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RRB RPF

TEST SERIES

DATE- __/__/__

DAY- _____

INSTRUCTION FOR CANDIDATE

TEST SERIES NO.

SG Set 02

QUESTION- 120

MARKS- 120

NEGATIVE MARK- 1/3

DURATION- 90 MIN.

1. USE ONLY BALL PENS WITH BLACK OR BLUE INK
2. AS SOON AS THE EXAMINATION STARTS, YOU MUST CHECK THIS QUESTION BOOKLET AND IF THERE IS ANY UNPRINTED, MUTILATED OR PARTIALLY PRINTED PAGE OR QUESTION IN IT, THEN REPLACE IT WITH THE CORRECT QUESTION BOOKLET THROUGH THE EXAMINER.
3. THERE ARE A TOTAL OF 120 QUESTIONS IN THIS QUESTION BOOKLET.
4. THIS IS AN OBJECTIVE TEST, IN WHICH FOUR OPTIONS ARE GIVEN FOR THE ANSWER TO EACH QUESTION, YOU HAVE TO CHOOSE ONLY ONE OPTION WITH THE CORRECT ANSWER OUT OF THESE FOUR OPTIONS.
5. ANSWERS TO ALL QUESTIONS ARE TO BE WRITTEN ON SEPARATE ANSWER SHEETS.

6. INSTRUCTIONS FOR FILLING THE ANSWER SHEET ARE WRITTEN ON THE BACK SIDE OF THE ANSWER SHEET, READ THEM CAREFULLY BEFORE FILLING THE ANSWER SHEET.
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9. AFTER THE EXAMINATION IS OVER, YOU CAN GO OUT ONLY WITH HIS PERMISSION AFTER SUBMITTING THE ORIGINAL COPY OF THE ANSWER SHEET TO THE INVIGILATOR.
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Total: 120 Que.

RPF Set 02

Time: 90 Min.

General Awareness

- 1). Rajiv Gandhi Khel Ratna Award is accorded annually by the:
- (a) Rajiv Gandhi Memorial Trust
(b) Indian National Congress
(c) Ministry of Youth Affairs and Sports
(d) Ministry of Human Resource Development, Govt of India
- 2). Recently, the Indian Army has signed an agreement with whom for hydrogen fuel cell bus?
- (a) BPCL (b) Adani Green (c) IOCL
(d) None of these
- 3). What is the meaning of the Greek origin words, 'Elektron'?
- (a) Negative (b) Ebonite (c) Amber (d) Charge
- 4). The tomb of Itimad-ud-Daulah, Inlaid with Pietra dura decoration is located at:
- (a) Alwar (b) Agra (c) Aurangabad (d) Ajmer
- 5). Which of the following Articles of the constitution of India prohibits employment of children in factories etc.?
- (a) 21 (b) 24 (c) 31 (d) 17
- 6). Part IV of the Indian Constitution contains the provision on:
- (a) Citizenship (b) Elections
(c) Fundamental Rights
(d) Directive Principles of state Policy
- 7). In which of the following places is Govardhan Math located?
- (a) Dwarka (b) Badrinath (c) Sringeri (d) Puri
- 8). Which part of the brain is instrumental in marking it possible for a person to perform activities, such as picking up a pencil from the floor?
- (a) Hypothalamus (b) Cranium (c) Cerebrum
(d) Cerebellum
- 9). The Princely state of Hyderabad was brought under the Indian Union in the year ____.
- (a) 1963 (b) 1952 (c) 1948 (d) 1950
- 10). 'Bathukamma' and 'Bonalu' are state festivals of:
- (a) Karnataka (b) Kerala (c) Tamil Nadu
(d) Telangana
- 11). Which section of the RBI Act empowers the central Government to supersede the RBI board and issue directors considered to be 'necessary in public interest' to the RBI, after consulting the Governor of the bank?
- (a) Section 3 (b) Section 5 (c) Section 1
(d) Section 7
- 12). Vibration of which among the following produces only odd harmonics?
- (a) An air column in a closed organ pipe.
(b) A Vibrating string fixed at two ends
(c) An Air column is an open organ pipe.
(d) A vibrating fixed at two ends.
- 13). Vailankanni (Velankanni) is a pilgrims centre located in the ____ district of Tamil Nadu.
- (a) Theni (b) Nagapattinam (c) Madurai
(d) Salem
- 14). Viticulture refers to the :
- (a) Breeding of fish
(b) Commercial rearing of silkworm
(c) Growing of vegetables
(d) Cultivation of grapes
- 15). Recently Goldman Sachs has estimated India's GDP to be what percentage for 2024?

