



(Download) Railway Recruitment Board : Junior Engineer (JE)  
Exam Papers-24-MAY-2019

**1. Find the ODD one out from the given options.**

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- A) 177
- B) 153
- C) 159
- D) 121

**2. Which of the following is the time taken for one complete oscillation of a sound wave in the density of the medium?**

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- A) Time period
- B) Wavelength
- C) Frequency
- D) Amplitude

**3. Who was the first Indian bodybuilder to win the Mr.Universe title?**

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- A) Manohar Aich
- B) Monotosh Roy

- C) Moloy Roy
- D) Prem Chand

**4. Where is the pituitary gland located in the human body?**

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- A) On the top of kidneys
- B) At the base of the brain
- C) Near the spleen
- D) In the intestine

**5. Volume of material used in constructing a hollow cylinder of height 24 cm and thickness 1 cm is  $96\pi$ . What is the sum of the internal and external radii?**

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- A) 7 cm
- B) 4 cm
- C) 5 cm
- D) 3 cm

**6. When copper sulphate solution reacts with iron metal, copper metal is formed. Which of the following reactions is this?**

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- A) Combination reaction
- B) Decomposition reaction
- C) Single displacement reaction
- D) Double displacement reaction

**7. Raja Ravi Varma was famous in the field of-**

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- A) Literature
- B) Painting
- C) Dance
- D) Music

**8. Which is the only muscle in the human body that is NOT attached at both the ends?**

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- A) Biceps
- B) Tongue
- C) Triceps
- D) Adductor

**9. Which of the following is NOT a base?**

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- A) NaOH
- B) KOH
- C) NH<sub>4</sub>OH
- D) C<sub>2</sub>H<sub>5</sub>OH

**10. Which of the following will best complete the relationship given below?**

**FDA : MKH :: QOL : ?**

---

- A) XSV
- B) SVX
- C) XVS
- D) QUZ

**11. Ages of P, Q and R are in the ratio 4 : 7 : 9. 8 years ago, the age of R was Q's present age. What is the sum of their ages at present?**

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- A) 80
- B) 100
- C) 60
- D) 50

**12. Complete the series.**

**0.7, 0.75, 0.85, 1, (...)**

---

- A) 1.8
- B) 1.2
- C) 1.6
- D) 1.1

**13. Find the wrong number in the given series.**

**12, 18, 27, 42, 62, 87**

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- A) 27
- B) 42
- C) 18
- D) 87

**14. Two identical items are sold for Rs.200 each, with 10% gain on one but 10% loss on the other. What is the net percentage loss or gain?**

---

- A) 2% loss
- B) 1% loss
- C) 2% gain
- D) 1% gain

**15. Find the value of  $\frac{1}{1 \times 2} + \frac{1}{2 \times 3} + \frac{1}{3 \times 4} + \frac{1}{4 \times 5} + \frac{1}{5 \times 6} + \dots + \frac{1}{9 \times 10}$**

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- A) 5/11
- B) 2/5
- C) 9/10
- D) 1/10

**16. Which of the following metals is the lightest in the periodic table of elements?**

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- A) Magnesium
- B) Lithium
- C) Titanium
- D) Aluminium

**17. If 'THRASH' is coded as 'UGSZTG', how will 'HEAD' be coded?**

---

- A) GDBC
- B) GDZC
- C) IDBC
- D) IECD

**18. Which of the following is equal to a measurement of 1 mA?**

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- A) 103 A
- B) 10<sup>-3</sup> A
- C) 106A
- D) 10<sup>-6</sup> A

**19. Choose the correct order of signs from the options so as to make the equation correct.**

$$18 - 5 \times 50 = 40$$

---

- A) -, x, =
- B) x, -, =
- C) =, -, x
- D) x, =, -

**20. What did Archimedes determine after discovering the Archimedes principle?**

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- A) Purity of gold in the king's crown
- B) Design concept of ship
- C) Purity of milk
- D) Design concept of submarine

