RAILWAY RRB: MODEL PAPER 1

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General Awareness

- **1.** What is the venue of 73rd Annual Golden Globe Awards ceremony?
 - a) Beverly Hills, California, United States
 - b) Canada, Beverly Hills, Unites States
 - c) California, Canada, Beverly Hills
 - d) India, Beverly Hills, California
 - e) None of The Abovc
- 2. Who is the Governor of Jammu & Kashmir?
 - a) Mufit Mohammad Syed
 - b) K. L. Lohtia
 - c) N. N. Vohra
 - d) Upendar Sinha
 - e) None of The Above
- **3.** Who won Brisbane International Tennis Championship 2016?
 - a) Sania Mirza
 - b) Martina Hingis
 - c) Maria Sharapova
 - d) Both (a) and (b)
 - e) None of The Above
- **4.** Who is brand ambassador of UC Browser now?
 - a) Akshay Kumar
 - b) Yuvraj Singh
 - c) Ajay Jadega
 - d) Salman Khan
 - e) None of The Above
- **5.** _____is the president of Craotia:
 - a) Kolinda Grabar Kitarovic
 - b) Trudeau

- c) Xi Jinping
- d) Shinjo Abey
- e) None of The Above
- **6.** What is the capital of Canda?
 - a) Lisbon
 - b) Canberra
 - c) Ottawa
 - d) Abu Dhabi
 - e) None of The Above
- 7. What is the purpose of River Information System Scheme recently launched?
 - a) Safe and Accurate Inland Waterway Navigation
 - b) Safe and Clean Drinking Water for Rural as well as Urban Areas
 - c) To Conserve the Water
 - d) Optimum Utilization of Water for Irrigation
 - e) None of The Above
- 8. Who publishes Global Economic Prospect Report?
 - a) UN
 - b) World Bank
 - c) World HR
 - d) World Economists
 - e) None of The Above
- 9. Which Indian former Cricketer inducted into ICC Hall of Fame in 2015?
 - a) Sachin Tendulkar
 - b) Sunil Gavaskar
 - c) Anil Kumble
 - d) Ajit Agarkar
 - e) None of The Above
- 10. What is the name of joint military exercise of India & France?
 - a) Shakti 2016
 - b) Akash 2016

- c) Saahas 2016
- d) Hosla 2016
- e) None of The Above
- 11. Who won Best Actor Screen Award?
 - a) Shah Rukh Khan & Ajay Devgan
 - b) Akshay Kumar & Salman Khan
 - c) Varun Dhawan & Arjun Kapoor
 - d) Ranveer Singh & Amitabh Bachchan
 - e) None of The Above
- **12.** Who has been conferred with the Central Banker of The Year Award (Global and Asia Pacific) for year 2016?
 - a) Raghuram Rajan
 - b) Upendar Kumar Sinha
 - c) D. Subbarao
 - d) Bimal Jalan
 - e) None of The Above
- 13. The currency of Canada is:
 - a) Dollar
 - b) Pound
 - c) Euro
 - d) Dinar
 - e) None of The Above
- 14. Which country has won the top UNESCO prize 'Award of Excellence' 2015?
 - a) USA
 - b) Japan
 - c) Sri Lanka
 - d) India
 - e) None of these

15. 7	The NASA's spacecraft which discovered the presence of neon on the moon's
8	atmosphere is?
	a) LADEE
	b) LADER
	c) LADAA
	d) LADSR
	e) None of these
16. U	Union government recently launched a telemedicine initiative under the name?
	a) AYUSH
	b) e-Swasthya
	c) Sehat
	d) Tele Medicine
	e) None of these
17.	World Water Day is Observed on
	a) 1st December
	b) 24th March
	c) 5th September
	d) 22nd March
	e) None of these
10	Name the largest lake in India
10.	a) Chandra Taal
	b) Wular Lake
	c) Dal Lake
	d) Pandoh Lake
	e) None of these
	c) None of these
19.	The "Buchi Babu Memorial Trophy" is associated with which sports?
	a) Badminton
	b) Cricket
	c) Hockey

- d) Tennis
- e) None of these
- **20.** India's first multi social payment app 'Ping Pay' launched by _____?
 - a) Union Bank
 - b) Corporation Bank
 - c) SBI
 - d) ICICI
 - e) Axis Bank

Arithmetic Ability

- **21.** A shopkeeper gives two successive discounts on an article marked Rs. 450. The first discount given is 10%, if the customer pays Rs. 344.25 for the article, then second discount is:
 - a) 12%
 - b) 11%
 - c) 15%
 - d) 10%
 - e) None of The Above
- 22. Akshay purchased a horse and a carriage for Rs. 1800. He sold the horse at a profit of 20% and the carriage at a profit of 30%. His total profit was $25\frac{5}{6}$ %. The cost price of the horse is:
 - a) Rs. 1050
 - b) Rs. 1200
 - c) Rs. 750
 - d) Rs. 975
 - e) Rs. 1125