(a) 7.1% (b) 6.7% (c) 7.4% (d) 7.8%

16). The Tata Iron and Steel Company (TISCO) is located at which of the following places?

(a) Jamshedpur (b) Bhilai (c) Durgapur
(d) Rourkela

17). Kalinjar Fort, Which was strategically important during medieval times, is located in :

(a) Sind (b) Rajasthan (c) Uttar Pradesh
(d) Punjab

18). Kamban wrote the Ramayana in which of the following languages?

(a) Malayalam (b) Tamil (c) Telugu
(d) Kannada

19). Standing in an open ground on a cloudless day, at what time will your shadow be the shortest?

(a) 09: 00 (b) 15: 00 (c) 12: 00 (d) 07: 00

20). Which among the following is NOT true about a solution and the solute concerned?

(a) The particles of the solute do not scatter a beam of light.
(b) The particles of the solute settle down at the bottom when the solution is kept undisturbed.
(c) The particles of the solute cannot be seen with unaided eyes.
(d) A solution is a homogeneous mixture.

21). The Summer Olympic Games 2000 were held in _____.

(a) Athens (b) Paris (c) Seoul (d) Sydney

22). Which of the following terms is associated with the anatomy of the human heart?

(a) Cerebellum (b) Aorta (c) Cerebrum
(d) Medulla

23). What is the number of hydrogen atoms in a molecule of calcium bicarbonate?

(a) 4 (b) 0 (c) 1 (d) 2

24). In the context of the Sri Lankan Civil War, What does the first 'T' in LTTE stand for?

(a) Tarantulas (b) Tamil (c) Tigers (d) Triumph

25). Who among the following is the founder of the social activist organization called 'Global March Against Child Labour'?

(a) Kailash Satyarthi (b) Baba Amte
(c) Kiran Bedi (d) Anna Hazare

26). The National Anthem of India, 'Gana Gana Mana' was sung at the _____ session of the Indian National Congress.

(a) Belgaum (b) Calcutta (c) Lahore (d) Tripuri

27). Who among the following is the only Indian shooter to have won a Summer Olympics silver medal?

(a) Prakash Padukone (b) Pulela Gopichand
(c) Sania Nehwal (d) PV Sindhu

28). With reference to the United Nations Sustainable Development Goal, Which of the following is SDG 10?

(a) Climate action (b) Zero hunger
(c) Reduced inequalities
(d) Decent work and economic growth

29). In which year did the first SAARC summit take place?

(a) 1990 (b) 1972 (c) 1985 (d) 1992

30). In respect of classification of algae, the members of phaeophyceae are commonly called

(a) Brown algae (b) White algae (c) Green algae
(d) Red algae

31). The 'Kathasaritasagara' is written by:

(a) Bhasa (b) Somadeva (c) Kalidas
(d) Jayadeva

32). Which of the following viceroys appointed the Hunter commission in 1882?

(a) Lord Minto (b) Lord Lytton (c) Lord Ripon
(d) Lord Mayo

33). Which among the following are called the amphibians of the plant kingdom?

(a) Liverworts (b) Gymnosperms (c) Bryophytes
(d) Pteridophytes

34). Who among the following did NOT belong to the Rajput Kingdom of Mewar?