**21. Read the following information carefully and answer the question given below.**

---

Eight friends—A, B, C, D, E, F, G and H are sitting around a circular table facing the centre. Each one of them likes different brands of air conditioner—Daikin, Samsung, Blue Star, Godrej, Onida, Panasonic, Voltas and Whirlpool, but not necessarily in the same order. A sits third to the right of the person who likes Whirlpool. A does not like Blue Star. E is not an immediate neighbour of H. C sits on the immediate right of the person who likes Blue Star. Neither A nor H likes Onida or a Samsung. The person who likes Onida is not an immediate neighbour of the person who likes Whirlpool. The person who likes Daikin sits second to the left of E. The person who likes Daikin is an immediate neighbour of the both persons who like Panasonic and Voltas. Person who likes Voltas sits third to the right of B. B does not like Onida. F is not an immediate neighbour of A. G is not an immediate neighbour of the person who likes Daikin. Only two people sit between the person who likes Voltas and H. The

persons who like Onida and the Samsung are immediate neighbours of each other.

Who among the following sits on the immediate right of A?

- A) G
- B) D
- C) B
- D) H

**22. Which of the following component imparts green colour to leaves?**

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- A) Chlorophyll
- B) Urea
- C) Water
- D) Nitrogen

**23. Which part of the human ear vibrates according to the sound received?**

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- A) Tympanic membrane
- B) Pinna
- C) Auditory nerve
- D) Hammer

**24. The Fiber Grid internet system was introduced by which Chief Minister in India?**

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- A) Chandrababu Naidu
- B) Arvind Kejriwal
- C) Raman Singh
- D) Manohar Parrikar

**25. The cash difference between the selling prices of an article at a profit of 4% and 6% is Rs.3. Find the ratio of the two selling prices.**

---

- A) 51 : 52
- B) 51 : 53

- C) 52 : 55
- D) 52 : 53

**26. The amplitude of the sound wave depends on the-**

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- A) Object's material
- B) Object's temperature
- C) Force with which an object is made to vibrate
- D) Object's quality

**27. Two numbers are in the ratio 4 : 5. Their LCM is 180. What is their sum?**

---

- A) 90
- B) 72
- C) 70
- D) 81

**28. A number when divided by 234 gives the remainder 36. What will be the remainder when it is divided by 13?**

---

- A) 9
- B) 6
- C) 11
- D) 10

**29. Who was the first person to observe 'Individual Satyagraha'?**

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- A) Govind Ballabh Pant
- B) Sardar Vallabhbhai Patel
- C) Mahatma Gandhi
- D) Vinoba Bhave

**30. In which of the following cities has ISRO launched Human Space Flight Centre in 2019?**

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- A) Bengaluru
- B) Mumbai

- C) Hyderabad
- D) Chennai

**31. Simplify :-  $\sqrt{25+10\sqrt{6}} + \sqrt{25-10\sqrt{6}}$**

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- A)  $\sqrt{50}$
- B)  $2\sqrt{15}$
- C)  $\sqrt{55}$
- D)  $2\sqrt{5}$

**32. Which hormone regulates the amount of sugar in human blood?**

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- A) Insulin
- B) Parathormone
- C) Estrogen
- D) Testoterone

**33. The second most abundant element in the earth's crust is-**

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- A) Aluminium
- B) Silicon
- C) Iron
- D) Oxygen

**34. If  $\tan \alpha = 1/2$ ,  $\tan \beta = 1/3$ , then find  $\alpha + \beta$ .**

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- A)  $90^\circ$
- B)  $45^\circ$
- C)  $0^\circ$
- D)  $135^\circ$

**35. On what principal will the difference between Compound Interest and Simple Interest at 10% rate in 3 years be equal to Rs.620?**

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- A) Rs.25000
- B) Rs.24000



- C) Rs.18000
- D) Rs.20000

**36. Repetition of sound produced by reflection of sound waves is called-**

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- A) Echo
- B) Noise
- C) Note
- D) Double

**37. In this question, two statements are given followed by two conclusions. Choose the conclusion(s) which best fit(s) logically.**

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**Statements:**

- 1) All flowers are candles.
- 2) No candle is lantern.

