

RRB GUESS PAPER

NON-TECHNICAL

MATHEMATICS

- A box contains two white balls, three black balls and four red balls. In how many ways can three balls be drawn from the box if atleast one black ball is to be included in the draw?
A. 32
B. 64
C. 48
D. 96
E. None of these
- At what price should shopkeeper mark a radio that costs him Rs. 1,200 in order that he may offer a discount of 20% on the marked price and still make a profit of 25%?
A. Rs. 1,675
B. Rs. 1,875
C. Rs. 2,025
D. Rs. 1,900
E. None of these
- Four of the five parts numbered A, B, C, D and E in the following equation are exactly equal. Which of the parts is not equal to the other four? The number of that part is the answer.
A $(9387 - 7284 + 1125)$
B $(286 \times 18 - 1680 - 240)$
C $(1640 \times 8.5 - 90 \times 140 + 1888)$
D $(1864 + 1058 + 306)$
E $(150\% \text{ of } 1080 + 1510 + 108)$
- The product of two fractions is $\frac{3}{5}$ and the quotient is $\frac{5}{12}$. If the denominator of one is $\frac{1}{3}$ of the other's numerator, which of the following is that pair of fractions?
A. $\frac{1}{3}, \frac{9}{5}$
B.
C.
D. Data inadequate
E. None of these
- What will be the ratio of simple interest earned by certain amount at the same rate of interest for 6 years and that for 9 years?
A. 2:3
B. 1:4
C. 1:3
D. Data inadequate
E. None of these
- How many different combinations of four letters beginning with E can be formed from the letters of the word EQUATION?
A. 630
B. 360
C. 210
D. 336
E. None of these
- When the numerator of a certain fraction is increased by 2 and denominator by 1, its value changes to $\frac{1}{6}$, but when the numerator is increased by 3, and denominator by 5, its value then equals to $\frac{2}{5}$. What is the original fraction?
A. $\frac{1}{6}$
B.
C.
D.
E. None of these
- The length of a rectangular plot is sixty percent more than its breadth. If the difference between the length and the breadth of that rectangle is 24 cms; what is the area of that rectangle?
A. 2400 sq.cm.
B. 2560 sq.cm.
C. 2480 sq.cm.
D. Data inadequate
E. None of these
- If 20 men complete a work in 56 days by working 10 hours a day, how many days will 40 men take to complete the same work by working 8 hours a day?
A. 30
B. 25
C. 48
D. 35
E. None of these
- What should come in place of the question mark (?) in the following equation?
 $5.8 \times 2.5 + 0.6 \times 6.75 + 139.25 = ?$
A. 157.30
B. 160.30
C. 157.80
D. 158.40
E. None of these
- What approximate value should come in place of the question mark (?) in the following equation?
 $137\% \text{ of } 6984 + 2.35 \text{ of } 140.79 + 1138.65 = ?$
A. 10,800
B. 11,000
C. 9,800
D. 11,500
E. 11,200