- (a) Maldeva (b) Rana Kumbha (c) Rao chanda
(d) Rao Jodha

35). The headquarters of the World Trade Organization is located at:

- (a) Paris (b) Dubai (c) Geneva (d) Bonn

36). The 90 degree East Meridian does NOT pass through:

- (a) Meghalaya (b) Sikkim (c) Bangladesh
(d) Bhutan

37). The approximate period between two consecutive new moons is ____ days.

- (a) 28.5 (b) 15.5 (c) 14.5 (d) 29.5

38). Which of the following persons won the Sultan Padamsee playwriting Award for his first play 'Larins Sahib'?

- (a) Ramchandra Guha (b) Amitav Ghosh
(c) Gurucharan Das (d) Shashi Tharoor

39). Leukaemia is a cancer of the ____.

- (a) Lungs (b) Skin (c) Uterus (d) Blood

40). Recently, which Indian peacekeeper has received the UN Military Gender Advocate of the Year Award?

- (a) Payal Kapadia (b) RM Vishakha
(c) Radhika Sen (d) Sudha Sharma

41). How many natural satellites does the planet Venus have?

- (a) 1 (b) 2 (c) 3 (d) 0

42). The Rig Veda is divided into _____ books of mandalas.

- (a) 34 (b) 10 (c) 8 (d) 12

43). 1 horse power is equal to approximately _____ watts.

- (a) 1000 (b) 500 (c) 750 (d) 250

44). Who is the author of the book 'We are Displaced'?

- (a) Malaia Yousafzai (b) Arnab Goswami
(c) Amrit Singh (d) Amrita Pritam.

45). Which of the following persons was the recipient of the inaugural Infosys Prize for Social Science – History, 2009?

- (a) Upinder Singh (b) Krishna Kumar
(c) Amlan Dutta (d) Hari Vasudevan

46). Who was the 24th Governor of the Reserve Bank of India?

- (a) YV Reddy (b) Urjit Patel (c) Bimal Jalan
(d) C Rangrajan

47). With which first sports would you associate the name Sathish Sivalingam?

- (a) Weightlifting (b) Boxing (c) Wrestling
(d) Hockey

48). Which among the following organizations releases the Index of Economic Freedom?

- (a) World Bank (b) Fraser Institute
(c) International Monetary Fund
(d) Heritage Foundation

49). The Silent Valley Movement was started in 1973 in the state of:

- (a) Odisha (b) Kerala (c) Andhra Pradesh
(d) Himachal Pradesh

50). Bangladesh was a part of Pakistan from _____ to _____.

- (a) 1947; 1971 (b) 1947; 1958 (c) 1947; 1989
(d) 1947; 1962

General Intelligence & reasoning

1). How many such pairs of letters are there in the word 'FREQUENT', each of which has as many letters between them in the word (in both forward and backward directions) as they have between them in the English alphabetical series?

- (a) None (b) One (c) Two (d) Three

2). In how many different ways, can the letters of the word 'TROUBLE' be arranged?

- (a) 840 (b) 5040 (c) 1260 (d) 2520

- 3). Directions: In each of the following questions two statements are given followed by two conclusions I and II. You have to consider the statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any follow from the given statements. Indicate your answer.

Statements:

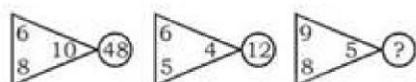
1. All students in my class are intelligent.
2. Sunil is not intelligent.

Conclusions:

- I. Sunil is not a student of my class.
- II. Sunil must work hard.

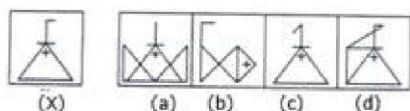
- (a) Neither conclusion I nor II follows
(b) Only conclusion I follows
(c) Only conclusion II follows
(d) Both conclusions I and II follow

- 4). In the following question, select the missing number from the given responses.



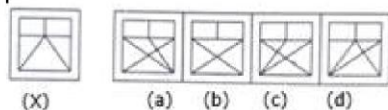
- (a) 24 (b) 32 (c) 36 (d) 28

- 5). In each of the following questions, figure (X) are given followed by four alternative figures (a), (b), (c) and (d) such that figure (X) is embedded in one of them. Trace out the alternative figure which contains figure (X) as its part.