**Conclusions:**

- I. No flower is lantern.
- II. All candles are flowers.
- A) Neither conclusion I nor II follows
- B) Both conclusions I and II follow
- C) Only conclusion I follows
- D) Only conclusion II follows

**38. In which city was the 10th Biennial International Exhibition and Conference “India Chem 2018” held?**

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- A) Kolkata
- B) Chennai
- C) Delhi
- D) Mumbai

**39. In this question, a statement is given followed by two conclusions. Choose the conclusion(s) which best fit(s) logically.**

---

**Statement:**

This world is neither good nor evil; each man manufactures a world for himself.

**Conclusions:**

I. Some people find this world good.

II. Some people find this world bad.

- A) Only conclusion I follows
- B) Both conclusions I and II follow
- C) Either conclusion I or II follows
- D) Only conclusion II follows

**40. Find the missing group of alphabets in the following series.**

**VA, ND, (...), DP, BY**

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- A) TU
- B) SE
- C) HI
- D) NR

**41. Complete the series.**

**168, 151, 134, 117, (...)**

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- A) 97
- B) 95
- C) 100
- D) 82

**42. Lanthanides and actinides are also called**

\_\_\_\_\_.

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- A) Inner transition elements
- B) Normal elements
- C) Transition elements
- D) Noble gases

**43. Mushroom is a/an-**

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- A) Slime mould
- B) Fungus

- C) Plant
- D) Animal

**44. Find the ODD one out from the given options.**

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- A) 13
- B) 7
- C) 9
- D) 11

**45. Amindivi and Minicoy are parts of which Indian Union Territory?**

---

- A) Chandigarh
- B) Lakshadweep
- C) Andaman and Nicobar
- D) Daman and Diu

**46. What is the medico-legal name given to the dissection and study of a dead human body?**

---

- A) Autolepsy
- B) Analysis
- C) Autopsy
- D) Causa medico

**47. Choose the pair in which the words show the same relationship as in the pair given below.**

**Cholera : Water**

---

- A) Medicine : Disease
- B) Malaria : Mosquito
- C) Poison : Death
- D) Cat : Plague

**48. Around a circular track of 120 m, P and Q start running simultaneously from the same point in the same direction at 20 m/min and 12 m/min. At how many points will they meet?**

---

- A) 2
- B) 4
- C) 3
- D) 1

**49. Travelling at  $\frac{3}{4}$  of the normal speed, a person reaches his workplace 15 minutes late. How many minutes does he take usually to reach the workplace?**

---

- A) 30 minutes
- B) 60 minutes
- C) 42 minutes
- D) 45 minutes

**50. Read the following information carefully and answer the question given below.**

---

Eight friends—A, B, C, D, E, F, G and H are sitting around a circular table for a meeting facing center. A is second to the right of G who is third to the right of B. D is second to the left of F who sits between G and A. C is not a neighbour of B or E.

Who is to the immediate left of B?

- A) H
- B) E
- C) D
- D) C

**51. A's age : B's age is 4 : 3. After 6 years, A will be 26 years. What is B's present age?**

---

- A) 9
- B) 12
- C) 18
- D) 15

**52. Which of the following is used in alcoholic drinks?**

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- A) Methanol
- B) Ethanol
- C) Propanol
- D) Butanol

**53. Which was India's first National Park?**

---

- A) Kaziranga National Park
- B) Kanha National Park
- C) Gir National Park
- D) Jim Corbett National Park

**54. Arthritis is a disease that affects the-**

---

- A) Kidneys
- B) Brain
- C) Lungs
- D) Joints

**55. Choose the alternative that best replaces the question mark(?) in the given figure.**

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144	49	36	25
529	196	?	42
961	256	121	58

- A) 25
- B) 32
- C) 34
- D) 30

**56. Who among the following was the first cricketer to score a century for India in a test match?**

---

- A) Deepak Shodhan
- B) Lala Amarnath

- C) Surinder Amarnath
- D) Hanumant Singh

**57. Which of the following reactions is commonly used in the hydrogenation of vegetable oils using a nickel catalyst?**

