



Your Personal Exams Guide



NDA



CDS



SSC CGL



CBSE UGC NET



IAS



SSC CHSL



CTET



MPSC



AFCAT



CSIR UDC NET



IBPS PO



UP POLICE



SSC MTS



SBI PO



BPSC



UP TET



IBPS RRB



IBPS CLERK



IES



UPSC CAPF



SSC Stenogr..



RRB NTPC



SSC GD



RBI GRADE B



RBI Assistant



DSSSB

SSC CGL 2018 Tier-I Previous Year Paper (10-Jun-2019) (Shift 3)

Total Time: 1 Hour

Total Marks: 200

Instructions

Sl No.	Section Name	No. of Question	Maximum Marks
1	General Intelligence and Reasoning	25	50
2	General Awareness	25	50
3	Quantitative Aptitude	25	50
4	English Comprehension	25	50

- 1.) A total of 60 minutes is allotted for the examination.
- 2.) The server will set your clock for you. In the top right corner of your screen, a countdown timer will display the remaining time for you to complete the exam. Once the timer reaches zero, the examination will end automatically. The paper need not be submitted when your timer reaches zero.
- 3.) There will, however, be sectional timing for this exam. You will have to complete each section within the specified time limit. Before moving on to the next section, you must complete the current one within the time limits.

General Intelligence and Reasoning

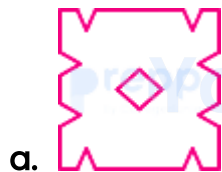
1. Bharat and Sapna are husband and wife. Rohit and Bharat are brothers. Suresh is the father of Rohit. Sapna's son is Krish. How is Krish related to Suresh? (+2, -0.5)
- a. Son
 - b. Uncle
 - c. Grandson
 - d. Father
-
2. Three of the following four letter-clusters are alike in a certain way and one is different. Pick the odd one out. (+2, -0.5)
- a. KMT
 - b. QSZ
 - c. FHO
 - d. OQV
-
3. Three of the following four number-pairs are alike in a certain way and one is different. Pick the odd one out. (+2, -0.5)
- a. 14 : 201
 - b. 13 : 179
 - c. 12 : 149
 - d. 8 : 69

4. Select the option that is related to the third term in the same way as the second term is related to the first term. (+2, -0.5)

WOLF : FLOW :: DRAW :

- a. WRAD
- b. WARD
- c. DARW
- d. RWAD

5. A square paper is folded and cut as shown below. How will it appear when unfolded? (+2, -0.5)





d.

6. Three of the following four-word pairs are alike in a certain way and one is different. Pick the odd word out. (+2, -0.5)

- a. Tamil : Kerala
- b. Dogri : Jammu and Kashmir
- c. Bori : Arunachal Pradesh
- d. Konkani : Goa

7. If (+2, -0.5)

+ denotes -

denotes *

denotes /

/ denotes +

then what will be the value of

$$25 - 2 / 10 * 5 + 2 = ?$$

- a. 10
- b. 58
- c. 50
- d. 26

8. A father was twelve times as old as his son twenty years ago. Now he is twice as old as his son. What are the present ages of the son and father? (+2, -0.5)

- a. 33 and 66 years
- b. 27 and 54 years
- c. 15 and 30 years
- d. 22 and 44 years

9. Three of the following four word-pairs are alike in a certain way and one is different. Pick the odd one out. (+2, -0.5)

- a. Paper : Book
- b. Chisel : Sculptor
- c. Scalpel : Surgeon
- d. Anvil : Blacksmith

10. Select the word pair in which the two words are related in the same way as the word pair given below. (+2, -0.5)

Feet : Socks

- a. Abdomen : Pants
- b. Head : Turban
- c. Finger : Nail
- d. Legs : Vest

11. Three different positions of a dice are shown below. Which number appears on the face opposite the number 4?

(+2, -0.5)



- a. 3
- b. 2
- c. 6
- d. 5

12. Select the term that will come next in the following series.

(+2, -0.5)

5, 9, ?, 29, 45

- a. 25
- b. 15
- c. 17
- d. 19

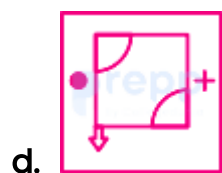
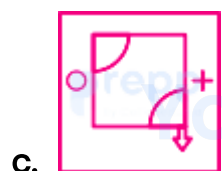
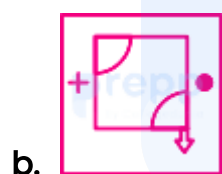
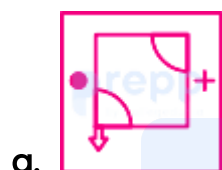
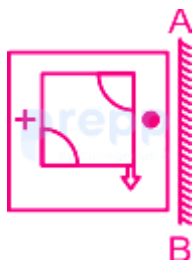
13. 'Fly' is related to 'Bird' in the same way as 'Gallop' is related to' _____. (+2, -0.5)

- a. Tiger
- b. Horse
- c. Lion

d. Elephant

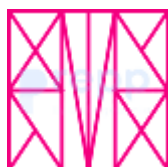
14. Select the correct mirror image of the given figure when the mirror is placed on the right of the figure?

(+2, -0.5)



15. How many triangles are there in the following figure?

(+2, -0.5)



- a. 29
 - b. 18
 - c. 31
 - d. 33
-

16. Find the next term in this series.

(+2, -0.5)

CBA, FGE, ILI, LQM, ?

- a. OVP
 - b. NVQ
 - c. OVQ
 - d. OUP
-

17. Select the option that is related to the third number in the same way as the second number is related to the first number.

(+2, -0.5)

17 : 102 :: 23 :

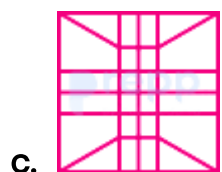
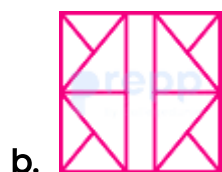
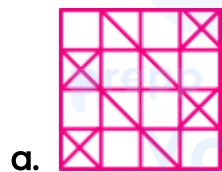
- a. 256
 - b. 152
 - c. 196
 - d. 138
-

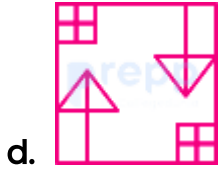
18. Which two signs should be interchanged to make the given equation correct? (+2, -0.5)

$$16 + 3 - 5 \times 2 \div 4 = 9$$

- a. $\div$ and $+$
- b. $\times$ and $-$
- c. $\times$ and $+$
- d. $\div$ and $\times$

19. Select the figure in which the given figure is embedded. (+2, -0.5)



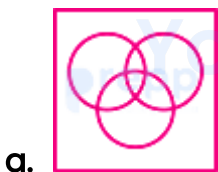


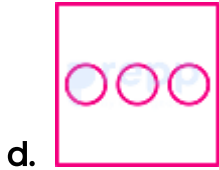
20. If SUN is coded as NUS and TOP is coded as POT, then which is the last letter in the code for the word FUR? (+2, -0.5)

- a. R
- b. F
- c. U
- d. E

21. Choose the Venn diagram form the given option which best represents the relationship amongst the following closes: (+2, -0.5)

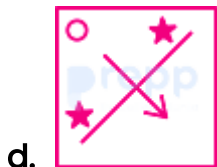
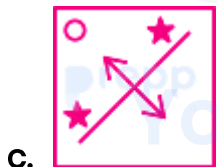
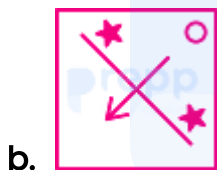
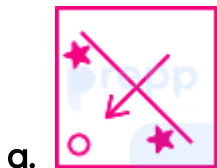
Players, Singers, Students





22. Select the figure that will come next in the following figure series?

(+2, -0.5)



23. If DON is coded as 345 and ROAM is coded as 6412, then how will RANDOM be coded?

(+2, -0.5)

a. 651342

b. 615342

c. 613542

d. 615324

24. Three of the following four letter-clusters are alike in a certain way and one is different. Pick the odd one out. (+2, -0.5)

a. PQR

b. SUW

c. FHJ

d. KMO

25. Find the missing number from the below options. (+2, -0.5)

9	28	85
12	37	?
16	49	148

a. 96

b. 140

c. 134

d. 112

Prepp

Your Personal Exams Guide

General Awareness

26. As a reaction to Rowlatt Act, _____ was organised as National Humiliation Day. (+2, -0.5)

- a. 2nd February 1913
- b. 8th May 1920
- c. 14th June 1921
- d. 6th April 1919

27. How many provinces is the country of Nepal divided into? (+2, -0.5)

- a. 4
- b. 7
- c. 5
- d. 6

28. The term 'Putt' is used in this sport _____. (+2, -0.5)

- a. Cricket
- b. Golf
- c. Football
- d. Table Tennis

29. In 2018, Amnesty International stripped _____ of the Ambassador of Conscience Award given in 2009. (+2, -0.5)

- a. Aung San Suu Kyi
- b. Al Gore
- c. Benjamin Netanyahu
- d. Henri Tiphagne

30. The maximum strength of the Bangladeshi Parliament is _____. (+2, -0.5)

- a. 363
- b. 340
- c. 350
- d. 322

31. Which world leader is awarded the St Andrew the Apostle, the highest order of the Russian Federation in the year 2019? (+2, -0.5)