- (a) Figure (a) (b) Figure (b) (c) Figure (c)
(d) Figure (d)

- 6). In each of the following questions, figure (X) are given followed by four alternative figures (a), (b), (c) and (d) such that figure (X) is embedded in one of them. Trace out the alternative figure which contains figure (X) as its part.



- (a) Figure (a) (b) Figure (b) (c) Figure (c)
(d) Figure (d)

- 7). In the following questions, two statements are given followed by four conclusions I, II, III and IV. You have to consider the statements to be true even if they seem to be at variance from

commonly known facts. You are to decide which of the given conclusions, if any, follow from the given statements. Indicate your answer.

Statements:

- 1) All stones are men.
- 2) All men are tigers

Conclusions:

- I. All stones are tigers.
- II. All tigers are stones.
- III. All men are stones.
- IV. Some tigers are stones.

- (a) Only conclusions II and III follow
(b) Only conclusions I and IV follow
(c) All conclusions follow
(d) Conclusions I, II and IV follow

- 8). Direction: In given question below, a statement is followed by some assumptions. An assumption is something supposed or taken in for granted. You have to consider the statement and the following assumptions and then decide which of the assumptions is implicit in the statement.

Statement:

Wars must be discouraged vehemently even though the majority of the victims might have been a nuisance to peace loving people.

Assumptions:

- I. Wars kill the majority of wicked people.
- II. Innocent people are also killed in wars.
- III. Vehement opposition to wars may have some desirable impact.

- (a) Only assumption II and III are implicit
(b) Only assumption III is implicit
(c) Only assumption III and either I or II are implicit
(d) All assumptions are implicit

- 9). Sunita leaves from her home. She walks 30 m in North-west direction and then 30 m in South-west direction. Next, she walks 30 m in South-east direction. Finally she turns 90 degree in the anticlockwise direction, towards her house. In which direction is she moving?

- (a) North-west (b) North-east (c) South east
(d) Data inadequate

- 10). Direction: Given below are two quantities named I and II. Based on the given information, you have to determine the relation between the two quantities. You should use the given data and your knowledge of Mathematics to choose among the possible answers.

A team of five players is to be formed out of 5 Seniors, 3 Juniors and 2 Kids

Quantity I: The number of ways, the committee can be formed which consists of 2 seniors, 2 juniors and 1 kid

Quantity II: The number of ways, the committee can be formed which consists of any five players

- (a) Quantity I > Quantity II
 (b) Quantity I < Quantity II
 (c) Quantity I ≥ Quantity II
 (d) Quantity I ≤ Quantity II

- 11). In the following question, two statements are given each followed by two conclusions I and II. You have to consider the statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements.

Statements:

1. Library is a place where one may find any answer to his/her question.
2. Books in any form whether physical or electronic are advantageous for resolving any kind of query.

Conclusion:

- I. Every question has an answer and one can find it in a book.
- II. Books give all related information pertaining to the title they have.

- (a) Only conclusion II follows
 (b) Conclusion I and II both follow
 (c) Neither I nor II follow
 (d) Only conclusion I follows

- 12). The positions of the first and the sixth letters of the word BHOPAL are interchanged; similarly, the positions of the second and fifth letters; and the third and fourth letters are interchanged. In the new arrangement thus formed, how many English alphabets are there between the second letter from the right and second letter from the left end?

- (a) None (b) 2 (c) 4 (d) 6

- 13). A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
 ZD, IN, SY, DK, ?

- (a) PX (b) XP (c) QX (d) OX

- 14). Rohan is to the east of Palak. Rohan is to the north of Ajay. Ajay is to the west of Deepak. Deepak is in which direction with respect to Palak?