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- A) Oxidation reaction
- B) Substitution reaction
- C) Addition reaction
- D) Displacement reaction

**58. Which of the following parts of Constitution is associated with the Union territories?**

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- A) Part VIII
- B) Part IX
- C) Part VI
- D) Part IV

**59. If 'ROPE' is coded as 6821 and 'CHAIR' is coded as 73456, then what will be the code for 'CRAPE'?**

---

- A) 77123
- B) 77246
- C) 76421
- D) 73456

**60. If  $\frac{1}{7}$  of a number is subtracted from the number, the result is 30 less than the number. Find the number.**

---

- A) 210
- B) 120
- C) 140
- D) 105

**61. What is the power of a lens whose focal length is 1 m?**

---

- A) 1D
- B) 4D
- C) 2D
- D) 3D

**62. If a sum becomes 4 times in years what is the rate of simple interest given ?**

---

- A) 20%
- B)  $40/3\%$
- C) 10%
- D) 15%

**63. What is the area of a regular hexagon of side 6 cm?**

---

- A)  $54\sqrt{3} \text{ cm}^2$
- B)  $108\sqrt{3} \text{ cm}^2$
- C)  $64\sqrt{3} \text{ cm}^2$
- D)  $72\sqrt{3} \text{ cm}^2$

**64. When a three quarter moon is visible, what is it called?**

---

- A) Gibbous moon
- B) Half moon
- C) Crescent moon
- D) Full moon

**65. If  $x - \frac{1}{x} = 3$ , then find the value of  $X^4 + \frac{1}{X^4}$**

---

- A) 129
- B) 123
- C) 119
- D) 14

**66. P and Q invested in a business in the ratio 5 : 13. Q withdrew his capital after 6 months. If they shared their profit in the ratio 25 : 26, for how long was P's amount used?**

---

- A) 8 months
- B) 15 months
- C) 12 months
- D) 18 months

**67. By how much is four-sevenths of 420 exceeds three-fifths of 200?**

---

- A) 80
- B) 120
- C) 60
- D) 90

**68. Complete the series.**

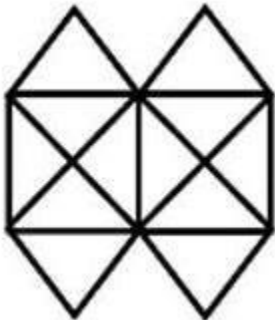
**1, 3, 7, 15, 31, (...)**

---

- A) 63
- B) 127
- C) 39
- D) 47

**69. How many triangles are there in the given figure.**

---



- A) 20
- B) 16
- C) 24
- D) 12

**70. What is the chemical formula of bleaching powder?**

---

- A)  $\text{CCl}_4$
- B)  $\text{CaCl}_2$



- C)  $\text{CaOCl}_2$
- D)  $\text{Ca}(\text{OH})_2$

**71. P, Q, R and S can do a piece of work in 20 days. If P and Q together can do it in 50 days, and R alone in 60 days, then in how many days can S alone do it?**

---

- A) 60
- B) 65
- C) 90
- D) 75

**72. P, Q and R can do a work in 15, 20 and 30 days respectively. The contractor decides to put any two of them on the job so as to finish the work earlier. Which of these choices is the best?**

---

- A) RP
- B) Either PQ or QR
- C) QR
- D) PQ

**73. In a survey conducted in a locality, it was found that 50% read newspaper A, 40% read newspaper B, and 20% read neither A nor B. If the number of persons who read both A and B is 500, then how many persons were surveyed?**

---

- A) 3000
- B) 4500
- C) 5000
- D) 7000

**74. Who was the first Indian footballer to receive the Arjuna Award?**

---

- A) Jarnail Singh
- B) P.K. Bannerjee
- C) Sailen Manna
- D) Tulsidas Balaram

**75. The study of relationship of animals with their environment is called-**

---

- A) Entomology
- B) Ecology
- C) Ethology
- D) Climatology

**76. P and Q together can complete some work in 30 days. Q and R together can do the same in 24 days. R and P together will take 20 days to complete it. If they all work together, in how many days will the job get done?**