- **23.** A man buys some mangoes @ 9 for a rupee and an equal number @ 7 for a rupee. After that, he sells them @ 8 for a rupee. His gain or loss percent is:
 - a) 0
 - b) 3 ¹ ₈ % Gain
 - c) $3^{1}_{8}\%$ Loss
 - d) 1 ⁹ 16 % Loss
 - e) 25 16 % Gain
- **24.** Two fill pipes A and B can fill a tank in 30 and 20 hours respectively. Pipe B alone is kept open for half the time and both pipes are kept open for the remaining time. In how many hours, the tank will be completely full.
 - a) 25h
 - b) 15h
 - c) 40h
 - d) 28h
 - e) 35h
- **25.** Three taps A, B and C can fill a tank in 12, 15 and 20h respectively. If A is open all the time and B and C are open for one hour each alternatively, the tank will be filled in:
 - a) 6h
 - b) 7h
 - c) 5h
 - d) 9h
 - e) None of The Above

- **26.** If 8 men or 17 boys can do a piece of work in 26 days, how many days will it take for 4 men and 24 boys to complete a piece of work 50×0.9 time great?
 - a) 680 days
 - b) 612 days
 - c) 68 days 80 days
 - d) 50 days
 - e) None of The Above
- **27.** The square root of $(7 + 3\sqrt{5})(7 3\sqrt{5})$ is
 - a) $\sqrt{5}$
 - b) 2
 - c) 4
 - d) $3\sqrt{5}$
 - e) None of these
- **28.** $\sqrt{0.0169 \times ?} = 1.3$
 - a) 10
 - b) 100
 - c) 1000
 - d) 10000
 - e) None of these
- **29.** $\sqrt{81} + \sqrt{0.81} = 10.09 x$
 - a) 0.019
 - b) 0.19
 - c) 0.9
 - d) 0.109
 - e) None of these

- **30.** What is the smallest number by which 3600 be divided to make it a perfect cube?
 - a) 450
 - b) 445
 - c) 440
 - d) 430
 - e) None of these
- **31.** The average age of 8 men is increased by 2 years when two of them whose ages are 21 years and 23 years are replaced by two new men. The average age of the two new men is :
 - a) 22 years
 - b) 24 years
 - c) 28 years
 - d) 30 years
 - e) None of these
- **32.** 10 years ago, the average age of a family of 4 members was 24 years. Two children having been born (with age difference of 2 years), the present average age of the family is the same. The present age of the youngest child is:
 - a) 1 year
 - b) 2 years
 - c) 3 years
 - d) 5 years
 - e) None of these
- **33.** The average age of 30 students of a class is 30 years. When the average age of class teacher is also included, the average age of the whole class increases by 1 year. The age of the class teacher is :
 - a) 31 years
 - b) 60 years
 - c) 61 years
 - d) 65 years
 - e) None of these

- **34.** The ratio of the ages of a man and his wife is 4 : 3. After 4 years, this ratio will be 9 : 7. If at the time of marriage, the ratio was 5 : 3, then how many years ago were they married?
 - a) 8 years
 - b) 10 years
 - c) 12 years
 - d) 15 years
 - e) None of these
- **35.** Pooja, Shipra and Monika are three sisters. Pooja and Shipra are twins. The ratio of sum of the ages of Pooja and Shpra is same as that of Monika alone. Three years earlier theratio of age of Pooja and Monika was 2 : 7. What will be the age of Shipra 3 years hence?
 - a) 21 years
 - b) 16 years
 - c) 8 years
 - d) 12 years
 - e) None of these
- **36.** At present, the ratio between the ages of Arun and Deepak is 4 : 3. After 6 years, Arun's age will be 26 years. What is the age of Deepak at present?
 - a) 12 years
 - b) 15 years
 - c) $19\frac{1}{2}$ years
 - d) 21 years
 - e) None of these
- **37.** The ratio between the school ages of Neelam and Shaan is 5 : 6 respectively. If the ratio between the one-third age of Neelam and half of Shaan's age is 5 : 9, then what is the school age of Shaan?
 - a) 25 years
 - b) 30 years
 - c) 36 years
 - d) Data inadequate
 - e) None of these

- **38.** At a game of billiards, A can give B 15 points in 60 and A can give C 20 points in 60. How many points can B give C in a game of 90?
 - a) 30 points
 - b) 20 points
 - c) 10 points
 - d) 12 points
 - e) None of these
- 39. A can run 22.5 m while B runs 25 m. In a kilometer race B beats A by:
 - a) 100 m
 - b) $111\frac{1}{9}$ m
 - c) 25 m
 - d) 50 m
 - e) None of these
- **40.** A, B and C are three contestants in a km race. If A can give B a start of 40 m and A can give C a start of 64 m, how many metre's start can B give C?
 - a) 30 m
 - b) 25 m
 - c) 40 m
 - d) 35 m
 - e) None of these
- **41.** A runs $1\frac{2}{3}$ times as fast as B. If A gives B a start of 80 m, how far must the winning post be so that A and B might reach it at the same time?
 - a) 200 m
 - b) 300 m
 - c) 270 m
 - d) 160 m
 - e) None of these
- **42.** In a 100 m race, A beats B by 10 m and C by 13 m. In a race of 180 m, B will beat C by :
 - a) 5.4 m
 - b) 4.5 m
 - c) 5 m
 - d) 6 m
 - e) None of these