- (a) North-East (b) South-East (c) North-West
 (d) South-West

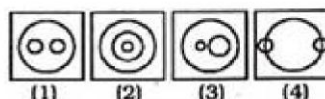
- 15). Point G is in the north-west direction of Point H at a distance of 13m. Point H is in the north-east direction of Point I at a distance of 13m. Point I is in the north-west direction of Point J at a distance of 13m. Point J is in the south

direction of Point K at a distance of 5m. How far and in which direction is Point I with respect to K?

- (a) 15m, East (b) 12m, West (c) 17m, North
 (d) 11m, South-East

- 16). Which one of the following diagrams best depicts the relationship among Nation, States and Districts?

Nation, States, Districts



- (a) 1 (b) 2 (c) 3 (d) 4

- 17). If the day before yesterday was Friday, what will be the third day after the day-after-tomorrow?

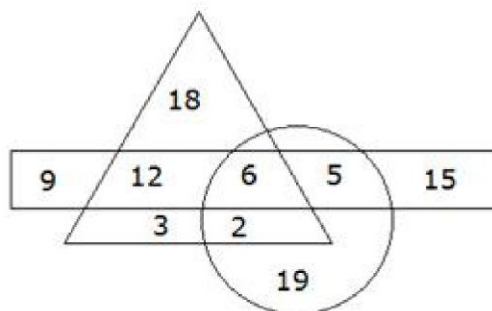
- (a) Thursday (b) Sunday (c) Saturday
 (d) Friday

- 18). In a committee, 50 people speak Hindi, 20 speak English and 10 speak both Hindi and English. How many speak at least one of these two languages?

- (a) 60 (b) 20 (c) 30 (d) 10

- 19). In the following diagram, the rectangle represents teachers, the triangle represents singers and the circle represents Politicians.

The number in different segments show the number of persons.



According to the given diagram, how many teachers are singers but not politicians?

- (a) 5 (b) 6 (c) 12 (d) 3

- 20). Select the word-pair in which the two words are related in the same way as are the two words in the following word. Pair. (in the same order).

Council : Ministers

- (a) Band : Musicians (b) Team : Umpire
(c) Student : Teacher (d) King : Palace

21). If DON is coded as 345 and ROAM is coded as 6412, then how will RANDOM be coded?
(a) 651342 (b) 615342 (c) 613542 (d) 615324

22). Which letter will replace the question mark (?) in the following series?
D, J, ?, S, V, X
(a) P (b) O (c) M (d) Q

23). An interviewer interviewed 100 students to determine their preferences for the three drinks: A, B and C. He reported that 10 students had all the three drinks A, B and C; 20 had A and B; 30 had B and C; 25 had A and C; 12 had A only; 5 had B only; 8 had C only. Then how many did not take any of the three drinks?
(a) 80 (b) 20 (c) 50 (d) 55

24). A, B, C, D, E, F, G and H are sitting around a circular table facing towards centre. H is on the immediate left of A but is not neighbor of D or E. F is on immediate right of B. C is between E and F, G is neighbor of E. Who is between A and B?
(a) D (b) F (c) G (d) H

25). In the following question, some statements followed by some conclusions are given. Taking the given statements to be true even if they seem to be at variance from commonly known facts, read all the conclusions and then decide which of the given conclusions logically follows the given statements.

Statements:

1. Some bikes are cycle.
2. Some cycles are trains.
3. Some trains are rocket.

Conclusions:

- I. Some trains are cycles.
- II. Some trains are bikes.
- III. Some rocket are bikes.

(a) Only I follow (b) Only I and II follow
(c) Only III follow (d) None of the above follow

26). Study the given pattern carefully and select the number that can replace the question mark (?) in it.