---

- A) 15
- B) 25
- C) 16
- D) 8

**77. Which material is used as a moderator in a nuclear power plant that slows down the neutrons and makes them fit for causing fission?**

---

- A) Silicon
- B) Beryllium
- C) Graphite
- D) Boron

**78. Find the LCM of  $(22 \times 32 \times 5 \times 7)$ ,  $(22 \times 3 \times 52 \times 7)$  and  $(2 \times 3 \times 5 \times 7)$ .**

---

- A) 7200
- B) 6300
- C) 8400
- D) 9000

**79. Atomic number of an element is equal to the number of \_\_\_\_\_ in the nucleus.**

---

- A) Electron
- B) Neutrons
- C) Protons
- D) Electrons and protons

**80. Simplify:  $\sin(A + B) \sin(A - B)$**

---

- A)  $\cos 2A$
- B)  $\sin^2 A - \sin^2 B$
- C)  $\sin^2 A + \sin^2 B$
- D)  $\cos^2 A - \cos^2 B$

**81. If an object starts moving and if there is no friction at all, what happens?**

---

- A) The object stops after sometime
- B) The object starts flying
- C) The object can never stop
- D) The object stops immediately

**82. Simplify:  $0.004 \times 0.5$**

---

- A) 2
- B) 0.002
- C) 0.02
- D) 0.2

**83. The Sun and the stars glow because of the presence of \_\_\_\_\_ in them.**

---

- A) Gases
- B) Plasma
- C) Electricity
- D) Light energy

**84. The base of a right pyramid is a square with diagonal 16 units. Its slant edge is 17 units. What is its vertical height?**

---

- A) 12
- B) 30
- C) 15
- D) 25

**85. Find the ODD one out from the given options.**

---

- A) HJL
- B) OQS
- C) PRT
- D) WYZ

**86. In this question, a statement is given followed by two conclusions. Choose the conclusion(s) which best fit(s) logically.**

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**Statement:**

Candidates should be young, energetic and dynamic in the age group of 27 to 32 years.

**Conclusions:**

- I. Persons below 27 years are not energetic.
  - II. Persons above 32 years are not young.
- A) Only conclusion II follows
  - B) Both conclusions I and II follow
  - C) Neither conclusion I nor II follows
  - D) Only conclusion I follows

**87. Which of the following taxes was levied, collected and retained by the Central Government?**

---

- A) Taxes on agriculture income
- B) Corporate tax
- C) Entertainment tax
- D) Land revenues

**88. A boy is standing at a platform and sees his watch showing 3:45 PM. The hour hand points east and the minute hand points west. Which direction the boy is facing now?**

---

- A) East
- B) North
- C) South east
- D) South west

**89. What is the atomicity of Helium?**

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- A) Tri atomic
- B) Di atomic
- C) Polyatomic
- D) Mono atomic

**90. Which of the following can be used for biological control of mosquitoes?**

---

- A) Gambusia
- B) Ointments
- C) D. D. T
- D) Oil

**91. Rustom-2 is a/an \_\_\_\_\_ developed by India's Defence Research and Development Organisation (DRDO).**

---

- A) Anti-missile tank
- B) Air-to-Air missile
- C) Unmanned Combat Aerial Vehicle
- D) Light weight vehicle