- a. Narendra Modi
- b. Angela Merkel
- c. Donald Trump
- d. Emmanuel Macron

32. Janku is a unique cultural custom followed in _____ as a celebration of life. (+2, -0.5)

- a. Nepal
 - b. Pakistan
 - c. Sri Lanka
 - d. Bhutan
-

33. In economic terms what do we mean by 'intermediate goods'? (+2, -0.5)

- a. Price of goods without GST
 - b. Fixed assets used by manufacturers
 - c. Goods sold between industries for the resale or production of other goods
 - d. Goods in transit before reaching the consumers
-

34. In which year was the term 'Gross Happiness Index' coined by the fourth king of Bhutan, Jigme Singye Wangchuck? (+2, -0.5)

- a. 1989
 - b. 1982
 - c. 1964
 - d. 1972
-

35. The Khilafat Movement of 1920 was organised as a protest against the injustice done to ----- (+2, -0.5)

- a. Egypt

- b. Iraq
 - c. Afghanistan
 - d. Turkey
-

36. Who was the first Indian to receive the Ramon Magsaysay Award for his contribution to community leadership? (+2, -0.5)

- a. Arvind Kejriwal
 - b. Acharya Vinoba Bhave
 - c. Verghese Kurien
 - d. Baba Amte
-

37. Which of the following is the busiest sea port in Pakistan? (+2, -0.5)

- a. Port of Qasim
 - b. Port of Ketu
 - c. Gwadar Port
 - d. Port of Karachi
-

38. Which of the following plants is carnivorous? (+2, -0.5)

- a. Cypress Vine
- b. Hyacinth
- c. Venus Flytrap

d. Amaryllis

39. The Hindustan Socialist Republican Association (HSRA) was formed in the year _____ with an aim to overthrow the British. (+2, -0.5)

a. 1922

b. 1930

c. 1928

d. 1921

40. What is the term used to describe the angular distance of a place north or south of Earth's equator? (+2, -0.5)

a. Pole

b. Latitude

c. Hemisphere

d. Longitude

41. Who was the first female shooter from India to reach number 1 in world ranking by the International Shooting Sport Federation in 2014? (+2, -0.5)

a. Shreyasi Singh

b. Anjali Bhagwat

c. Anisha Sayyed

d. Heena Sidhu

42. _____ was not only Sri Lanka's first woman prime minister, but also the first woman prime minister in the world. (+2, -0.5)

- a. Chandrika Kumaratunga
- b. Sirimavo Bandaranaike
- c. Rosy Senanayake
- d. Upeksha Swarnamali

43. Which of the following is the third stage in the metamorphosis of a butterfly? (+2, -0.5)

- a. Egg
- b. Pupa
- c. Larva
- d. Adult

44. A traditional 'battery' contains which of the following chemicals? (+2, -0.5)

- a. Ethylene glycol
- b. Sulfuric acid
- c. Sodium bicarbonate
- d. Ethanol

45. How many 'canine teeth' does an adult human have? (+2, -0.5)

- a. 3
- b. 8
- c. 2
- d. 4

46. Which tribe of Pakistan performs a traditional dance form called 'Waziri Dance'?

(+2, -0.5)

- a. Brahuis
- b. Sindhi
- c. Baloch
- d. Pashtun

47. Mother Teresa, the founder of 'Missionaries of Charity', was born on

(+2, -0.5)

-
- a. 26th August 1910
 - b. 15th May 1907
 - c. 13th January 1912
 - d. 2nd February 1913

48. What is the definition for the term 'hibernation'?

(+2, -0.5)

- a. A habit of food conservation during summer season for winter among animals

- b. Building of habitat (nests) by birds to save themselves in rainy season
 - c. A state of reduced metabolic activity during winter season among some animals
 - d. A state of hyperactivity in spring time among birds
-

49. Which of the following kings is regarded as the founder of the Kingdom of Nepal? (+2, -0.5)

- a. Mahendra Bir Bikram Shah Dev
 - b. Prithivi Narayan Shah
 - c. Tribhuvan Bir Bikram Shah
 - d. Rana Bahadur Shah
-

50. Atal Tinkering Labs is an initiative by which of the following institutions? (+2, -0.5)

- a. NITI Aayog
- b. National AYUSH Mission
- c. Reserve Bank of India
- d. Central Board of Secondary Education

Quantitative Aptitude

51. If $x - 5\sqrt{x} - 1 = 0$, then $x^2 + 1/x^2$ is equal to: (+2, -0.5)

- a. 729
- b. 731
- c. 625
- d. 727

52. The value of $\sin^2 60^\circ - \cos^2 45^\circ + \sec 60^\circ + \cos^2 40^\circ + \cos^2 50^\circ$ is equal to: (+2, -0.5)

- a. $11/4$
- b. $9/14$
- c. $13/4$
- d. $7/2$

53. If $a : b = 4 : 5$, then $(2a + 3b) : (3a + 2b)$ is equal to: (+2, -0.5)

- a. 9 : 10
- b. 22 : 23
- c. 23 : 22
- d. 10 : 9

54. In a $\triangle ABC$, the sides are $AB = 16$ cm, $AC = 63$ cm, $BC = 65$ cm. From A, a straight line AM is drawn up to the midpoint M of side BC . Then the length of AM is equal to: (+2, -0.5)
- a. 31.5 cm
 - b. 32.5 cm
 - c. 24.5 cm
 - d. 23.5 cm
-
55. In circle with centre O , AB is a diameter and CD is a chord such that $ABCD$ is a trapezium. If $\angle BAC = 15^\circ$, then $\angle CAD$ is equal to (+2, -0.5)
- a. 30°
 - b. 75°
 - c. 60°
 - d. 45°
-
56. The radius of a sphere is increased by 140%. By what percent will its volume increase? (+2, -0.5)
- a. 1382.4%
 - b. 274.4%
 - c. 174.4%
 - d. 1282.4%
-

57. **Direction :** The table below shows the percentage of students and the ratio of boys and girls in different colleges. Total students = 1800

(+2, -0.5)

College	% students	Boys : Girls
A	20	4 : 5
B	18	1 : 2
C	14	4 : 3
D	22	6 : 5
E	10	2 : 3
F	16	9 : 7

What is the percentage of girls in colleges D, E and F taken together, (nearest to one decimal place)?

- a. 47.9%
- b. 48.3%
- c. 48.1%
- d. 48.5%

58. $\triangle ABC \sim \triangle EDF$ and $AB = 5$ cm, $BC = 8$ cm and $AC = 10$ cm. If $Ar(\triangle ABC) : Ar(\triangle DEF) = 9 : 4$. then DF is equal to: (+2, -0.5)

- a. $16/3$ cm
- b. $32/9$ cm
- c. $10/3$ cm
- d. $20/3$ cm

59. If the six digit number $6x2904$ is divisible by 88, then the value of x is: (+2, -0.5)

- a. 7
- b. 8
- c. 6
- d. 5

60. If $x + 1/x = \sqrt{5}$, then $x^3 + 1/x^3$ is equal to: (+2, -0.5)

- a. $5\sqrt{5}$
- b. $2\sqrt{5}$
- c. $4\sqrt{5}$
- d. $3\sqrt{5}$

61. A train without stoppage travels with an average speed of 70 km/h, and with stoppage, it travels with the average speed of 56 km/h. How many (+2, -0.5)

minutes, does the train stop on an average per hour?

- a. 12
- b. 14
- c. 16
- d. 15

62. If $(3x - 1)^3 + (4x - 3)^3 + (2x + 1)^3 = 3(3x - 1)(4x - 3)(2x + 1)$ and $x \neq 1/3$, then $x = ?$ (+2, -0.5)

- a. $1/2$
- b. $1/4$
- c. 1
- d. 2

63. **Direction :** The table below shows the percentage of students and the ratio of boys and girls in different colleges. Total students = 1800 (+2, -0.5)

College	% students	Boys : Girls
A	20	4 : 5
B	18	1 : 2
C	14	4 : 3
D	22	6 : 5
E	10	2 : 3
F	16	9 : 7

In which college is the percentage difference between the number of boys and girls minimum?

- a. A
- b. E
- c. D
- d. C

64. The value of $3.8 - (4.2 \div 0.7 \times 3) + 5 \times 2 \div 0.5$ is:

(+2, -0.5)

- a. 15.6

b. 21.8

c. 18.4

d. 5.8

65. The price of sugar is increased by 18%. A person wants to increase the expenditure by 12% only. By what percent, correct to one decimal place, should he decrease his consumption? (+2, -0.5)

a. 6%

b. 5.3%

c. 5.1%

d. 5.6%

66. Two articles are sold for Rs. 10,384 each. On one, the seller gains 18% and on the other, he loses 12%. What is his overall gain or loss? (+2, -0.5)

a. Rs. 178 gain

b. Rs. 178 loss

c. Rs. 168 loss

d. Rs. 168 gain

67. **Direction :** The table below shows the percentage of students and the ratio of boys and girls in different colleges. Total students = 1800 (+2, -0.5)

College	% students	Boys : Girls
A	20	4 : 5
B	18	1 : 2
C	14	4 : 3
D	22	6 : 5
E	10	2 : 3
F	16	9 : 7

What is the ratio of boys and girls in the colleges A and B taken together?