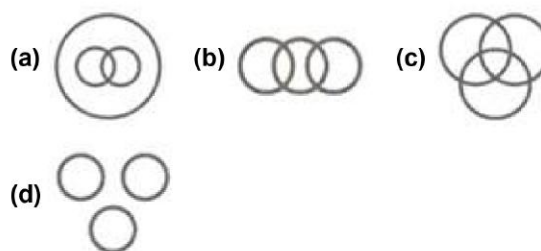
42	37	?
18	24	36
252	296	540

(a) 40 (b) 45 (c) 55 (d) 50

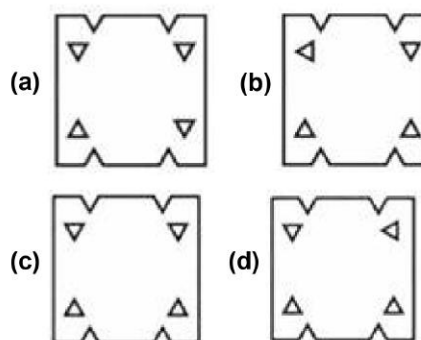
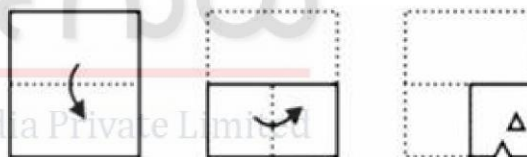
27). In a certain code language, 'FOX' is coded as '108' and 'SOUP' is coded as '148'. How will 'UPSIDE' coded as in that language?
(a) 494 (b) 385 (c) 590 (d) 528

28). Identify the Venn diagram that best represents the relationship between the given classes.

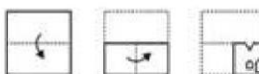
Producer, Director, Actor



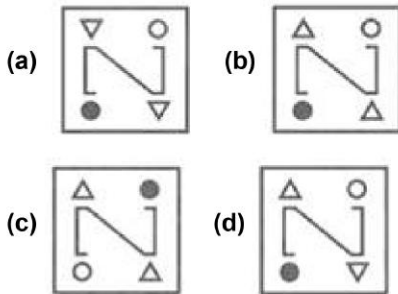
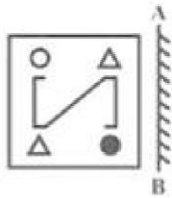
29). A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened?



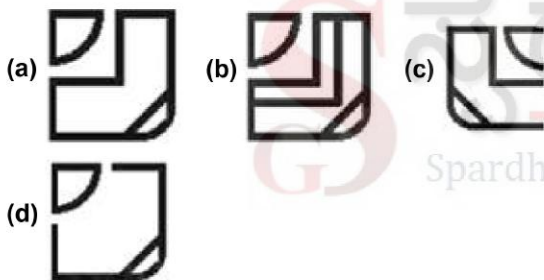
30). A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened?



31). If a mirror is placed on the line AB, then which of the answer figures is the right image of the given figure?



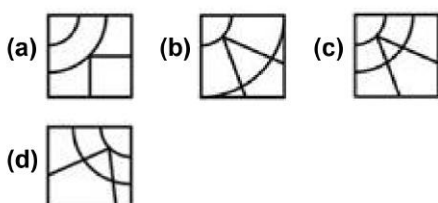
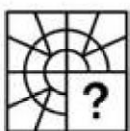
- 32). Which of the following option figure will complete the pattern in the figure given below?



- 33). There are 5 members in a family A, B, C, D, E. A is elder than C and D. B's age is between A and C but E is the youngest. D is not elder than B and C. Who is the second elder member in the family?

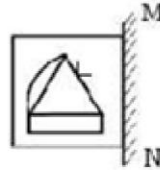
(a) D (b) A (c) B (d) C

- 34). Study the given pattern carefully and select the figure that will complete the pattern given in the question figure.

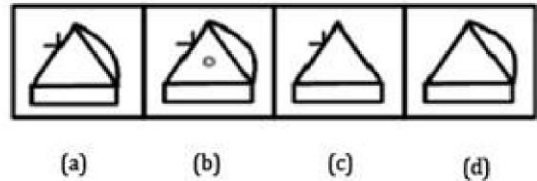


- 35). If a mirror is placed on the line MN, then which of the answer figures is the correct image of the given question figure?

