 minutes. How much time will he take to cover a distance of 10 km ?

15.

A person invests money in there different schemes for 6 years, 10 years and 12 years at 10%, 12% and 15% simple interest respectively . At the completion of each scheme, he gets the same amount. What is the ration of his investment ?

16.

If the interest is calculated half-yearly the compound interest on Rs. 16,000 at 5% per annum, at the end of 1 year and 6 months is

17.

If four cubes, each of 10 cm. edge are joined end to end, then find the total surface area of the resulting solid in sq. cm.

18.

For an equilateral triangle, the length of its inradius be 4 cm, then the area of the triangle is

19.

A right circular cylinder has same height as the radius of sphere. Both of them have same volume. The ratio of their surface areas is

20.

The base of a cone and a sphere have the same radius r. Also they have the same area of curved surface. Height of the cone is

21.

The average weight of a class of 35 students is 47.5 kg. If the weight of the teacher is included, the average rises by 1/2 kg. Then the weight of the teacher is

22.

Arun bought a secondhand music system for Rs. 2000 . He spent Rs. 400 on its repairing . The selling price of the music system, if he wants to gain 50/3 % is

23.

A person sells 36 oranges per rupee and suffers a loss of 4%. Find how many oranges should be sold per rupee to have a gain of 8% .

24.

Two-third of a consignment was sold at a profit of 5% and the remaining at a loss of 2%. If the total profit was Rs. 400, the value of the consignment in rupees was

25.

If 35% of x is 735, then 80% of x is

26.

If the price of oil is increased by 25%, what will be the percentage consumption of oil that a house must reduce, so that his monthly expenditure does not increase ?

27.

A car completes a journey in 11 hours, the first half at 30 km/hr and the second half at 25 km/hr. Find the distance traveled .

28. E is the mid-point of the median AD of triangle ABC . BE when produced intersects AC at F. If AB = 18 cm, AC = 15 cm and BC = 20 cm, then the length of CF is

29.

The chord of a circle is equal to it radius. The angle subtended by this chord at the minor arc of the circle is

30.

Two medians BP and CQ intersect at G. Find Triangle PGQ : Triangle ABC

31.

If two angles of a triangle are  $30^\circ 45' 15''$  and  $28^\circ 14' 45''$ , find the third angle in radians .

32.

If  $\theta$  is a positive acute angle and  $5 \cos \theta + 12 \sin \theta = 13$ , then the value of  $\tan \theta$  is

33. Two ships are sailing in the sea on the two sides of lighthouse. The angles of elevation of the top of the lighthouse as observed from the two ships are  $30^\circ$  and  $45^\circ$  respectively . If the lighthouse is 100 m high, then the distance between the two ships is

34.

If the ratio of the sides of two equilateral triangles is 1 : 2, then the ratio of their areas is

35.

A path of 7-meter width runs around a circular park whose radius is 18 meters. The area of path is

# General Awareness

1. Who will act as chairman of Public Accounts Committee?

- The speaker of the Lok Sabha
- The Vice-President of India
- The Leader of the Opposition in Lok Sabha
- The Leader of the House

2. Who was chosen unanimously as the President of India ?

- K.R. Narayanan
- Dr. A.P.J. Abdul Kalam
- Dr. S. Radhakrishnan
- Neelam Sanjiva Reddy

3. The Constitution of India was passed by the Constituent Assembly on ?

4. The power to decide an election petition is vested in the ?

5. The 1857 Mutiny failed mainly because ?

- of lack of planning and leadership
- it was premature
- the British got French support
- the British numbered more

6. The story of 'My Experiments with Truth' is autobiography of ?

7. The basic characteristics of a capitalistic economy is ?

- absence of monopoly
- large scale production in primary industries
- full employment
- the private ownership of the means of production