- **43.** 45 men can complete a work in 16 days. Six days after they started working. 30 more men joined them. How many days will they now take to complete the remaining work?
 - a) 18 days
 - b) 12 days
 - c) 9 days
 - d) 6 days
 - e) None of these
- **44.** Two pipes A and B can fill a cistern in 15 hours and 10 hours respectively. A tap C can empty the full cistern in 30 hours. All the three taps were open for 2 hours, when it was remembered that the emptying tap had been left open. It was then closed. How many hours more would it take for the cistern to be filled?
 - a) 30 min.
 - b) 1.2 hours
 - c) 24 min.
 - d) 35 min.
 - e) None of these
- **45.** A tyre has two punctures. The first puncture alone would have made the tyre flat in 9 minutes and the second alone would have done it in 6 minutes. If air leaks out at a constant rate, how long does it take both the punctures together to make it flat?
 - a) $1\frac{1}{2}$
 - b) $3\frac{1}{2}$
 - c) $3\frac{3}{5}$
 - d) $4\frac{1}{4}$
 - e) None of these

General Intelligence

- **46.** _____ is country as well as continent.
 - a) Australia
 - b) Antartica
 - c) Africa
 - d) All of The Above
 - e) None of The Above

47. Water boils at:

- a) 300° Fahrenheit
- b) 212^o Fahrenheit (100^o Celsius)
- c) 400⁰ Fahrenheit
- d) 225^o Fahrenheit
- e) None of The Above
- **48.** Which among the following is closely related to Glass?
- a) Coal
- b) Sand
- c) Diamond
- d) Gold
- e) None of The Above
- **49.** The longest living organism on earth would be a:
 - a) Blue Whale
 - b) Tree
 - c) Fungi
 - d) Land
 - e) None of The Above
- **50.** The symbol '&' is also known as:
 - a) Treble Clef

- b) Semi Colon
- c) Ampersand
- d) Sybersand
- e) None of The Above
- **51.** Choose the correct order of these four planets in our solar system:
 - a) Earth, Mars, Saturn, Jupiter
 - b) Earth, Mars, Jupiter, Saturn
 - c) Mars, Earth, Jupiter Saturn
 - d) Earth, Jupiter, Saturn, Mars
 - e) None of The Above
- **52.** "The Oscars" is a nickname for which entertainment awards show?
 - a) Primetime Emmy Awards
 - b) The Academy Awards
 - c) The Golden Globes
 - d) Grammy Awards
 - e) None of The Above
- **53.** 4 is square root of:
 - a) 2
 - b) 40
 - c) 16
 - d) 20
 - e) None of The Above

Direction (54 - 58): In the following questions, select the related letters/ word/ number from the given alternatives.

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54. Length: Meter: Power:?
a) Calories
b) Degree
c) Watt
d) Kilogram
e) None of The Above
55. Square: Cube: Circle:?
a) Ellipse
b) Parabola
c) Cone
d) Sphere
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56. Paper : Tree : : Glass : ?

e) None of The Above

- a) Window
- b) Sand
- c) Stone
- d) Mirror
- e) None of The Above
- **57.** ACFJ: ZXUQ:: EGIN:?
 - a) VUSQ
 - b) VRPM
 - c) VTRM
 - d) VMRT
 - e) None of The Above

a) 69
b) 72
c) 89
d) 97
e) None of The Above
59. Among the biotic components of the ecosystem, the producer system is?
a) Sea
b) Rivers
c) Green Plants
d) Animals
e) None of The Above
60. Which of the following group of gases contribute to the 'Green House Effect'?
a) Carbon Monoxide and Sulphur Dioxide
b) Ammonia and Ozone
c) Carbon Dioxide and Methane
d) Nitrogen and Hydrogen
e) None of The Above
61. Which one of the following air pollution can affect blood system leading to
death?
a) Cadmium
b) Asbestos Dust
c) Carbon Monoxide
d) Lead
e) None of The Above
62. Plants receive their nutrients mainly from?

a) Atmosphere

58. 10: 90 : : 9 : ?