- a. 67 : 104
- b. 45 : 71
- c. 43 : 67
- d. 37 : 52

68. The average marks of 50 students in a class was found to be 64. If the marks of two students were incorrectly entered as 38 and 42 instead of 83 and 24, respectively, then what is the correct average? (+2, -0.5)

- a. 61.24
- b. 62.32
- c. 61.86
- d. 64.54

69. **Direction :** The table below shows the percentage of students and the ratio of boys and girls in different colleges. Total students = 1800 (+2, -0.5)

College	% students	Boys : Girls
A	20	4 : 5
B	18	1 : 2
C	14	4 : 3
D	22	6 : 5
E	10	2 : 3
F	16	9 : 7

If 10% of the girls from college A are transferred to college E, then what is the increase in the percentage of girls in college E?

- a. 4.2%
 - b. 18.51%
 - c. 4.4%
 - d. 4.6%
-

70. If $a + b + c = 11$ and $ab + bc + ca = 38$, then $a^3 + b^3 + c^3 - 3abc$ is equal to: **(+2, -0.5)**

- a. 44
 - b. 66
 - c. 55
 - d. 77
-

71. If $\tan \theta = 3/4$ then $\frac{4 \sin \theta - \cos \theta}{4 \sin \theta + \cos \theta}$ is equal to : **(+2, -0.5)**

- a. $3/5$
 - b. $1/4$
 - c. $1/2$
 - d. $2/5$
-

72. An article is sold for Rs. 642.60 after successive discounts of 15% and 10%. **(+2, -0.5)**
What is the marked price of the article?

- a. Rs. 820
- b. Rs. 800

c. Rs. 880

d. Rs. 840

73. The difference between the compound interest and simple interest on Rs. x at 9% per annum for 2 years is Rs. 20.25. What is the value of x ? (+2, -0.5)

a. 2,400

b. 2,800

c. 2,500

d. 2,200

74. In $\triangle ABC$, AD is median and G is the point on AD such that $AG : GD = 2 : 1$. Then $\text{ar}(\triangle ABG) : \text{ar}(\triangle ABC)$ is equal to: (+2, -0.5)

a. 1 : 6

b. 1 : 3

c. 3 : 1

d. 1 : 5

75. If $2 \sin^2 \theta = 3 \cos \theta$, and $0 \leq \theta < 90^\circ$, then $\theta = ?$ (+2, -0.5)

a. 45°

b. 30°

c. 60°

d. 90°

Prepp

Your Personal Exams Guide

English Comprehension

76. Select the most appropriate synonym of the given word. (+2, -0.5)

REPUDIATE

- a. regret
- b. renounce
- c. enforce
- d. sanction

77. In the sentence identify the segment which contains the grammatical error. (+2, -0.5)

On the way he was bited on his toe by a venomous snake.

- a. on his toe
- b. by a venomous snake
- c. he was bited
- d. On the way

78. Select the word which means the same as the group of words given. (+2, -0.5)

One who helps a person in need

- a. samaritan
- b. veteran
- c. collaborator

d. mercenary

79. Select the most appropriate option to fill in the blank. (+2, -0.5)

The owner of the house was _____ at the watchman for letting in a stranger.

a. indignant

b. indulgent

c. indifferent

d. impatient

80. Select the correct passive form of the given sentence. (+2, -0.5)

Have they announced the world cup cricket team?

a. Has the world cup cricket team been announced?

b. Have the world cup cricket team announced?

c. Has the world cup cricket team being announced?

d. Have the world cup cricket team been announced?

81. Select the most appropriate antonym of the given word. (+2, -0.5)

PRUDENT

a. tactful

b. judicious

- c. indiscreet
 - d. practical
-

82. Select the correct active form of the given sentence. (+2, -0.5)

You will either be taken a prisoner or shot by the enemy.

- a. The enemy either takes you a prisoner or shoots you.
 - b. The enemy would either take you a prisoner or shoot.
 - c. The enemy will be either taking you a prisoner or shooting you.
 - d. The enemy will either take you a prisoner or shoot you.
-

83. Select the word which means the same as the group of words given. (+2, -0.5)

Sole right to make and sell some invention

- a. patent
 - b. copyright
 - c. inheritance
 - d. heirloom
-

84. Select the most appropriate antonym of the given word. (+2, -0.5)

SEVERE

- a. mild
- b. morose

c. meticulous

d. mediocre

85. Directions: In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank. (+2, -0.5)

Portia claims that even if she (1) _____ to live as long as Sibylla, she would die as (2) _____ as Diana because she can only be claimed (3) _____ the manner specified by her father's will. She (4) _____ that nobody would be able to crack (5) _____ casket test and so she was bound to remain unmarried.

Select the most appropriate option to fill in blank No.1.

a. is

b. was

c. were

d. has

86. Directions: In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank. (+2, -0.5)

Portia claims that even if she (1) _____ to live as long as Sibylla, she would die as (2) _____ as Diana because she can only be claimed (3) _____ the manner specified by her father's will. She (4) _____ that nobody would be able to crack (5) _____ casket test and so she was bound to remain unmarried.

Select the most appropriate option to fill in blank No.3.

a. in

- b. from
- c. through
- d. at

87. **Directions:** In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank. (+2, -0.5)

Portia claims that even if she (1) _____ to live as long as Sibylla, she would die as (2) _____ as Diana because she can only be claimed (3) _____ the manner specified by her father's will. She (4) _____ that nobody would be able to crack (5) _____ casket test and so she was bound to remain unmarried.

Select the most appropriate option to fill in blank No.2.

- a. clear
- b. real
- c. pure
- d. plain

88. Select the most appropriate option to substitute the underlined segment in the given sentence. If no substitution is required, select No improvement. (+2, -0.5)

It is convey to all the residents by now that they are required to apply for parking stickers.

- a. It has been conveyed to all the residents
- b. It is conveyed to all the residents
- c. It will be conveyed to all the residents

d. No improvement

89. In the sentence identify the segment which contains the grammatical error. (+2, -0.5)

Supriya asked Kiran that where had her mother gone when the results of the contest were being declared.

- a. when the results of the contest
- b. were being declared
- c. that where had her mother gone
- d. Supriya asked Kiran

90. Select the correctly spelt word. (+2, -0.5)

- a. particular
- b. perticuler
- c. perticular
- d. particuler

91. **Directions:** In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank. (+2, -0.5)

Portia claims that even if she (1) _____ to live as long as Sibylla, she would die as (2) _____ as Diana because she can only be claimed (3) _____ the manner specified by her father's will. She (4) _____ that nobody would be able to crack (5) _____ casket test and so she was bound to remain unmarried.

Select the most appropriate option to fill in blank No.5.

- a. the
 - b. a
 - c. one
 - d. an
-

92. Select the most appropriate synonym of the given word. (+2, -0.5)

LAMENT

- a. torment
 - b. mourn
 - c. distress
 - d. afflict
-

93. Select the most appropriate meaning of the underlined idiom in the given sentence. (+2, -0.5)

Extreme poverty made the poor woman wonder how long she could keep the wolf from the door.

- a. be safe in her house
 - b. live on charity
 - c. avoid starvation
 - d. keep wild animals away
-

94. Select the correctly spelt word. (+2, -0.5)

- a. acomodation
- b. accommodation
- c. accomodation
- d. accommodation

95. Select the most appropriate option to substitute the underlined segment in the given sentence. If no substitution is required, select No improvement. (+2, -0.5)

The world's agricultural land are in pressure to raising more and more crops.

- a. land is under pressure so raising
- b. land is under pressure to raise
- c. No improvement
- d. land is at pressure to raise

96. Select the most appropriate option to fill in the blank. (+2, -0.5)

I was frustrated at not being able to _____ of my old car.

- a. deal
- b. devoid
- c. depose

d. dispose

97. Given below are four jumbled sentences. Select the option that gives their correct order. (+2, -0.5)

A. Soon, flames ignited the wooden beams of the grand palace built by Xerxes.

B. Men and women holding flaming torches aloft raced up and down the palace terraces.

C. When the fire died out, all that remained of the magnificent palace were the stone columns.

D. Looters fought off the heat of the inferno to drag out gold and silver vessels.

a. ADBC

b. BCAD

c. BADC

d. CDBA

98. **Directions:** In the following passage some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank. (+2, -0.5)

Portia claims that even if she (1)_____ to live as long as Sibylla, she would die as (2)_____ as Diana because she can only be claimed (3)_____ the manner specified by her father's will. She (4)_____ that nobody would be able to crack (5)_____ casket test and so she was bound to remain unmarried.

Select the most appropriate option to fill in blank No.4.

- a. worry
 - b. has worry
 - c. will worry
 - d. worries
-

99. Given below are four jumbled sentences. Select the option that gives their correct order. (+2, -0.5)

A. It was very unusual as boys were not supposed to be out of school at this late hour.

B. He moved closer to the boy in anger so that he could recognise the miscreant and punish him.

C. He felt angry as teachers ought to be about school rules being broken.

D. Mr Oliver, the school teacher saw a lonely boy sitting on a rock, weeping soundlessly.

- a. ABCD
 - b. DACB
 - c. ACBD
 - d. DBAC
-

100. Select the most appropriate meaning of the underlined idiom in the given sentence. (+2, -0.5)

The ambitious project to impart free books to all students ended in smoke.