12. Three-fifth of two-third of one-sixth of a number is 40. What is thirty percent of that number?
 A. 180 D. 160
 B. 240 E. None of these
 C. 480
13. In the following number series a wrong number is given. Find out that wrong number.
 10, 11, 24, 75, 303, 1525, 9156
 A. 24 D. 11
 B. 1525 E. 303
 C. 75
14. Four of the five parts numbered A, B, C, D and E are exactly equal. Which of the parts is not equal to the other four? The number of that part is the answer.
 (4 of 140 + 334) (95% of 500 + 50% of 900)
 A B
 (1860 + 380 - 1290) (2 of 330 + 180)
 C D
 (6.5 × 120 + 2.5 × 80 - 30)
 E
15. A park-square in shape has a 3 metre wide road inside it running along its sides. The areas occupied by the road is 1764 square metres. What is the perimeter along the outer edge of the road?
 A. 576 metres D. Data inadequate
 B. 640 metres E. None of these
 C. 600 metres
16. The average marks obtained by Sudhir in Physics, Chemistry, Mathematics and Geography was 65. The total marks obtained by him in Chemistry and Geography was 110. What were the total marks obtained by him in Physics and Geography?
 A. 120 D. Data inadequate
 B. 105 E. None of these
 C. 140
17. In the following number series a wrong number is given. Find out the wrong number.
 3, 8, 20, 46, 100, 208, 432
 A. 208 D. 20
 B. 46 E. 100
 C. 8
18. In the following number series a wrong number is given. Find out that wrong number.
 4, 6, 18, 90, 486, 3645, 32805
 A. 3645 D. 486
 B. 6 E. 18
 C. 90
19. The average of 20 numbers is 22. The average of first eleven and the last ten of these numbers are 23 and 21 respectively. What is the eleventh number?
 A. 22 D. Data inadequate
 B. 23 E. None of these
 C. 24
20. Samir got 30 percent concession on the labelled price of an article and sold it for Rs. 8,750 with 25 percent profit on the price he bought. What was the labelled price?
 A. Rs. 10,000 D. Data inadequate
 B. Rs. 12,000 E. None of these
 C. Rs. 16,000
21. The total of the present ages of P, Q and R is 78 years. If the difference between the ages of P and R is 14 years, what is Q's age at present?
 A. 24 years D. Data inadequate
 B. 26 years E. None of these
 C. 22 years
22. Three-fifth of a number is 20 percent more than another number. What is the ratio between the first and the second number?
 A. 2:1 D. Data inadequate
 B. 1:2 E. None of these
 C. 3:2
23. In the following number series a wrong number is given. Find out the wrong number.
 14604, 2420, 480, 108, 28, 8, 4
 A. 8 D. 28
 B. 2420 E. 108
 C. 480
24. The sum of three consecutive odd numbers is 38 more than the average of these numbers. What is the first of these numbers?
 A. 13 D. Data inadequate
 B. 17 E. None of these
 C. 19
25. What approximate value should come in place of the question mark (?) in the following equation?
 $\frac{1}{3} \times 5.65 \times 130.79 + 2 \text{ of } 1586.34 = ? - 5558.82$
 A. 8,800 D. 12,400
 B. 11,200 E. 10,000
 C. 9,500
26. Meena can finish a job in 5 days while Reena can finish the same job in 10 days. How many days will both together take to complete the job.
 A. $3\frac{1}{3}$ days D. $3\frac{2}{3}$ days
 B. $2\frac{1}{2}$ days E. None of these
 C. $2\frac{2}{3}$ days
27. What sum of money will yield Rs. $17\frac{4}{5}$ as interest in 5 years at 4% per annum?
 A. Rs.85 D. Rs.79
 B. Rs.89 E. Rs.83
 C. Rs.63
28. A 120 mts long train crosses a tree in 6 seconds. What is the speed of the train in kilometer per hour?
 A. 60km/hr D. 72km/hr
 B. 75km/hr E. 70km/hr
 C. 90km/hr
29. The price of an article goes through an increase of 20% and becomes Rs.780/- calculate the original price?
 A. Rs.600 D. Rs.700
 B. Rs.625 E. None of these
 C. Rs.500

30. The sum of three numbers is 98. If the ratio between the first and the second is 2:3 and that between the second and the third is 5:3, then the second number is
- A. 42
B. 38
C. 49
- D. 45
E. None of these
31. A, B and C together can finish a piece of work in 10 days. If A alone can finish the same work in 30 days and B alone in 40 days, how many days will C take to finish the work alone?
- A. 18 days
B. 45 days
C. 24 days
- D. 36 days
E. None of these
32. By selling a vehicle for 23,800, Madan gains 19% profit. His gain in rupees is
- A. Rs.3800
B. Rs.4250
C. Rs.3600
- D. Rs.2800
E. None of these
33. Anju takes out a loan of Rs.1000 at the beginning of each year at 5% per annum compound interest. Find the accumulated amount, to the nearest of a rupee, she will have at the end of three years,
- A. Rs.3,300
B. Rs.3,510
C. Rs.3,410
- D. Rs.3,310
E. None of these
34. The average age of 7 members of a family is 18 years. If the head of the family is excluded the average age of the rest of the members would be 5 years less. Find the age of the head of the family.
- A. 45 years
B. 48 years
C. 91 years
- D. 78 years
E. None of these
35. A train travels from New Delhi to Karnal at the speed of 80 km/hr & returns at the speed of 76 km/hr. What is the average speed of that train?
- A. 79.95km/hr.
B. 76.95km/hr.
C. 77.95km/hr.
- D. 78.95km/hr.
E. None of these
36. At what percent per annum simple interest will a sum of money double in 12 years?
- A. $8\frac{1}{3}\%$
B. 24%
C. $\frac{25}{3}\%$
- D. 8.25%
E. None of these
37. If 6 years are subtracted from the present age of Gulzar and the remainder is divided by 18, then you get the present age of his grandson Anup. If Anup is two years younger to Mahesh whose age is 5 years, then what is the present age of Gulzar?
- A. 96 years
B. 59 years
C. 84 years
- D. 48 years
E. None of these
38. A certain sum of money is divided between A, B & C. B's share is twice A's & thrice C's. If A's share is Rs.330, then what is the total sum?
- A. 1210
B. 1310
C. 1110
- D. 1410
E. None of these
39. A garrison of 750 men has provision for 20 weeks. If at the end of 4 weeks, they are reinforced by 450 men, how long will the provision last?
- A. 11 weeks
B. 10 weeks
C. 8 weeks
- D. 9 weeks
E. None of these
40. A man deposits Rs.5600 in S.B. of India at 5% per annum rate of interest. He withdraws Rs.3200 after 6 months and the remaining after 12 months. What amount does he get as interest?
- A. 200
B. 2000
C. 2400
- D. 400
E. None of these
41. In an examination the number of those who passed was 4 times the number of those who failed. If there had been 35 fewer candidates and 9 more had failed, the ratio would have been 2:1. Find the total number of candidates.
- A. 135
B. 145
C. 155
- D. 165
E. None of these
42. A contractor undertakes to make a road in 30 days and employs 15 men. After 24 days, he finds that only half of the road is made. How many extra men should he now employ so that he is able to complete the road in time?
- A. 12
B. 30
C. 45
- D. 35
E. None of these.
43. In a group of 70 people, 37 like coffee, 52 like tea and each person likes at least one of the two drinks. How many people like both coffee and tea?
- A. 15
B. 33
C. 19
- D. 18
E. None of these.
44. A rise of 25% in the price of groundnuts compels a person to buy 1.5 kg of groundnuts less for Rs. 48. Find the original price of groundnuts per kg.
- A. Rs.6.40
B. Rs.8.00
C. Rs.7.00
- D. Rs.9.00
E. None of these.
45. Simplify $\frac{\sqrt{5} + \sqrt{3}}{\sqrt{5} - \sqrt{3}}$
- A. $8 + \sqrt{15}$
B. $4 + 2\sqrt{15}$
C. $5 + 2\sqrt{15}$
- D. $4 - 2\sqrt{5}$
E. None of these.