- b) Chlorophyll
- c) Light
- d) Soil
- e) None of The Above
- **63.** Bamboo is classified as:
 - a) Bush
 - b) Tree
 - c) Grass
 - d) Weed
 - e) None of The Above
- **64.** The richest source of Vitamin D is:
 - a) Cheese
 - b) Milk
 - c) Spinach
 - d) Cod Liver oil
 - e) None of The Above
- **65.** Scientific name of Cow is:
 - a) Bos Taurus
 - b) Canis Lupus Familiaris
 - c) Bison Bison
 - d) Capra Aegagrus Hircus
 - e) None of The Above
- **66.** Most highly intelligent mammals are:
 - a) Elephants
 - b) Whales
 - c) Kangaroos
 - d) Dolphins
 - e) None of The Above

- **67.** Milk is poor source of:
 - a) Calcium
 - b) Iron
 - c) Copper
 - d) Sodium
 - e) None of The Above
- **68.** Normal Human Blood is:
 - a) Neutral
 - b) Acidic
 - c) Alkaline
 - d) All of The Above
 - e) None of The Above
- **69.** Study of heart is known as:
 - a) Ecology
 - b) Dermatology
 - c) Cardiology
 - d) Demography
 - e) None of The Above
- 70. The real name of "The Queen of Jhansi Rani Lakshmi Bai" was:
 - a) Chandarlekha
 - b) Divyakala
 - c) Samriddhi Bai
 - d) Manikarnika
 - e) None of The Above

Reasoning

- **71.** A and B both are walking away from point 'X'. A walked 3m and B walked 4m from it, then A walk 4m North of X and B walked 5m of South of A. What is the distance between them now?
 - a) 9.5m
 - b)9m
 - c) 16m
 - d) 11.40m
 - e) None of The Above
- **72.** John's house is 100m North of his uncle's office. His uncle's house is located 200m West of his (uncle's) office. Kabir is the friend of John and he stays 100m East of John's house. The office of Kabir is located 100m South of his house. Then, how far is his uncle's house from Kabir's office?
 - a) 200m
 - b)300m
 - c) 400m
 - d) 500m
 - e) None of The Above
- **73.** Seema walks 30m North. Then, she turns right and walks 30m then she turns right and walks 55m. Then, she turns left and walks 20m. Then, she again turn left and walks 25m. How many meters away is she from her original position?
 - a) 45m
 - b) 50m
 - c) 66m
 - d) 55m
 - e) None of The Above

74. K M 5, 1 P 8, G S 11, E V 14,

- a) C Y 17
- b) BY 17
- c) B X 17
- d) C Z 17
- e) None of The Above

- a) 4C
 - b)4D
- c) 6E
- d)9F
- e) None of The Above

Directions (Q. 76-81) Read the following information carefully and answer the questions that follow.

Seven friends A, B, C, D, E, F and G are sitting around a circular table facing either the centre or outside. Each one of them belongs to a different department viz. Finance, Marketing Sales, HR, Corporate Finance, Investment Banking and Operations but not necessarily in the same order.

C sits third to the right of G. G faces the centre. Only one person sits between C and the person working in the HR department immediate neighbours of C face outside. Only one person sits between F and D. Both F and D face the centre. D does not work in the HR department. A works in Investment Banking Department. A faces the centre. Two people sit between the persons who work in Investment Banking and Marketing Departments. The person who works in Corporate Finance sits to the immediate left of E. C faces same direction as E. The person who works in corporate finance sits to the immediate left of the person who works for Operations Department.

76. For which of the following departments does B work?

- a) Finance
- b) Marketing

- c) HR
- d) Corporate Finance
- e) Operations
- 77. What is position of B with respect to the person who works for Sales Department?
 - a) Immediate right
 - b) Third to the left
 - c) Second to the right
 - d) Second to the left
 - e) Fourth to the right
- **78.** Who sits to the immediate right of E?
 - a) The person who works for Marketing Department
 - b) C
 - c) B
 - d) The person who works for HR Department
 - e) A
- **79.** Who amongst the following sits exactly between C and the person who works for HR Department?
 - a) B
 - b) The person who works for Marketing Department
 - c) The person who works for Operations Department
 - d)D
 - e) G
- **80.** Who amongst the following sit between the persons who work for Marketing and Investment Banking departments when counted for the left hand side of the person working for Marketing Department?
 - a) F and G
 - b) E and C
 - c) C and B
 - d) F and D
 - e) B and D

- **81.** How many people sit between the person who workds for Operations Department and A, when counted from the right hand side of A?
 - a) One
 - b) Two
 - c) Three
 - d) Four
 - e) None of these

Directions (82-86) - Study the following information carefully to answer the question that follow.

Six couples have been invited to a dinner party. They are Nitika, Geetika, Lajwanti, Rekha, Savitri, Chameli and Faizal, Harbhajan, Akshay, Tirlochan, Ranveer, Aamir. They are seated on a circular table facing each other.

- (i) Geetika refuses to sit next to Aamir.
- (ii) Lajwanti wants to be between Akshay and Harbhajan.
- (iii) Chameli refuses to sit next to Faizal.
- (iv) Nitika is seated on Aamir's right hand side.
- (v) Faizal and Tirlochan are seated exactly opposite to each other.
- (vi) Ranveer and Savitri are seated to the left of Chameli.
- (vii) Akshay and Rekha want to enjoy the company of Lajwanti and Tirlochan respectively and are seated closest to them.
- (viii) The seating arrangement is such that minimum one woman is always between two men.