- a. yielded no result

- b. was successfully completed
- c. was delayed
- d. exceeded the budget

prepp

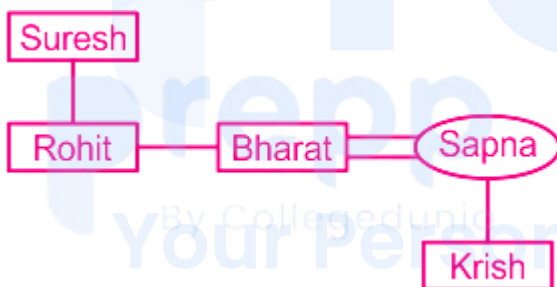
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Answers

1. Answer: c

Explanation:

Symbol in Diagram	Meaning
○	Female
□	Male
==	Married Couple
—	Siblings
	Difference of A Generation



Hence, Krish is a grandson of Suresh.

2. Answer: d

Explanation:

Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

1) $K + 2 = M$; $M + 7 = T$

2) $Q + 2 = S$; $S + 7 = Z$

3) $F + 2 = H$; $H + 7 = O$

4) $O + 2 = Q$; $Q + 5 = V$

3. Answer: b

Explanation:

1) $14^2 = 196$; $196 + 5 = 201$

2) $13^2 = 169$; $169 + 10 = 179$

3) $12^2 = 144$; $144 + 5 = 149$

4) $8^2 = 64$; $64 + 5 = 69$

Hence, '13 : 179' is the odd one among the given options.

4. Answer: b

Explanation:

Diagram:

First word is written in reverse order to get second word.

So,



Hence, 'WARD' is the correct answer.

5. Answer: c

Explanation:

When opened, the figure will appear as below:



Hence, the figure in option 3 is the correct answer.

6. Answer: a

Explanation:

Dogri is a language spoken mostly in Jammu and Kashmir.

Bori is a language spoken mostly in Arunachal Pradesh

Konkani is a language spoken mostly in Goa.

But, Tamil is spoken mostly in Tamil Nadu and not in Kerala.

Hence, 'Tamil: Kerala' is the correct answer.

7. Answer: c

Explanation:

Symbol	+	-	*	/
Meaning	-	*	/	+

According to given conditions the new equation will be,

$$25 * 2 + 10 / 5 - 2$$

$$= 25 * 2 + 2 - 2$$

$$= 50 + 2 - 2$$

$$= 50$$

Hence, the correct answer is '50'.

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8. Answer: d

Explanation:

Current age of Father = F; Son = S

$$F = 2S$$

Twenty years ago:

$$(F - 20) = 12 (S - 20)$$

$$F = 12S + 20 - 240$$

$$F = 12S - 220$$

$$2S = 12S - 220$$

$$10S = 220$$

Therefore, $S = 22$ and $F = 44$

Hence, the present ages of the son and father are 22 and 44 years respectively.

9. Answer: a

Explanation:

Chisel is a tool used by sculptor, scalpel is used by a surgeon, anvil is a tool used by a blacksmith.

Such a relation is not given in the first option.

Hence, 'Paper : Book' is the odd one among the given options.

10. Answer: b

Explanation:

Socks are worn on feet.

Similarly, turban is worn on head.

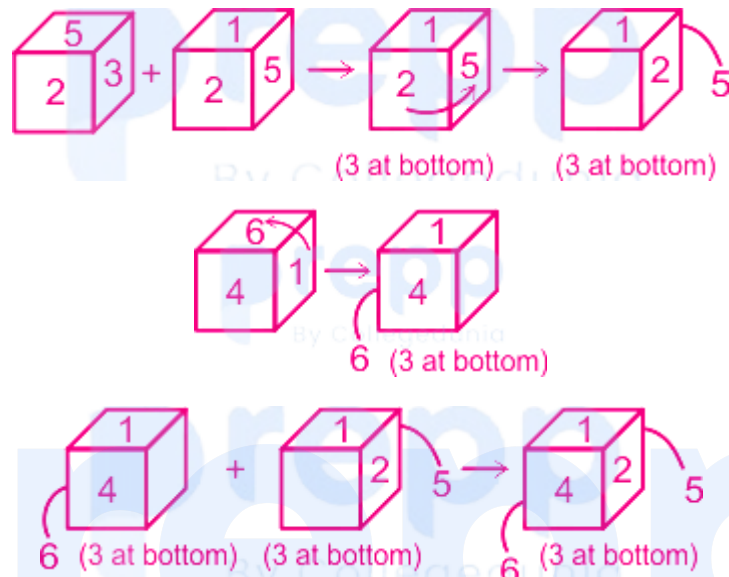
Hence, 'Head : Turban' is the correct answer.

11. Answer: d

Explanation:

Considering the first and third positions of the dice, it can be concluded that 1 is on the opposite side of 3.

Now consider fig.2 along with fig. 1 and 3, it can be concluded that 6 is on opposite side of 2 and 4 is on opposite side of 5.



Hence, number 5 appears on face opposite the number 4.

12. Answer: c

Explanation:

Differences between the given numbers are multiples of 4, starting from 4.

$$5 + 4 = 9$$

$$9 + 8 = 17$$

$$17 + 12 = 29$$

$$29 + 16 = 45$$

Hence, 17 is the missing number in the series.

13. Answer: b

Explanation:

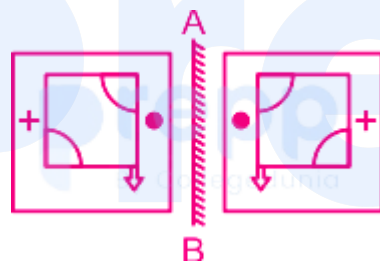
Flying is a form of movement of birds.

Similarly, galloping is a form of movement of horses.

Hence, 'gallop' is related to 'horse'.

14. Answer: d

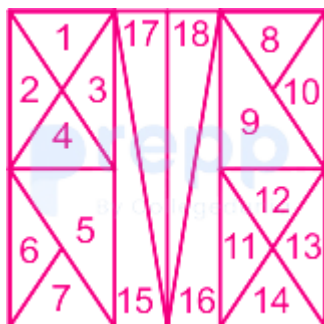
Explanation:

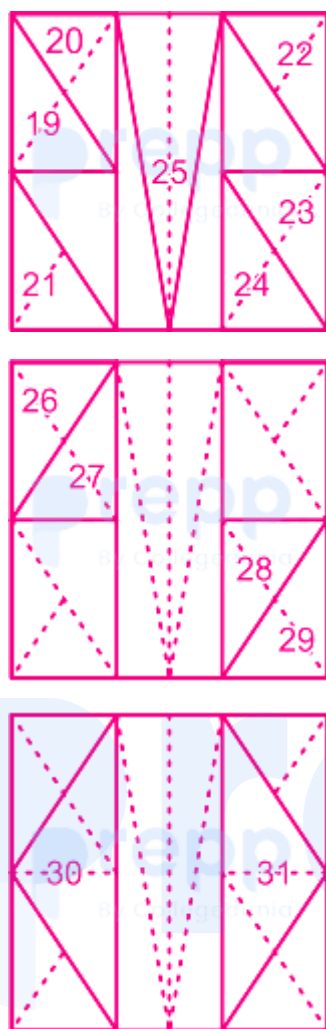


Hence, the figure in option 4 is the correct answer.

15. Answer: c

Explanation:





Hence, there are 31 triangles in the figure.

16. Answer: c

Explanation:

Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

First letter of each term,

$$C + 3 = F; F + 3 = I; I + 3 = L; L + 3 = O$$

Second letter of each term,

$$B + 5 = G; G + 5 = L; L + 5 = Q; Q + 5 = V$$

Third letter of each term,

$$A + 4 = E; E + 4 = I; I + 4 = M; M + 4 = Q$$

Hence, the next term in the series will be **OVQ**.

17. Answer: d

Explanation:

$$17 \times 6 = 102$$

Similarly,

$$23 \times 6 = 138$$

Hence, '138' is the correct answer.

18. Answer: d

Explanation:

Let's check the options one by one,

$$1) \div \text{ and } + \rightarrow 16 \div 3 - 5 \times 2 + 4 \neq 9$$

$$2) \times \text{ and } - \rightarrow 16 + 3 \times 5 - 2 \div 4 \neq 9$$

$$3) \times \text{ and } + \rightarrow 16 \times 3 - 5 + 2 \div 4 \neq 9$$

$$4) \div \text{ and } \times \rightarrow 16 \div 3 - 5 \div 2 \times 4 = 9$$

Hence, ' $\div$ and $\times$ ' is the correct answer.

19. Answer: a

Explanation:



Hence, the figure in option 1 is the correct answer.

20. Answer: b

Explanation:

Logic for coding SUN and TOP are,



Similarly,



Hence, 'F' is the last letter in the code for the word FUR.

21. Answer: a

Explanation:

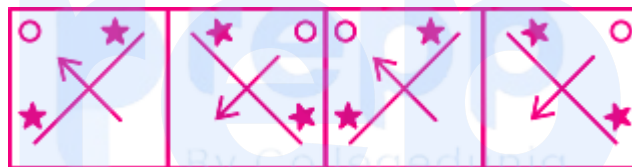


Hence, the figure in option 1 is the correct answer.