13. **Mercaptans are added to LPG in order to**
 A. increase the calorific value
 B. detect the leakage of gas
 C. add weight
 D. to make it easily combustible
14. **Dust storm is**
 A. dispersion of solid in gas
 B. dispersion of gas in solid
 C. dispersion of solid in liquid
 D. dispersion of gas in liquid
15. **The blue colour of water in the sea is due to**
 A. absorption of other colours except blue by water molecules
 B. scattering of blue light by water molecules
 C. refraction of blue light by impurities in sea
 D. reflection of blue sky by sea water.
16. **The chemical used in photography is**
 A. hypo
 B. sodium sulphate
 C. phthalimide
 D. benzoic acid
17. **Which one of the following ethers is used in perfumery?**
 A. Dimethyl ether
 B. Anisol
 C. Diethyl ether
 D. Ethyl methyl ether.
18. **Aeroplane tyres are made from**
 A. Nylon
 B. Terylene
 C. PVC
 D. Thiokol
19. **Which of the following scientists discovered that ionizing radiations can induce gene mutations?**
 A. H.J.Muller
 B. Lamarck
 C. Darwin
 D. De Vries
20. **How many types of RNA are there?**
 A. 3
 B. 5
 C. 2
 D. 4
21. **Food items such as butter, cheese and rice are spoiled by**
 A. Penicillium
 B. Rhizopus
 C. Yeast
 D. Aspergillus
22. **What is ecological niche?**
 A. Dwelling place of plants and animals
 B. Environment of living beings
 C. Specific habitat with unique function of species
 D. Living conditions of a species
23. **Ostrich is a native of**
 A. Africa
 B. America
 C. New Zealand
 D. Australia
24. **A limbless amphibian is**
 A. Siren
 B. Triturus
 C. Ichthyophis
 D. Ophiosaurus
25. **Ancestor of man who first stood erect was**
 A. Java Man
 B. Australopithecus
 C. Peking Man
 D. Cro-Magnon.
26. **Plica semilunaris is a vestigial structure found in the**
 A. eye of man
 B. ear of rabbit
 C. heart of frog
 D. kidney of pigeon
27. **The basic unit of nervous system is**
 A. Nephron
 B. Brain
 C. Neuron
 D. Diencephalon
28. **“Law of Purity of gametes” is also known as**
 A. Law of segregation
 B. Law of Dominance
 C. Law of Recessiveness
 D. Law of Independent Assortment.
29. **Which of the following is a greenhouse gas?**
 A. Carbon dioxide
 B. Carbon monoxide
 C. Sulphur dioxide
 D. Hydrogen
30. **Colour blindness is a disease usually affecting man, but the gene for it is transmitted to the offspring always through the mother. This is because the particular gene located on**
 A. X-chromosome
 B. Y-chromosome
 C. Both X and Y-chromosomes
 D. Autosomes
31. **Blood group of an individual is determined by**
 A. Shape of RBC
 B. combination of RBC and WBC
 C. genes carried by the individual
 D. presence of haemoglobin
32. **Sweat glands in mammals are primarily concerned with**
 A. regulation of water content
 B. removal of excess salts
 C. killing of bacteria
 D. regulation of body temperature
33. **After the ovulation in the ovary, what is the name of the gland formed in the ovary?**
 A. Corpus callosum
 B. Corpus luteum
 C. Corpus triosum
 D. Corpus albicans
34. **Who was the father of Local Self-Government in India?**
 A. Lord Bentinck
 B. Lord Lytton
 C. Lord Curzon
 D. Lord Rippon
35. **The Third Carnatic War ended with the treaty of**
 A. Paris
 B. Bassein
 C. Aix-la-Chapelle
 D. Surat
36. **Which one of the following is correctly matched/**
 A. Shivaji - Astapradhan
 B. Shah Jahan - Successor of Sher Shah
 C. Aurangzeb - Defeated Nadir Shah
 D. Akbar - First Battle of Panipat.
37. **Akbar introduced a new religious order “Din Ilahi” in order to**
 A. create a loyal band of followers
 B. organise a truly national state
 C. create amity between the Hindus and the Muslims
 D. satisfy the ego of his inquiring spirit to find the truth