82. Which of the following statements is correct:

- a) Lajwanti is on Tirlochan's right
- b) Aamir is on Chameli's right
- c) Geetika is on Hari's right
- d) Geetika is on Faizal's left

83. If looked in an anti-clockwise manner, who are seated between Tirlochan and Faizal:

- a) Savitri, Ranveer, Chameli, Aamir and Nitika
- b) Savitri, Ranveer, Rekha, Akshay and Lajwanti
- c) Savitri, Ranveer, Geetika, Harbhajan and Lajwanti

- d) Savitir, Ranveer, Lajwanti, Akshay and Harbhajan
- 84. Which of the following close neighboring arrangements is correct:
- a) Aamir, Chameli and Ranveer
- b) Tirlochan, Ranveer and Aamir
- c) Nitika, Faizal and Lajwanti
- d) Harbhajan, Geetika and Akshay
- 85. Who sits between Geetika and Lajwanti:
- a) Faizal
- b) Akshay
- c) Tirlochan
- d) Ranveer
- e) None of The Above
- 86. Who sits to the second left of Nitika:
- a) Savitri
- b) Ranveer
- c) Chameli
- d) Tirlochan
- e) None of The Above
- **87.** In a class among the passed students Neeta is 22nd from the top and Kalyan, who is 5 ranks below Neeta is 34th from the bottom. All the students from the class appeared for an examination. If the ratio of the students, who passed in the examination to those who failed is 4:1 for the class, how many students were there in the class?
 - a) 90
 - b) 60
 - c) 75
 - d) Data Inadequate
 - e) None of The Above

- **88.** Seema correctly remembers that she took leave after 21st October and before 27th October. Her colleague Rita took leave on 23rd October but Seema was present on that day. If 24th October was a public holiday and 26th October was Sunday, on which day in October did Seema take leave?
 - a) 22nd October
 - b) 25th October
 - c) 22nd or 25th October
 - d) Data Inadequate
 - e) None of The Above
- 89. Directions Examine the following statements
 - I. Rama scored more than Rani
 - II. Rani scored less than Ratna
 - III. Ratna scored more than Rama
 - IV. Padma scored more than Rama but less than Ratna

Who Scored the highest?

- a) Rama
- b) Padma
- c) Rani
- d) Ratna
- e) None of The Above

Directions (Q. 90 -94) Study the given information carefully and answer the given questions.

Eight people -A, B, C, D, E, F, G and H are sitting around a circular table facing the centre, not necessarily in the same order. Three people are sitting between A and D. B is sitting second to the right of A. C is to the immediate right of F. D is not an immediate neighbour of either F or E. H is not an immediate neighbour of B.

90. What is E's position with respect to G?

b) Second to	the right			
c) Third to t	he right			
d) Second to				
e) None of t	hese			
	llowing are based s not belong to the	d on ab ove arrangement and so form a group.		
a) GE	b) DC	c) AF		
d) AB	e) CE	C) 7 H		
92. Who is sitting of H?	third to the right	of the one who is sitting to the immediate right		
a) A	b) B	c) E		
d) C	e) G			
b) B is an immediac) H is an immediad) D is not an immediae) None of these	ate neighbour of A	\mathbf{A}		
94. How many peo of H?	ople are sitting bet	tween H and A when counted from the right side		
a) Three	b) None	c) More than three		
d) One	e) Two	,		
Directions (Q. 95 - 100) In each of the questions below are given four statements followed by four conclusions number I, II, III and IV. You have to take the given statements to be true even if they seem to be of variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.				

Some robots are machines.

Some animals are machines.

Some toys are animals.

Some computers are both robots and machines.

95. Statements:

a) Third to the left

Conclusions: I. Some toys are robots.

II. Some toys are machines.

III. Some animals are computers. IV. Some robots are not toys.

a) None follows

b) Only II and III follow

- c) Only I and III follow
- d) Only III follows
- e) Only either I or IV follows

96. Statements: All suns are stars.

All moons are stars. Some planets are suns. Some stars are gases.

Conclusions: I. Some starts are planets.

II. Some suns are gases.III. No moon is a planet.IV. Some gases are moons.

a) None follows

b) Only I follows

c) Only I and II follows

d) Only III and IV follow

e) Only I and III follow

97. Statements: All books are diaries.

Some diaries are pens. Some pens are drawers. All drawers are chairs.

Conclusions: I. Some drawers are diaries.

II. Some chairs are pens.III. Some pens are books.IV. Some diaries are books.

a) None follows

b) Only II follows

c) Only II and III follow

d) Only II and IV follow

e) All follow

98. Statements: Some buildings are rivers.

Some mountains are both buildings and rivers.

Some roads are buildings.

All roads are trucks.

Conclusions: I. Some mountains are roads.

II.Some buildings are trucks. III.Some rivers are roads. IV. Some trucks are rivers.