22. Answer: b

Explanation:

Figures 1 and 3 are the same. i.e. the figures are repeating in alternate pattern



Hence, the figure in option 2 is the correct answer.

23. Answer: b

Explanation:

From the given codes,

D	O	N
3	4	5

And,

R	O	A	M
6	4	1	2

Similarly,

R	A	N	D	O	M
6	1	5	3	4	2

Hence, the code for RANDOM is 615342.

24. Answer: a

Explanation:

Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

1) PQR: $P + 1 = Q$; $Q + 1 = R$

2) SUW: $S + 2 = U$; $U + 2 = W$

3) FHJ: $F + 2 = H$; $H + 2 = J$

4) KMO: $K + 2 = M$; $M + 2 = O$

Hence, 'PQR' is the odd one among the given options.

25. Answer: d

Explanation:

The logic followed here is:

In a row:

$$\text{2nd number} = (\text{First Number} \times 3) + 1,$$

$$\text{3rd number} = (\text{First Number} \times 9) + 4$$

For Row 1 $\rightarrow$ 9, 28, 85

$$\text{2nd number} = (9 \times 3) + 1 = 27 + 1 = 28$$

$$\text{3rd number} = (9 \times 9) + 4 = 81 + 4 = 85$$

For Row 3 $\rightarrow$ 16, 49, 148

$$\text{2nd number} = (16 \times 3) + 1 = 48 + 1 = 49$$

$$\text{2nd number} = (16 \times 9) + 4 = 144 + 4 = 148$$

Similarly,

For Row 2 $\rightarrow$ 12, 37, ?

$$\text{2nd number} = (12 \times 3) + 1 = 36 + 1 = 37$$

$$\text{2nd number} = (12 \times 9) + 4 = 108 + 4 = 112$$

Hence, the correct answer is "112".

★ Alternate Method

First row: $9 + 19 = 28$ and $28 + 57 = 85$ where $57 = 19 \times 3$

Third row: $16 + 33 = 49$ and $49 + 99 = 148$ where $99 = 33 \times 3$

Similarly,

Second row: $12 + 25 = 37$ and $37 + 75 = 112$ where $75 = 25 \times 3$

Hence, the missing number is 112.

26. Answer: d

Explanation:

- 6th April 1919 was organised as National Humiliation day as a reaction to Rowlatt Act.
 - Rowlatt Act was officially known as the Anarchical and Revolutionary Act, 1919.
 - It was passed in March 1919 by the Imperial Legislative Council.
 - The Act gave the authority to the Britishers to detain anybody suspected of terrorist activities without any trials.
-

27. Answer: b

Explanation:

Nepal is divided into 7 provinces for administrative purposes.

<u>Province</u>	<u>Capital</u>
Province 1	Biratnagar
Province 2	Janakpur
Province 3	Hetauda
Gandaki Pradesh	Pokhara
Province 5	Butwal
Karnali Pradesh	Birendra Nagar
Sudurpaschim Pradesh	Dhangadhi

28. Answer: b

Explanation:

<u>GAMES</u>	<u>TERMS</u>
Cricket	Mid-Wicket, LBW, Wide Ball, No Ball, Yorker
Golf	Putt, Tee, Par, Fore, Links, Handicap
Football	Attackers, Back heels, Back pass, Corner Kick
Table Tennis	Stroke, Topspin, Twiddle, Backspin, Backhand

29. Answer: a

Explanation:

- Amnesty International stripped Aung San Suu Kyi of the Ambassador of Conscience Award given in 2009.
- Amnesty International is a British Non-Governmental Organisation and its work is focused on the protection of Human Rights.
- The move came from the NGO in November 2018 after the failure of Aung San Suu Kyi and her government to speak out about military atrocities against the Rohingya Population in Myanmar.

30. Answer: c

Explanation:

- The maximum strength of the Bangladeshi Parliament is 350.
- It is also known by the name of Jatiya Sangsad.

- It is unicameral in nature with a term limit of 5 years.
 - The first prime minister of Bangladesh was Tajuddin Ahmad.
 - The first president of Bangladesh was Sheikh Mujibur Rahman.
-

31. Answer: a

Explanation:

- The Indian Prime Minister Narendra Modi has been conferred with the award of St Andrew the Apostle in 2019.
 - It is the highest order of the Russian Federation.
 - He was conferred with award for his exceptional services in promoting special and privileged strategic partnership between India and Russia.
-

32. Answer: a

Explanation:

- Janku is a celebration performed by the Newari community when a man or woman turns 77 years old.
 - Some cultural festivals celebrated in Pakistan are Shab-e-Barat, Eid-e-Milad-un-Nabi.
 - Some festivals celebrated in Sri Lanka are Vesak Poya, Poson, Kataragama Esala.
 - Some of the festivals that are celebrated in Bhutan are Paro Tshechu, Punakha Drubchen.
-

33. Answer: c

Explanation:

The correct answer is Option 3 i.e. Intermediate goods

- **Intermediate goods** are the goods sold between industries for the resale or production of other goods.
- These products are also called semi-finished products because they are used as inputs to become part of the finished products.
- Examples of intermediate goods are Salt, Sugar, etc.

34. Answer: d

Explanation:

- The term "Gross Happiness Index" was coined by Jigme Singye Wangchuk in 1972.
- This index is still used by the government of Bhutan to measure the collective happiness and the well-being of a population of Bhutan.
- The first Prime Minister of Bhutan was Jigme Palden Doorji.

35. Answer: d

Explanation:

- Khilafat Movement was organised as a protest against the injustice done to Turkey.
- It was organised by the Indian Muslims in 1919 to recover the Caliph of Turkey as a symbol of unity among Muslim community in India.
- The movement was also supported by Mahatma Gandhi's Non-Cooperation movement.
- It was launched by brothers Shaukat and Muhammad Ali and by Abdul Kalam Azad.
- The movement collapsed in 1924.

36. Answer: b

Explanation:

★ Key Points

- Acharya Vinoba Bhave was the first Indian to be conferred with Ramon Magsaysay Award for his contribution to community leadership.
- Ramon Magsaysay award, also known as the Nobel Prize of Asia is an annual established in the memory of the former Philippine President Ramon Magsaysay.

★ Important Points

- Arvind Kejriwal won Ramon Magsaysay award in 2006.
- Vergheese Kurien is known as the Father of White Revolution in India and he won the Ramon Magsaysay award in 1964.
- Baba Amte was an Indian social worker who won Ramon Magsaysay award in 1985.

37. Answer: d

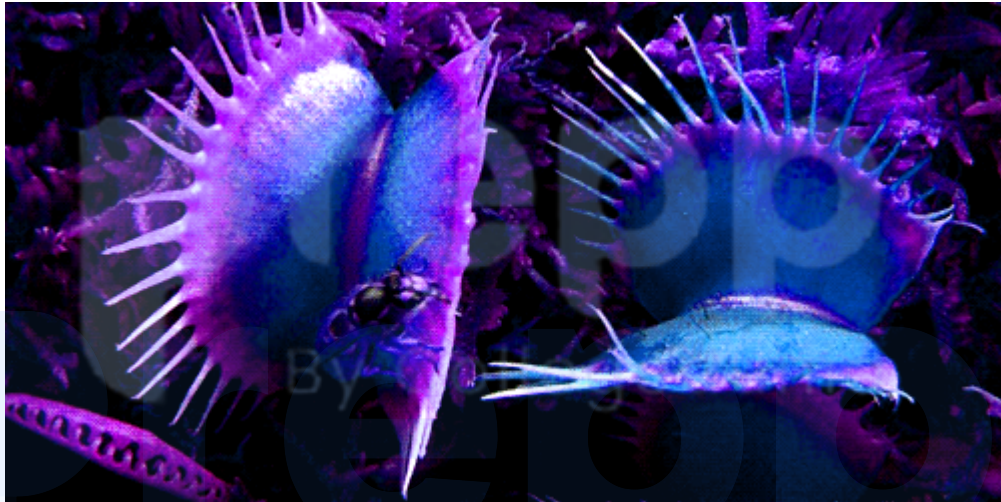
Explanation:

- Karachi Port is the busiest sea port of Pakistan.
- It handles around 60% of the total cargo of Pakistan.
- Qasim port is in Sindh province of Pakistan.
- Keti port is in Sindh province of Pakistan.
- Gwadar port is situated in Balochistan Province of Pakistan.

38. Answer: c

Explanation:

- Venus Flytrap is a carnivorous plant.
- Carnivorous plants are adapted to capture and digest insects and protozoa.
- These plants derive most of their required nutrients by these insects.
- Examples of insectivorous plants are Venus Fly Trap, Pitcher plant, Drosera capensis etc.



39. Answer: c

Explanation:

- The Hindustan Socialist Republican Association was formed in 1928 with an aim to overthrow the British.
- It was founded by Bhagat Singh, Sachindra Nath Sanyal, Chandra Shekhar Azad, and Sukhdev Thapar.
- The HSRA bought out a manifesto known as 'Philosophy of a Bomb' written by Bhagwati Chandra Vohra.