**92. Iodine is used to test the presence of \_\_\_\_\_ in food.**

---

- A) Starch
- B) Vitamin
- C) Fat
- D) Protein

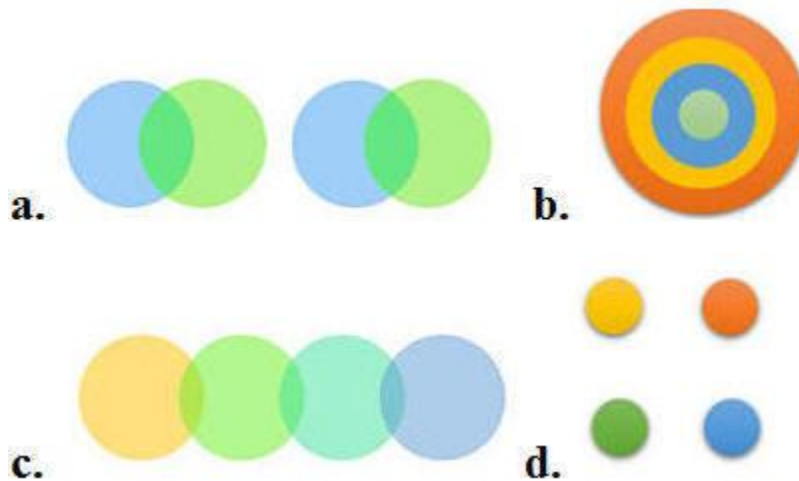
**93. Gas leaked during Bhopal tragedy was-**

---

- A) Methyl isocyanate
- B) Ethyl isothiocyanate
- C) Sodium isothiocyanate
- D) Potassium isothiocyanate

**94. Choose the figure the best represents the relationship among the classes given below: vegetable, women, Lion, Parrot**

---



**95. Find the wrong group of alphabets in the following series.**

**BZ, DV, ES, HN, JJ**

---

- A) HN
- B) BZ
- C) ES
- D) JJ

**96. Find the value of  $\sin(180^\circ - \theta) \cos(90^\circ - \theta) - \cos(180^\circ - \theta) \sin(90^\circ - \theta)$ .**

---

- A)  $\cos \theta$
- B)  $\tan \theta$
- C) 0
- D) 1

**97. Anitha walks 4 km towards north direction and turns left. After reaching 2 km, she turns right and walks 5 km. Which direction is she standing from the starting point?**

---

- A) North east
- B) South east
- C) South west
- D) North west

**98.  $x^3 + 5x^2 - 2x - 24$  has a zero at  $x = 2$ . Find the other zeros.**

---

- A) 3, 4
- B) -3, 5
- C) -2, -3
- D) -3, -4

**99. In a certain code, 'ITNIETAM' is coded as 'INTIMATE'. How will 'TREVNIETARBI' be coded?**

---

- A) INVRETIBRATE
- B) INVERTIBARTE
- C) INVERTIBRETA
- D) INVERTIBRATE

**Answer:-**

**1. (d), 2. (a), 3. (b), 4. (b), 5. (b), 6. (c), 7. (b), 8. (b), 9. (d), 10. (c)**

11. (a), 12. (b), 13. (c), 14. (b), 15. (c), 16. (b), 17. (c), 18.  
(b), 19. (b), 20. (a)  
21. (b), 22. (a), 23. (a), 24. (a), 25. (d), 26. (c), 27. (d), 28.  
(d), 29. (d), 30. (a)  
31. (b), 32. (a), 33. (b), 34. (b), 35.(d), 36. (a), 37. (c), 38.  
(d), 39. (b), 40. (c)  
41. (c), 42. (a), 43. (b), 44. (c), 45. (b), 46. (c), 47.(b), 48.  
(a), 49. (d), 50. (a)  
51. (d), 52. (b), 53. (d), 54. (d), 55. (a), 56. (b), 57. (c), 58.  
(a), 59. (c), 60. (a)  
61. (a), 62. (d), 63. (a), 64. (a), 65. (c), 66. (b), 67. (b), 68.  
(a), 69. (a), 70. (c)  
71. (d), 72. (d), 73. (c), 74. (b), 75. (b), 76. (c), 77. (c), 78.  
(b), 79. (c), 80. (b)  
81. (c), 82. (b), 83. (b), 84. (c), 85. (d), 86.(c), 87. (b), 88.  
(b), 89. (d) 90. (a)  
91. (c), 92. (a), 93. (a), 94. (d), 95. (c), 96. (d), 97. (d), 98.  
(d), 99. (d)

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