- a) None follows
- b) Only I follows
- c) Only II follows
- d) Only III follows
- e) All follow

99. Statements: All tables are round.

Some hills are round. Some rivers are hills. All rivers are conical.

Conclusions: I. Some rivers are round.

II. Some hills are conical.

III. Some rivers are both hills and round.

IV. Some tables are conical.

- a) None follows
- b) Only II follows
- c) Only I and III follow
- d) Only II and III follow
- e) All follow

100. Statements: All sharks are fishes.

Some fishes are birds. All birds are trees. All trees are insects.

Conclusions: I. Some insects are sharks.

II. Some sharks are trees. III. All insects are birds.

IV. Some birds are sharks.

- a) None follows
- b) Only II follows
- c) Only I and IV follow
- d) Only II and III follow
- e) All follow

Solution

- 1. Option A
- 2. Option C
- 3. Option D
- 4. Option B
- 5. Option A
- 6. Option C
- 7. Option A
- 8. Option B
- 9. Option C
- 10. Option A
- 11. Option D
- 12. Option A
- 13. Option A
- 14. Option D
- 15. Option A
- 16. Option C
- 17. Option D
- 18. Option B
- 19. Option B
- 20. Option E
- 21. Option C

Let x% is second discount, then $45 \times 450 \times 90/100 \times (100 - x/100) = 344.25$

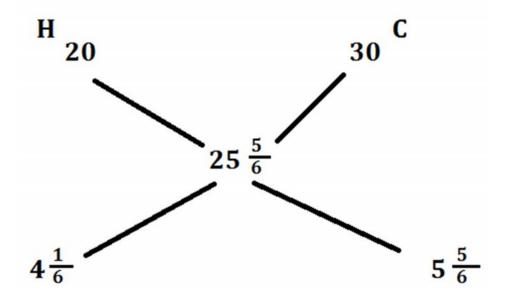
$$=405 (100 - x/100) = 344.25 = 100 - x = 85$$

$$x = 15$$

22. Option C

Here, the rule of allegation is to be used

$$\frac{\text{Horse}}{\text{Carriage}} = \frac{25/6}{35/6} = \frac{5}{7}$$



Cost of Horse =
$$\frac{4\frac{1}{6}}{4\frac{1}{6} + 5\frac{5}{6}} \times 1800 = \frac{5}{12} \times 1800 = \text{Rs. } 750$$

23. Option E

LCM of 7, 8, 9 = 504, Assume he buys 504 mangoes

$$CP = \frac{252}{9} + \frac{252}{7} = 28 + 36 = 64$$

$$SP = 504/8 = 63$$

Percentage (%) Gain =
$$\frac{64-63}{64} \times 100 = 25 / 16\%$$

24. Option B

B is open for total time, say x hrs. and A is kept open for x/2 hrs.

$$= (x/2 \times 30) + x/20 = total work = 1$$

$$x = 15$$

25. Option B

Filling by (A + B) in 1^{st} hr 1/12 + 1/15 = 3/20, filling by (A +C) in 2^{nd} hr. = 1/12 + 1/20 = 2/15

Filling done in first 2 hr 3/20 + 2/15 = 17/60 in first 6hr = $17/60 \times 3 = 15/60$, Rest filling = 1 - 51/60 = 2/15

Now in 7th hr, filling is done by (A + B) in $\frac{3/20}{3/20}$ = 1 hour

Total time = 7 hour

26. Option B

Use the formula as given below:

4 men + 24 boys can do it in
$$\frac{26}{\frac{4}{8} + \frac{17}{24}}$$
 days

For 50×0.9 times great, they can do in $\frac{26 \times 34}{65} \times \frac{9}{10} \times 50 = 612$ days

27. Option B

$$7 + 3\sqrt{5} (7 \ 3\sqrt{5}) = (7)^2 (3\sqrt{5})^2 = \sqrt{49} \ 45 = \sqrt{4} = 2$$

28. Option B

Let
$$\sqrt{0.0169 \times x} = 1.3$$

Then,
$$0.0169x = (1.3)^2 = 1.69$$

$$x = \frac{1.69}{0.0169} = 100$$

29. Option B

$$= > \sqrt{81} + \sqrt{0.81} = 10.09 - x$$
$$= > 9 + 0.9 = 10.09 - x$$
$$= > x = 10.09 - 9.9 = 0.19$$

30. Option A

$$3600 = 2^3 \times 5^2 \times 3^2 \times 2$$

To make it a perfect cube it must be divided by

$$5^2 \times 3^2 \times 2 = 450$$

31. Option D

Total age increased
$$= (8 \times 2)$$
 years $= 16$ years

Sum of ages of two new men
$$= (21 + 23 + 16)$$
 years $= 60$ years

So average age of two new men =
$$\left[\frac{60}{2}\right]$$
 years = 30 years

32. Option C

Total age of 4 members, 10 years ago =
$$(24 \times 4) = 96$$
 years

Total age of 4 members now
$$= (96 + 10 \times 4)$$
 years $= 136$ years

Total age of 6 members now

$$= (24 \times 6) = 144 \text{ years}$$

Sum of the ages of 2 children

$$= (144 - 136) = 8$$
 years

Let the age of the younger child be x years.