38. What was unique to Harappan civilization?
 A. Pictographic Script
 B. Temples
 C. Rectangular town planning
 D. Drainage system
39. Kalidasa lived during the reign of
 A. Asoka
 B. Chandragupta I
 C. Chandragupta II
 D. Samudragupta
40. Indica was written by
 A. Kautilya
 B. Tiruvalluvar
 C. Kambar
 D. Megasthenes
41. Nalanda University was established by
 A. Mauryas
 B. Aryans
 C. Guptas
 D. Nandas
42. The fourth Buddhist Council was organised by
 A. Asoka
 B. Chandragupta
 C. Kanishka
 D. Harsha
43. The Great Bath was discovered at
 A. Mohenjodaro
 B. near Cauvery river
 C. near Godavari river
 D. near Tamiraparani river
44. Which one of the following scripts of ancient India was written from right to left?
 A. Brahmi
 B. Nandnagari
 C. Sharada
 D. Kharoshthi
45. Which one of the following is not a principle of 'Panchsheel'?
 A. Non-alignment
 B. Peaceful co-existence
 C. Mutual respect for each other's territorial integrity and sovereignty
 D. Mutual non-interference in each other's internal affairs.
46. The point where the Western Ghats and the Eastern Ghats are meeting is known as
 A. Anaimalai Hills
 B. Cardamom Hills
 C. Nilgiri Hills
 D. Palani Hills.
47. The Western coastal strip in Maharashtra is known as
 A. Malabar coast
 B. Circar coast
 C. Coromandel coast
 D. Konkan coast
48. Generally over most parts of the earth, rainfall occurs commonly during the season of
 A. summer
 B. winter
 C. spring
 D. autumn

49. Which one of the following is a non-metallic mineral?
 A. Zinc
 B. Tin
 C. Gypsum
 D. Thorium
50. Which of the following is a non-conventional source of energy?
 A. Mineral oil
 B. Water
 C. Coal
 D. Wind

ENGLISH

I. Fill in the blanks with suitable prepositions:

1. The dog ran the road
 A. of
 B. in
 C. off
 D. outside
2. The city was destroyed fire
 A. in
 B. by
 C. through
 D. with
3. He is known all the world ...
 A. across
 B. amidst
 C. over
 D. around
4. We all went
 A. across
 B. in
 C. out
 D. below
5. God is good ... me
 A. to
 B. for
 C. towards
 D. inside.

II. Select the correct question Tag.

6. Malathy worked hard (add question tag)
 A. didn't she?
 B. Is it?
 C. Is it so?
 D. None
7. You are the boss. (add question tag)
 A. Are you?
 B. Aren't you?
 C. Is it you?
 D. None

VIII. Select the correct Tense:

8. The river flows under the bridge.
 A. Present Indefinite tense
 B. Past tense.
 C. Future tense
 D. Present continuous tense.
9. I hear he has passed all right.
 A. Past Indefinite tense
 B. Past continuous tense
 C. Past perfect tense
 D. Past perfect continuous tense
10. I shall answer the letter to-night.
 A. Past Indefinite tense.
 B. Future Indefinite tense.
 C. Future continuous tense
 D. Future perfect tense.