Question Figure:



Answer Figures:



(a) (a) (b) (b) (c) (c) (d) (d)

Arithmetic

- 1). Find the value of ? in the given equation:

$$468 - 28 \times 558 \div 18 + 4000 = (?)^2$$

(a) 60 (b) 67 (c) 65 (d) 62

- 2). L.C.M of two numbers is 495 and their H.C.F is 5. If both are two digit numbers then what is their difference?

(a) 99 (b) 55 (c) 10 (d) 20

- 3). If we divide x by 10, 15, 18 and 25 get remainders 4, 9, 12 and 19 respectively then what is the lowest value of x?

(a) 425 (b) 444 (c) 450 (d) 900

- 4). A cab moves from Noida to New Delhi railway station, a distance of 40 km at a certain speed. If the speed of the cab is reduced by 5km/hr it takes $6\frac{2}{3}$ minutes more to cover the same distance. Find the original speed of the cab.

(a) 51 (b) 48 (c) 45 (d) 35

- 5). The difference between simple and compound interests compounded annually on a certain sum of money for 2 years at 6% per annum is Rs. 180. Find the sum.

(a) Rs. 27,000 (b) Rs. 36,000 (c) Rs. 50,000
(d) Rs. 53,000

6). A shopkeeper gives three successive discounts of 25%, 10% and 5% on the marked price. What would be the net discount on an article marked at Rs. 600?

- (a) Rs. 205.25 (b) Rs. 210.75 (c) Rs. 220.75
(d) Rs. 215.25

7). A train passing a man standing on the platform. The length of the train is 900 m and its speed is 108 km/hr. How long will it take to cross a man?

- (a) 20 sec (b) 40 sec (c) 25 sec (d) 30 sec

8). In party there are a total of 120 hugs. If all the persons hugs with every other person, then find the number of person present in the party.

- (a) 15 (b) 16 (c) 17 (d) 18

9). A person who saves $57\frac{1}{7}\%$ of his income, spend 1680 rupees per month. Find his annual income.

- (a) 57060 (b) 52440 (c) 47040 (d) 50000

10). What is the least possible number, which when divided by 18, 35 and 42, leaves 2, 19 and 26 as the remainder, respectively?

- (a) 714 (b) 614 (c) 876 (d) 978

11). Which of the following is TRUE?

- I. $\sqrt[3]{11} > \sqrt{7} > \sqrt[3]{45}$
II. $\sqrt{7} > \sqrt[3]{11} > \sqrt[3]{45}$
III. $\sqrt{7} > \sqrt[3]{45} > \sqrt[3]{11}$
IV. $\sqrt[3]{45} > \sqrt{7} > \sqrt[3]{11}$

- (a) Only I (b) Only II (c) Only III (d) Only IV

12). A student who gets 20% of the marks failed by 10 marks in an exam. Another student of the same class in that exam score 30% of the maximum marks and gets 20 marks more than the pass marks. The required percentage for passing in the exam is

- (a) 22 % (b) 23.33 % (c) 33 % (d) 28 %

13). Two numbers are respectively 20% and 50% more than a third number. The ratio of the two numbers is:

- (a) 2:5 (b) 3:5 (c) 4:5 (d) 6:7

14). In what ratio must merchant mix two varieties of oils worth Rs. 60/kg and Rs. 65/kg, so that by selling the mixture at Rs. 68.20/kg, he may gain 10%?

- (a) 2:3 (b) 4:3 (c) 3:5 (d) 3:2

15). In a 40-liter mixture of alcohol & water, the ratio of alcohol and water is 5: 3. If 20% of this mixture is taken out and the same amount of water is added then what will be the ratio of alcohol and water in final mixture?

- (a) 1:1 (b) 2:1 (c) 3:1 (d) 1:2

16). A, B and C can do a piece of work in 20, 30 and 15 days, respectively. They began the work together but A left 4 days before completion of the work. In how many days, was the work done?

- (a) 10 days (b) 8 days (c) 12 days (d) 7 days

17). A group of 20 girls has an average age of 12 years. Average age of first 12 from the same group is 13 years while the average age of last 9 from same group is 10.5. Find the age of 12th girl.