Then, age of the elder child = (x + 2) years

So,
$$x + x + 2 = 8$$

$$2x = 6$$

$$x = 3$$

So, age of younger child = 3 years

33.Option C

$$31 \times 31 - 30 \times 30 = 61$$
 years

34. Option C

Let the present ages of the man and his wife be 4x and 3x years respectively.

Then,
$$\frac{4x+4}{3x+4} = \frac{9}{7}$$

$$7(4x+4) = 9(3x+4)$$

$$x = 8$$

So, their present ages are 32 years and 24 years respectively.

Suppose they were married z years ago.

Then,
$$\frac{32}{24} = \frac{5}{3}$$

$$3(32 - z) = 5(24 - z)$$

$$2z = 24$$

$$z = 12$$

35. Option C

Since Pooja and Shipra are twins so their ages be same. Let their ages be x and age of Monika be y, then,

$$x + x = y$$
 ... (i)

and
$$\frac{x}{y} = \frac{3}{7}$$

$$7x - 2y = 15$$

Now, from equation (i),

$$7x - 4x = 15$$

$$x = 5$$

So, the age of Shipra 3 years hence will be 5 + 3 = 8 years

36. Option B

Let the present ages of Arun and Deepak be x years and 3x years respectively. Then, 4x + 6 = 26

$$4x = 20$$

$$x = 5$$

So, Deepak's age = 3x = 15 years

37. Option D

Let the school ages of Neelam and Shaan be 5x and 6x years respectively. Then,

$$\frac{\frac{1}{3} \times 5x}{\frac{1}{2} \times 6x} = \frac{5}{9} \qquad [\frac{1}{3} \times 9 \times 5x] = [\frac{5}{2} \times 6x] \quad 15 = 15$$

Thus, Shaan's age cannot be determined.

38. Option C

$$A : B = 60 : 45 \text{ and } A : C = 60 : 40$$

So,
$$\frac{B}{C} = \left[\frac{B}{A} \times \frac{A}{C}\right] = \left[\frac{45}{60} \times \frac{60}{40}\right] = \frac{45}{40} = \frac{90}{80} = 90 : 80$$

So, B can give C 10 points in a game of 90.

39. Option A

When B runs 25 m, A runs $\frac{45}{2}$ m

When B runs 1000 m, A runs $\left[\frac{45}{2} \times \frac{1}{25} \times 1000\right]$ m = 900 m

So, B beats A by 100 m

40. Option B

While A covers 1000 m, B covers (1000 - 40) m = 960 m and C covers (1000 - 64) m or 936 m

When B covers 960 m, C covers 936 m

When B covers 1000 m, C covers
$$\left[\frac{936}{960} \times 1000\right]$$
 m = 975 m

So, B can give C a start of (1000 - 975) or 25 m

41. Option A

Ratio of the speeds of A and B = $\frac{5}{3}$: 1 = 5:3

Thus, in a race of 5 m, A gains 2 m over B.

2 m are gained by A in a race of 5 m.

80 m will be gained A in a race of $\left[\frac{5}{2} \times 80\right]$ m = 200 m

So, winning post is 200 m away from the starting point.

42. Option D

$$A : B = 100 : 90 \text{ and } A : C = 100 : 87$$

$$\frac{B}{C} = \frac{B}{A} \times \frac{A}{C} = \frac{90}{100} \times \frac{100}{87} = \frac{30}{29}$$

When B runs 30 m, C runs 29 m

When B runs 180 m, C runs $[\frac{29}{30} \times 180]$ m = 174 m

So, B beats C by (180 - 174) m = 6 m

43. Option E

 (45×16) men can complete the work in 1 day.

So, 1 man's 1day's work
$$=\frac{1}{720}$$

45 men's 6 day's work
$$= \left[\frac{1}{16} \times 6\right] = \frac{3}{8}$$

Remaining work =
$$\left[1 - \frac{3}{8}\right] = \frac{5}{8}$$

44. Option C

Time taken by pipes A and B to fill the whole tank = $\frac{100}{16.66}$ = 6 hours

Capacity filled in 2 hours by pipes A, B and $C = 2 \times 13.33 = 26.66\%$

Remaining capacity = 73.33%

This remaining capacity can be filled by A and B = $\frac{73.33}{16.66}$ = $4\frac{2}{5}$

So, the total time required

$$=2+4\frac{2}{5}=6$$
 hours 24 minutes

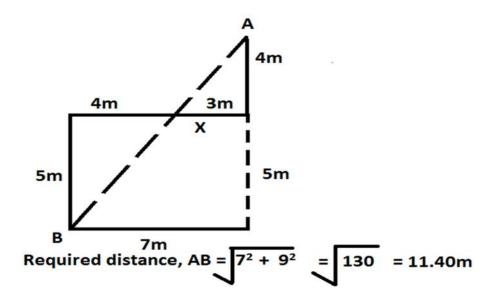
Thus, in this case 24 minutes extra are required.