8. Which one of the following taxes is not a direct tax ?

- Sales tax
- Estate tax
- Gift tax
- Wealth tax

9. UNDP prepares ?

10. Fiscal policy refers to ?

11. Public opinion gets an authoritative expression in a democracy through ?

- Pressure Groups
- Public Meetings
- Newspapers
- Parliament

12. Which one of the following is not a determine factor of a country's foreign policy ?

- Cultural Conditions
- Religious Conditions
- National Interests
- Interdependece

13. What is the capital of Himachal Pradesh ?

14. Tides in the sea have stored in them ?

15. Delivery of developed foetus is scientifically called as ?

16. Thyroxine hormone is secreted by ?

17. The digestive juice which has no enzyme is ?

18. An essential feature of the seed germination is the presence of ?

- Light
- Temperature
- Minerals
- Waster

19. Plants that grow on stones and rocks are ?

20. Who among the following made the Ganpati festival very popular in Maharashtra ?

- Mahadev Ranade
- Bal Gangadhar Tilak
- Gopal Krishna Gokhale
- Annie Besant

21. The mughal ruler who built the Buland Darwaza was ?

22. Diarchy in the provinces was introduced through the ?

- Government of India Act, 1919
- Government of India Act, 1935
- Indian Councils Act, 1861
- Indian Council Act, 1892

23. Which of the following is the world's largest desert ?

- The Great Australian Desert
- Arabian Desert
- Gobi
- Sahara

24. The rate of erosion in a stream is lowest where ?

25. The name ' Sahyadri' is related to ?

- A rain-bearing wind
- depth is greater
- breadth is greater
- velocity is more

26. People die in an atmosphere of carbon dioxide because ?

27. Which of the following acts as photosensitizer during photosynthesis ?

- Chlorophyll
- Chlorine
- Oxygen
- Notrogen

28. What happens when bleaching powder is left exposed to air ?

29. Arsenic pollution leads to ?

- Dylexia
- Allergy
- White foot disease
- Black foot disease

30. Which one of following does not contribute to pollution ?

- Hydroelectric Power Plant
- Atomic Power Plant
- Thermal Power Plant
- Nuclear Power Plant

31. Which of the following are the two major components of dry air ?

- Nitrogen and Ammonia
- Oxygen and Carbon dioxide
- Nitrogen and Oxygen
- Oxygen and Argon

32. Tactile hair is found in the body of ?

33. The source of energy in the Sun is ?

34. Which one of the following materials is used as controller in a nuclear reactor power generator ?

- Graphite
- Heavy Water
- Cadmium
- Beryllium

35. Banking of the curves on road or railway track is done to provide ?

- gravitational force
- angular force
- centripetal force
- centrifugal force

36. ....is a type of application software used for communication ?

- Database
- Image editing
- FTP
- Word Processing

37. A floppy disk is ?

- Used as the primary memory in computer system
- made up of magnetic material
- a semiconductor random-access memory
- an EPROM

38. MDI stands for ?

39. What is the full form of FCI ?

40. The Twelfth Five Year Plan will be operative for the period ?

41. The state with largest gap in male and female literacy is ?

42. " Better to reign in hell than serve in heaven." Who said these words ?

43. Comprehensive Test Ban Treaty ( CTBT ) is associated with the ban on which of the followings ?

- Ban on nuclear tests for developing arsenals
- Ban on terrorism
- Ban on certain organisations under UN laws
- Ban on money laundering activities

44. The Pulitzer Prize is associated with which of the following ?

- Journalism
- Olympic Games
- Environmental Protection
- Civil Aviation

45. Which one of the following is not an example of Lotc ecosystem ?

- Pond
- Estuary
- Stream
- Lagoon

46. Permissible noise level at industrial area during daytime is ?

47. Benazir Bhutto, the former Pakistan Prime Minister was assassinated in ?

48. Which of the following is correctly matched ?

- Silk Research Institute - Bangalore
- Sugar Research Institute - Chennai
- Leather Research Institute - Lucknow
- Rice Research Institute - Cuttack

49. Who was affectionately known as the " Grand Old Man of India " ?

50. India test fired successfully its Agni-V, surface-to-surface ICBM from Wheeler Island on ?