- (a) 12 years (b) 10 years (c) 10.5 years
(d) 9 years

18). A sum of Rs. 12000 is compounded annually at the rate of 7% for the 1st year and at 10% for the 2nd. What will be the amount after 2 years?

- (a) Rs. 12414 (b) Rs. 14214 (c) Rs. 14412
(d) Rs. 14124

19). The average age of five students is 25 year. If a teacher's age is included, the average age becomes 27 years. Find the age of the teacher.

- (a) 32 years (b) 35 years (c) 37 years
(d) 40 years

20). Two bags A and B contain different colours of balls. In bag A, there are 2 red balls, 3 green balls and 5 white balls while bag B contain 4 red balls, 'x' green balls and 3 white balls. If the probability of drawing one white ball from bag A is $\frac{1}{6}$ more than the probability of drawing one red ball from bag B, then find the value of 'x'

- (a) 4 (b) 6 (c) 5 (d) 7

21). If 20% of a number is 64, then find 35% of that number:

- (a) 91 (b) 126 (c) 105 (d) 112

22). Two persons X & Y can complete a work in 40 days. They start work together & after 18 days Y left then the whole work is completed in 45 days. In how many days, Y alone can finish the whole work?

- (a) 196 days (b) 216 days (c) 180 days
(d) 150 days

23). Find the No. of Prime Factor $(30)^{15} \times (22)^{11} \times (15)^{24}$

- (a) 110 (b) 115 (c) 120 (d) 125

24). Find the No. of Prime Factor of 240:

- (a) 4 (b) 5 (c) 6 (d) 8

25). The radius of a cylinder is increased by 60% and its height is decreased by 20%. What is percentage increase in its volume?

- (a) 105.2% (b) 105.6% (c) 105.8% (d) 104.8%

26). The price of petrol was raised by 15%. By how much percentage, should a motorist reduce the consumption of petrol so that the expenditure on it does not increase?

- (a) $9\frac{2}{11}\%$ (b) $15\frac{3}{13}\%$ (c) $13\frac{1}{23}\%$ (d) $6\frac{7}{8}\%$

27). The sum of three numbers is 777. The ratio between first two numbers is 7:9 and between second and third number is 3:7. Find the second number:

- (a) 252 (b) 147 (c) 63 (d) 189

28). If $a^3 - b^3 = 208$ and $a - b = 8$, then $(a + b)^2 - ab$ is equal to:

- (a) 42 (b) 52 (c) 26 (d) 38

29). If $a^3 + b^3 = 1344$ and $a + b = 28$, then $(a + b)^2 - 3ab$ is equal to:

- (a) 24 (b) 16 (c) 32 (d) 48

30). ABCD is a cyclic quadrilateral. The tangents to the circle at the points A and C on it, intersect at P. If $\angle ABC = 98^\circ$, then what is the measure of $\angle APC$?

- (a) 14° (b) 22° (c) 16° (d) 26°

31). The marked price of an article is Rs.250. After allowing two successive discounts of 20% and x% on the marked price, it is sold for Rs. 185.60. What is the value of x?

- (a) 8.4% (b) 7.6% (c) 6.8% (d) 7.2%

32). Find out the unit digit in the following expression $4^1 \times 4^7 \times 5^3 \times 6^9 \times 8^3$.

- (a) 0 (b) 9 (c) 3 (d) 1

33). Out of 504 students in a school, ratio between girls and boys is 11:13. If 12 new girls took admission then the new ratio is

- (a) 31 : 51 (b) 91 : 81 (c) 81 : 91 (d) 51 : 31

34). Choose the correct factor of $f(x) = 2x^2 - 5x + 2$.

- (a) $x - 2$ (b) $x - 3$ (c) $x - 4$ (d) $x - 5$

35). The proportion of acid and water in the three samples is 2 : 1, 3 : 2 and 5 : 3. A mixture containing equal quantities of all three samples is made. The ratio of acid and water in the mixture is

- (a) 120 : 133 (b) 227 : 133 (c) 227 : 120
(d) 133 : 227