45. Option C

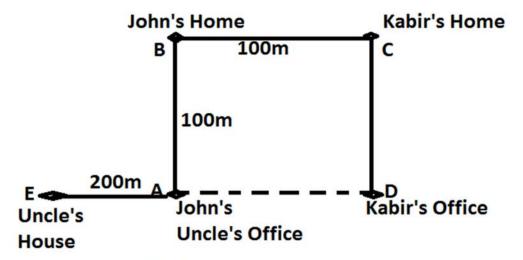
1 minute's work of both the punctures = $\left[\frac{1}{9} + \frac{1}{6}\right] = \frac{5}{18}$

So, both the punctures will make the tyre flat in $\frac{18}{5} = 3\frac{3}{5}$ min.

- 46. Option A
- 47. Option B
- 48. Option B
- 49. Option B
- 50. Option C
- 51. Option B
- 52. Option B
- 53. Option C
- 54. Option C
- 55. Option D
- 56. Option B
- 57. Option B
- 58. Option B
- 59. Option C
- 60. Option C
- 61. Option C
- 62. Option D
- 63. Option C
- 64. Option D
- 65. Option A
- 66. Option D
- 67. Option B
- 68. Option C
- 69. Option C
- 70. Option D
- 71. Option D

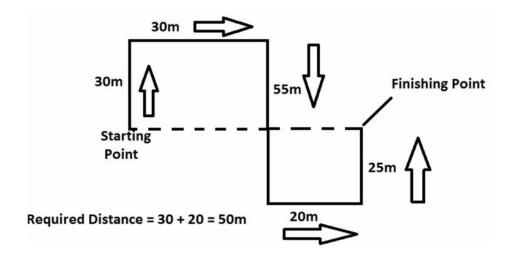


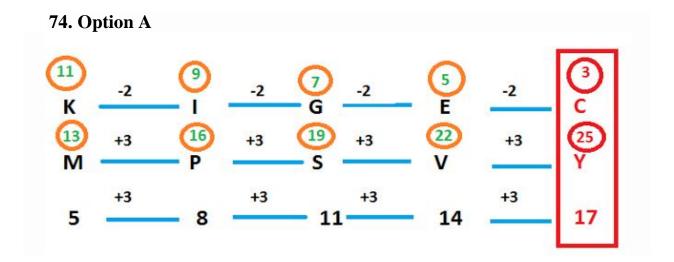
72. Option B



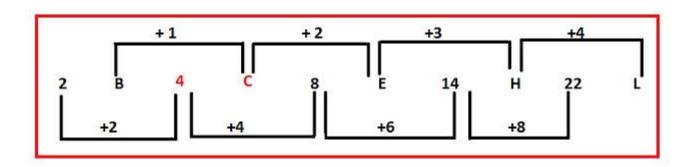
Required Distance = 200 + 100 = 300m

73. Option B





75. Option A



76. Option A

77. Option D

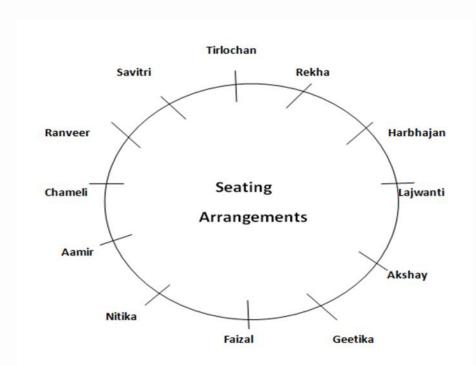
78. Option D

79. Option B

80. Option C

81. Option A

Solution (82 - 86)



82. Option B

83.Option A

84.Option A

85.Option B

86.Option C

87.Option C

From among those who passed Neeta is 22^{nd} from the top and Kalyan is $22 + 5 = 27^{th}$ from the top and 34^{th} from the bottom. Therefore, total number of students who passed the examination = 27 + 34 - 1 = 60

Therefore, total number of students in the class

 $= 60/4 \times 5 = 75$

88. Option C

According to	Leave Date
Seema	22, 23, 24, 25, 26

But Seema was present on 23rd. Also, it was holiday on 24th October.

26th October was Sunday. Hence, possible date may be either 22nd or 25th October.

89. Option D

According to the Question

Rama > Rani

Rani < Ratna

Ratna > Rama and Ratna > Padma > Rama

On arranging the above data, we get

Ratna > Padma > Rama > Rani

So, Ratna scored the highest.

- 90. Option D
- 91. Option B
- 92. Option C
- 93. Option B
- 94. Option C
- 95.Option E
- 96.Option B
- 97.Option D
- 98.Option C
- 99. Option B
- 100. Option A