40. Answer: b

Explanation:

- Latitude is defined as the angular distance of a place north or south of Earth's equator.
 - Pole is a point on the either side of the surface of the Earth where lines of longitude meet.
 - The Earth is divided by the 0 degree latitude into equal halves known as Hemisphere.
 - Longitude are defined as the imaginary lines that bisect the globe through the North and South poles.
-

41. Answer: d

Explanation:

- Heena Sidhu was the first female shooter from India to reach number 1 in world ranking by the International Shooting Sport Federation in 2014.
 - She has also won Bronze in Asian Games Jakarta-Palembong 2018.
 - Shreyasi Singh is an Indian Shooter who bagged a gold in double trap event at Gold Coast Commonwealth event 2018.
 - Angali Bhagwati is an Indian Shooter who became world number one in 10m Air rifle in 2002.
 - Anisha Sayyed is an Indian pistol shooter who bagged two gold in 2010 Commonwealth games in Delhi.
-

42. Answer: b

Explanation:

- Sirimavo Bandaranaike was Sri Lanka's first woman prime minister.
- She served three terms: 1960–1965, 1970–1977 and 1994–2000.
- She was also the first woman prime minister of the world.

- First Woman Prime minister of India was Indira Gandhi.
 - First Woman President of India was Pratibha Patil.
-

43. Answer: b

Explanation:

- There are four stages in the process of Metamorphosis of a butterfly.
 - The first stage is the egg.
 - The Butterfly eggs are laid on the plants by the female Butterfly.
 - The second stage is the larva stage in which the butterfly exists in the form of a caterpillar.
 - The Third stage is Pupa which is transitional phase in which the Caterpillar changes into Butterfly.
 - The fourth stage is the Adult stage in which a full grown adult butterfly comes out of the pupa.
-

44. Answer: b

Explanation:

- The Traditional battery contains Sulfuric acid.
 - The Battery acid is 30–50% sulfuric acid (H_2SO_4) in water.
 - The Sulfuric acid is used as an electrolyte.
 - The Traditional battery consists of two metals plates separated by a liquid or gel containing sulfuric acid in water.
 - When the battery is in the use, the electrons move from the negatively-charged plate to the positively-charged plate.
-

45. Answer: d

Explanation:

- Human beings have four types of teeth which are Incisors, Canine, Molar and Premolar.
 - A normal adult mouth has 32 teeth.
 - Incisors (8) help in biting into the food.
 - Canines (4) help in tearing the food.
 - Molars (12) help in grinding the food.
 - Premolars (8) help in crushing the food.
-

46. Answer: d

Explanation:

- Waziri Dance is a traditional dance form of Pakistani Tribe Pashtun.
 - Dhol Chap is the traditional dance form of Brahuis Tribe of Pakistan.
 - Chhej Dance is a traditional dance form of the Sindhi Tribe.
 - Lewa is a traditional dance form of Baloch tribe.
-

47. Answer: a

Explanation:

- Mother Teresa was born in Macedonia on 26 August 1910.
 - She was honoured in the Catholic Church as Saint Teresa of Calcutta.
 - She received the Ramon Magsaysay Peace Prize in 1962 and Nobel Peace Prize in 1979.
 - She became the Indian citizen in 1950 and was awarded Bharat Ratna in 1980.
-

48. Answer: c

Explanation:

- Hibernation is defined as a state of reduced metabolic activity during winter season among some animals.
 - Many organisms are hibernators such as Fishes, Amphibians and Reptiles.
 - Snakes, Frogs and Lizards hibernate in cold weather because they are cold blooded animals.
 - The Hibernators relies on a combination of reserve body fat, stored food supplies etc.
 - Some animals become dormant in the summer season which is called Aestivation.
-

49. Answer: b

Explanation:

- Prithivi Narayan Shah was the last ruler of the Gorkha Kingdom.
 - He started unification of Nepal and became the first monarch of the Kingdom of Nepal.
 - Mahendra Bir Bikram Shah Dev was the king of Nepal ruled from 1955 to 1972.
 - Tribhuvan Bir Bikram Shah was the King of Nepal from 1911 until his death.
 - Rana Bahadur Shah was king of Nepal from 1777 to 1806.
-

50. Answer: a

Explanation:

- Atal Tinkering Labs is an initiative by NITI Aayog to create an environment of scientific temperament, innovation, creativity among Indian students.
- National AYUSH Mission is launched by the Ministry of Health and Family Welfare to promote AYUSH medical systems through cost effective services.
- Reserve Bank of India is the central bank of India.

- Central Board of Secondary Education is national level board of education in India.
-

51. Answer: d

Explanation:

$$\Rightarrow x - 5\sqrt{x} - 1 = 0$$

Divide by $\sqrt{x}$

$$\Rightarrow \sqrt{x} - 5 - 1/\sqrt{x} = 0$$

$$\Rightarrow \sqrt{x} - 1/\sqrt{x} = 5$$

Squaring both the sides

$$\Rightarrow (\sqrt{x} - 1/\sqrt{x})^2 = 5^2$$

$$\Rightarrow x + 1/x - 2 = 25$$

$$\Rightarrow x + 1/x = 27$$

Squaring both the sides again

$$\Rightarrow (x + 1/x)^2 = 27^2$$

$$\Rightarrow x^2 + 1/x^2 + 2 = 729$$

$$\Rightarrow x^2 + 1/x^2 = 727$$

52. Answer: c

Explanation:

$$\Rightarrow \sin^2 60^\circ - \cos^2 45^\circ + \sec^2 60^\circ + \cos^2 40^\circ + \cos^2 50^\circ$$

$$\Rightarrow (\sqrt{3}/2)^2 - (1/\sqrt{2})^2 + 2 + \cos^2(90^\circ - 50^\circ) + \cos^2 50^\circ$$

$$\Rightarrow (3/4) - (1/2) + 2 + \sin^2 50^\circ + \cos^2 50^\circ$$

$$\Rightarrow (3/4) - (1/2) + 2 + 1$$

$$\Rightarrow (3 - 2 + 8 + 4)/4$$

$$\Rightarrow 13/4$$

53. Answer: c

Explanation:

$$\Rightarrow a : b = 4 : 5$$

Suppose $a = 4x$ and $b = 5x$

$$\Rightarrow (2a + 3b) : (3a + 2b)$$

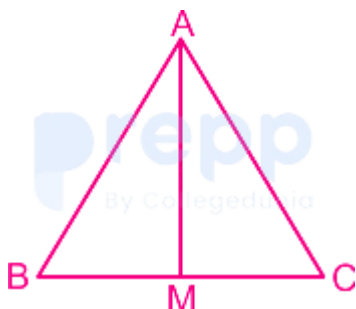
$$\Rightarrow (2 \times 4x + 3 \times 5x) : (3 \times 4x + 2 \times 5x)$$

$$\Rightarrow (8x + 15x) : (12x + 10x)$$

$$\Rightarrow 23 : 22$$

54. Answer: b

Explanation:



As we know,

$$\Rightarrow 2(AM^2 + BM^2) = AB^2 + AC^2$$

$$\Rightarrow 2[AM^2 + (65/2)^2] = 16^2 + 63^2$$

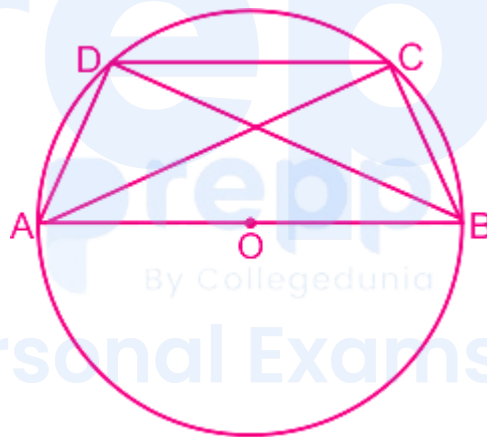
$$\Rightarrow 2[AM^2 + (4225/4)] = 256 + 3969$$

$$\Rightarrow AM^2 = 2112.5 - 1056.25$$

$$\Rightarrow AM = 32.5 \text{ cm}$$

55. Answer: c

Explanation:



Given, $\angle BAC = 15^\circ$

$\Rightarrow \angle ACB = 90^\circ$ [Angle in a semicircle is 90°]

In $\triangle ACB$

$$\Rightarrow \angle ACB + \angle CBA + \angle BAC = 180^\circ$$

$$\Rightarrow \angle CBA = 180^\circ - 90^\circ - 15^\circ = 75^\circ$$

$$\Rightarrow \angle DCA = \angle CAB = 15^\circ \text{ [Alternate interior angle]}$$

$$\Rightarrow \angle DCA = \angle ABD = 15^\circ \text{ and } \angle CAD = \angle DBC$$

$\therefore$ Two inscribed angles forming the same arc or forming two equal arcs are equal.

$$\Rightarrow \angle CBA = \angle DBC + \angle ABD$$

$$\Rightarrow 75^\circ = \angle DBC + 15^\circ$$

$$\Rightarrow \angle DBC = 75^\circ - 15^\circ = 60^\circ$$

$$\Rightarrow \angle CAD = \angle DBC = 60^\circ$$

56. Answer: d

Explanation:

Let radius of sphere be r cm

$$\text{Volume of sphere} = \left[\frac{4}{3} \right] \times \pi r^3$$

If radius increased by 140%

$$\text{New radius of sphere} = r \times \left[\frac{240}{100} \right] = 2.4r$$

$$\text{New volume of sphere} = \left[\frac{4}{3} \right] \times \pi \times (2.4r)^3 = \left[\frac{4}{3} \right] \times \pi \times 13.824 \times r^3$$

$$\text{Volume increased by} = \frac{4}{3}\pi \times 13.824r^3 - \frac{4}{3}\pi r^3 = \frac{4}{3}\pi r^3 (13.824 - 1) = 12.824 \times \frac{4}{3}\pi r^3$$

$$\therefore \text{Required percentage} = \left[\frac{12.824 \times \frac{4}{3}\pi r^3}{\frac{4}{3}\pi r^3} \right] \times 100 = 1282.4\%$$

Short trick :

$$\Rightarrow 140 + 140 + \left[\frac{(140 \times 140)}{100} \right] = 280 + 196 = 476\%$$

$$\Rightarrow 476 + 140 + \left[\frac{(476 \times 140)}{100} \right] = 616 + 666.4 = 1282.4\%$$

57. Answer: a

Explanation:

Given, Total number of students are = 1800

Number of girls in college D = $1800 \times [22/100] \times [5/11] = 180$

Number of girls in college E = $1800 \times [10/100] \times [3/5] = 108$

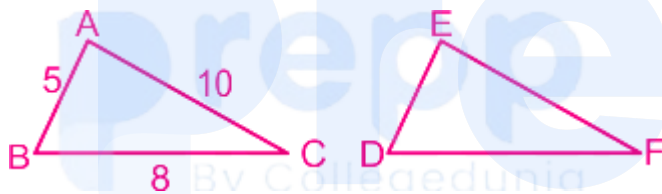
Number of girls in college F = $1800 \times [16/100] \times [7/16] = 126$

Total number of students in colleges D, E and F = $1800 \times (22 + 10 + 16)\% = 864$

Required percentage = $[(180 + 108 + 126)/864] \times 100 = 47.91\%$

58. Answer: a

Explanation:



Given, $AB = 5$, $AC = 10$ and $BC = 8$

If $\triangle ABC \sim \triangle EDF$, then

$$\Rightarrow \text{Ar}(\triangle ABC) / \text{Ar}(\triangle EDF) = BC^2 / DF^2$$

$$\Rightarrow DF^2 = (4 \times 8^2) / 9$$

$$\Rightarrow DF = (2 \times 8) / 3 = 16/3$$

59. Answer: c

Explanation:

Divisibility law of 8: A number divisible by 8 if its last 3 digit is divisible by 4

Divisibility law of 11: If the difference of the alternating sum of digits of the number is a multiple of 11 (e.g. 2343 is divisible by 11 because $2 - 3 + 4 - 3 = 0$, which is a multiple of 11).

$\Rightarrow 6x2904$ is divisible by 11 if $x = 6$

Or

$$\Rightarrow (x + 9 + 4) - (6 + 2 + 0) = 11$$

$$\Rightarrow x = 11 - 5 = 6$$

60. Answer: b

Explanation:

$$\Rightarrow x^3 + 1/x^3 = (x + 1/x)^3 - 3(x + 1/x)$$

$$\Rightarrow x + 1/x = \sqrt{5}$$

$$\Rightarrow x^3 + 1/x^3 = (\sqrt{5})^3 - 3\sqrt{5}$$

$$\Rightarrow x^3 + 1/x^3 = 5\sqrt{5} - 3\sqrt{5} = 2\sqrt{5}$$

61. Answer: a

Explanation:

Without stoppage average speed = 70 km/h

With stoppages average speed = 56 km/h

As we know,

Time of rest per hour equal to the difference in average speed divided by the speed without stoppage.

$$\therefore \text{Required time} = [(70 - 56)/70] \times 60 = 12$$

So, A train stops on an average 12 minute/h.

62. Answer: d

Explanation:

If $a^3 + b^3 + c^3 - 3abc = 0$, then

$$a + b + c = 0 \text{ or } a = b = c$$

$$\Rightarrow (3x - 1)^3 + (4x - 3)^3 + (2x + 1)^3 = 3(3x - 1)(4x - 3)(2x + 1)$$

$$\Rightarrow (3x - 1)^3 + (4x - 3)^3 + (2x + 1)^3 - 3(3x - 1)(4x - 3)(2x + 1) = 0$$

$$\Rightarrow 3x - 1 = 4x - 3$$

$$\Rightarrow x = 2$$

63. Answer: c

Explanation:

Percentage difference between the number of boys and girls in college A = $[(5 - 4)/9] \times 100 = 11.11\%$

Percentage difference between the number of boys and girls in college B = $[(2 - 1)/3] \times 100 = 33.33\%$

Percentage difference between the number of boys and girls in college C = $[(4 - 3)/7] \times 100 = 14.28\%$

Percentage difference between the number of boys and girls in college D = $[(6 - 5)/11] \times 100 = 9.09\%$

Percentage difference between the number of boys and girls in college E = $[(3 - 2)/5] \times 100 = 20\%$

Percentage difference between the number of boys and girls in college F = $[(9 - 7)/16] \times 100 = 12.5\%$

In college D the percentage difference between the number of boys and girls is minimum

Note: As there are only four colleges A, E, D and C our answer must be any one of these. So, no need to calculate for college B and F.

64. Answer: d

Explanation:

Follow BODMAS rule to solve this question, as per the order given below :

Step-1 : Parts of an equation enclosed in 'Brackets' must be solved first, and in the bracket,

Step-2 : Any mathematical 'Of' or 'Exponent' must be solved next,

Step-3 : Next, the parts of the equation that contain 'Division' and 'Multiplication' are calculated,

Step-4 : Last but not least, the parts of the equation that contain 'Addition' and 'Subtraction' should be calculated.

$$\Rightarrow 3.8 - (4.2 \div 0.7 \times 3) + 5 \times 2 \div 0.5$$

$$\Rightarrow 3.8 - (6 \times 3) + 5 \times 4$$

$$\Rightarrow 3.8 - 18 + 20$$

$$\Rightarrow 23.8 - 18$$

$$\Rightarrow 5.8$$

65. Answer: c

Explanation:

Let the initial price of sugar be $100x$.

Price of sugar after increased = $100x \times [118/100] = 118x$

Person wants his expenditure increase by 12% only,

So, his expenditure should be = $100x \times [112/100] = 112x$

$\therefore$ Required percentage = $[(118 - 112x)/118] \times 100 = 5.08\% \approx 5.1\%$

66. Answer: d

Explanation:

SP of each article = Rs. 10,384

CP of first article = $10,384 \times [100/118] = 8800$

CP of second article = $10,384 \times [100/88] = 11,800$

Total SP of both article = $10,384 \times 2 = 20,768$

Total CP of both article = $8,800 + 11,800 = 20,600$

Total gain = $20,768 - 20,600 = 168$

67. Answer: a

Explanation:

Number of boys in college A = $1800 \times [20/100] \times [4/9] = 160$

Number of girls in college A = $1800 \times [20/100] \times [5/9] = 200$

Number of boys in college B = $1800 \times [18/100] \times [1/3] = 108$

Number of girls in college B = $1800 \times [18/100] \times [2/3] = 216$

Total number of boys in college A and B = $160 + 108 = 268$

Total number of girls in college A and B = $200 + 216 = 416$

Required ratio = $268 : 416 = 67 : 104$

68. Answer: d

Explanation:

Average marks of 50 students = 64

Sum of marks of 48 students = $64 \times 50 = 3200$

According to the question

Correct sum of marks of 50 students = $3200 - 38 - 42 + 83 + 24 = 3227$

Correct average marks of 50 students = $3227/50 = 64.54$

Short trick :

$$\Rightarrow 64 + [(83 + 24 - 38 - 42)/50]$$

$$\Rightarrow 64 + [27/50]$$

$$\Rightarrow 64.54$$

69. Answer: b

Explanation:

$$\text{Number of girls in college A} = 1800 \times \frac{20}{100} \times \frac{5}{9} = 200$$

$$10\% \text{ of girls of college A} = 200 \times \left[\frac{10}{100} \right] = 20$$

$$\text{Number of girls in college E} = 1800 \times \left[\frac{10}{100} \right] \times \left[\frac{3}{5} \right] = 108$$

According to question,

$$\text{the increased number of girls in college E} = 20$$

$$\text{Increased in the percentage of girls in college E} = \left(\frac{20}{108} \right) \times 100$$

$$\Rightarrow 18.51\%$$

$$\therefore \text{Increase in percentage of girls} = 18.51\%$$

70. Answer: d

Explanation:

$$\text{Given, } a + b + c = 11 \text{ and } ab + bc + ca = 38$$

As we know,

$$\Rightarrow a^3 + b^3 + c^3 - 3abc = (a + b + c) [(a + b + c)^2 - 3(ab + bc + ca)]$$

$$\Rightarrow 11 [11^2 - 3 \times 38]$$

$$\Rightarrow 11 (121 - 114)$$

$$\Rightarrow 11 \times 7$$

$$\Rightarrow 77$$

71. Answer: c

Explanation:

Given $\tan \theta = 3/4$

$$\frac{4\sin\theta - \cos\theta}{4\sin\theta + \cos\theta}$$

Divide by $\cos \theta$

$$\Rightarrow \frac{4\tan\theta - 1}{4\tan\theta + 1} = \frac{4 \times \frac{3}{4} - 1}{4 \times \frac{3}{4} + 1} = \frac{3-1}{3+1}$$

$$\Rightarrow 2/4$$

$$\Rightarrow 1/2$$

72. Answer: d

Explanation:

SP of the article = Rs. 642.60

Let MP of the article be Rs x

According to the question

$$\Rightarrow x \times [85/100] \times [90/100] = 642.60$$

$$\Rightarrow x = 840$$

73. Answer: c

Explanation:

As we know, the formula of difference between the compound interest and simple interest is

$$\Rightarrow \frac{Pr^2}{(100)^2} = \text{Difference}$$

Given, $r = 9\%$, $t = 2$ years and Difference = 20.25

$$\Rightarrow [P \times 9 \times 9] / [100 \times 100] = 20.25$$

$$\Rightarrow P = 2,500$$



Additional Information

For 3 years,

If $CI - SI = D$, Principle is P ,

Then $r\% = 1/x \times 100$

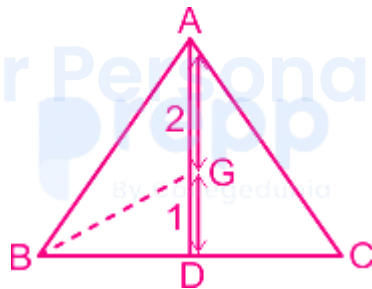
Where,

$$(3x + 1)/x^3 = D/P$$

74. Answer: b

Explanation:

As we know,



AD is median, so AD divides triangle in two equal parts.

$$\text{Ar } \triangle ADB = \text{Ar } \triangle ADC$$

In $\triangle ABD$

$$\Rightarrow \text{Ar } \triangle BDG / \text{Ar } \triangle BGA = DG / AG$$

$$\Rightarrow \text{Ar } \triangle BDG / \text{ar } \triangle BGA = 1/2$$

Let the area of $\triangle BDG$ be 1 unit.

So, area of $\triangle BGA$ will be = 2 unit

So, area of $\triangle BAD = \text{Ar } \triangle BDG + \text{Ar } \triangle BGA = 1 + 2 = 3 \text{ unit}$

Area of $\triangle ABC = 2 \times \text{Ar } \triangle BAD = 2 \times 3 = 6 \text{ unit}$

$\therefore \text{Ar } \triangle ABG : \text{Ar } \triangle ABC = 2 : 6 = 1 : 3$

75. Answer: c

Explanation:

$$\text{If } 2\sin^2\theta = 3\cos\theta$$

$$\Rightarrow 2(1 - \cos^2\theta) = 3\cos\theta$$

$$\Rightarrow 2\cos^2\theta + 3\cos\theta - 2 = 0$$

$$\Rightarrow 2\cos^2\theta + 4\cos\theta - \cos\theta - 2 = 0$$

$$\Rightarrow 2\cos\theta(\cos\theta + 2) - 1(\cos\theta + 2) = 0$$

$$\Rightarrow (2\cos\theta - 1)(\cos\theta + 2) = 0$$

$$\Rightarrow 2\cos\theta - 1 = 0$$

$$\Rightarrow \cos\theta = 1/2$$

$$\Rightarrow \cos\theta = \cos 60^\circ$$

$$\Rightarrow \theta = 60^\circ$$

Short trick

Put $\theta = 60^\circ$

$$\Rightarrow 2 \times (\sqrt{3}/2)^2 = 3 \times 1/2$$

$\Rightarrow 3/2 = 3/2$ (Satisfied)

76. Answer: b

Explanation:

Option 2 is the correct solution.

repudiate means refuse to accept; reject. So, the most appropriate synonym for **repudiate** would be **renounce**.

77. Answer: c

Explanation:

The correct answer is **he was bited**.

★ Key Points

- Option 3 is the segment with the error.
 - **he was bited** is grammatically wrong because past participle of a **bite** is **bitten**.
-

78. Answer: a

Explanation:

Option 1 is the correct solution.

Samaritan means a charitable or helpful person.

veteran means a person who has had long experience in a particular field.

collaborator means a person who works jointly on an activity or project; an associate.

mercenary means primarily concerned with making money at the expense of ethics.

79. Answer: a

Explanation:

Option 1 is the correct solution.

indignant is a feeling or showing anger or annoyance at what is perceived as unfair treatment. so, when watchman was not doing his duty properly the owner was indignant.

80. Answer: a

Explanation:

Option 1 is the correct solution.

The passive form is of order object+auxiliary verb+past participle of verb+subject. Here, the world cup is singular so **has** is used. so, the passive form would be **Has the world cup cricket team been announced?**

81. Answer: c

Explanation:

Option 3 is the correct solution.

prudent means showing care and thought for the future. The most appropriate antonym for **prudent** would be **indiscreet** which means to reveal things that are private or imprudent.

82. Answer: d

Explanation:

Option 4 is the correct solution.

The order of the active form is **subject+verb+object**. Here, the verb used is **taken** which is the past participle of the verb **take**. So, the active form of the sentence would be **The enemy will either take you a prisoner or shoot you.**

83. Answer: a

Explanation:

Option 1 is the correct solution.

patent means a government authority or licences conferring a right or title for a set period to make and sell some invention

copyright means the exclusive and assignable legal right.

inheritance means a thing that is inherited or legacy.

heirloom a valuable object that has belonged to a family for several generations.

84. Answer: a

Explanation:

The correct answer is Mild

★ Key Points

Let's look at the meaning of the following options-

- **Severe-** (of something bad or undesirable) very great; intense; acute, critical
- **Mild-** not severe, serious, or harsh; Lenient
- Hence, the meaning of both i.e. *severe and mild* express the opposite meaning

Let's look at the meaning of other given options-

- **Morose-** unhappy, annoyed, and unwilling to speak or smile
- **Meticulous-** showing great attention to detail; very careful and precise
- **Mediocre-** of only average quality; not very good

85. Answer: c

Explanation:

Option 3 is the correct solution.

We use the simple past tense (in the plural form) of the 'be' verb 'were' when we talk about something which **might not happen at all/does not happen in reality**.

86. Answer: a

Explanation:

Option 1 is the correct solution.

in is the most appropriate option because it specifies the place or where.

87. Answer: c

Explanation:

The correct answer is **pure**.

★ Key Points

Let's refer to the options:

- **Clear:** easy to perceive, understand, or interpret
- **Real:** actually existing as a thing or occurring in fact; not imagined or supposed
- **Pure:** free from anything of a different, inferior, or contaminating kind
- **Plain:** not decorated or elaborate; simple or ordinary in character

The given sentence talks about Portia who is said to have a character like Diana.

According to the passage, **pure** is the most appropriate word to fill in blank No.2

88. Answer: a

Explanation:

Option 1 is the correct solution.

It **has been conveyed to all the residents** is the correct substitution. In the sentence, **now** is used which says it must be in the present tense. So, **has been** must be used.

89. Answer: c

Explanation:

Option 3 is the segment with the error

that where had her mother gone... is grammatically wrong. The correct formation would be --Supriya asked Kiran where her mother had gone when the results of the

contest were being declared.

90. Answer: a

Explanation:

Option 1 is the correct solution.

particular is the correctly spelt word.

91. Answer: a

Explanation:

Option 1 is the correct solution.

Casket test is a definite word so **the** is used.

92. Answer: b

Explanation:

Option 2 is the correct solution.

Explanation:

lament means a passionate expression of grief or sorrow.

Torment means severe physical or mental suffering

Mourn means feel or show sorrow for the death of (someone)

Distress means extreme anxiety, or pain

Afflict means cause pain or trouble to; affect adversely

So, the synonym of **lament** must be **mourn**.

93. Answer: c

Explanation:

Option 3 is the correct solution.

keep the wolf from the door means have enough money to **avert** hunger or starvation.

94. Answer: b

Explanation:

Option 2 is the correct solution.

accommodation is the correctly spelt word.

95. Answer: b

Explanation:

Option 2 is the correct solution.

Under is the most appropriate word to be used and with **to-infinitive** form of the verb must be used. land is singular so **is** must be used. The world's agricultural **land is under pressure to raise** more and more crops.

96. Answer: d

Explanation:

Option 4 is the correct solution.

dispose means to get rid off. So, the sentence would be **I was frustrated at not being able to dispose of my old car.**

97. Answer: c

Explanation:

Option 3 is the correct solution.

The correct order is **BADC**. **B** is an independent sentence so it should be first. **A** is the continuation of **B** as it mentions flames that were mentioned in sentence **D**. so **C** is the last.

98. Answer: d

Explanation:

Option 4 is the correct solution.

'worries' is the most appropriate option because the blank needs a plural simple present tense.

99. Answer: b

Explanation:

Option 2 is the correct solution.

The correct order is **DACB**. **D** is an independent sentence so it should be first. **A** is the continuation of **D** and as the rules were broken so the teacher was angry that was mentioned in sentence **C**. **B** is the last.

100. Answer: a

Explanation:

Option 1 is the correct solution.

ended in smoke means to come to nothing.

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