

Adda247

RRB NTPC 2024

eBook



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RRB NTPC 2024 DECODING PDF

What is RRB NTPC?

RRB NTPC stands for Railway Recruitment Board Non-Technical Popular Categories. It is a popular recruitment examination conducted by the Railway Recruitment Board (RRB) for various non-technical posts in the Indian Railways. RRB NTPC exam is conducted to recruit candidates for the positions mentioned in the table.

RRB NTPC Recruitment 2024 Posts	
1. Junior Clerk cum Typist	7. Goods Guard
2. Accounts Clerk cum Typist	8. Senior Commercial cum Ticket Clerk
3. Junior Time Keeper	9. Senior Clerk cum Typist
4. Trains Clerk	10. Junior Account Assistant cum Typist
5. Commercial cum Ticket Clerk	11. Senior Time Keeper
6. Traffic Assistant	12. Commercial Apprentice
13. Station Master in various Zonal Railways and Production Units of Indian Railways	

RRB NTPC Notification 2024: Overview

Organization	Railway Recruitment Board
Exam Name	RRB NTPC
Posts Name	NTPC (Junior Clerk cum Typist, Accounts Clerk cum Typist, Junior Time Keeper, Trains Clerk, Commercial cum Ticket Clerk, Traffic Assistant, Goods Guard, Senior Commercial cum Ticket Clerk, Senior Clerk cum Typist, Junior Account Assistant cum Typist, Senior Time Keeper, Commercial Apprentice and Station Master)
Vacancies	10,844
RRB NTPC Notification 2024	August 2024 (Expected)
RRB NTPC Exam Date 2024	To be Announced
Mode of Application	Online
Selection Process	• CBT-1 • CBT-2 • Skill Test • Document Verification • Medical Test

RRB NTPC Vacancy Trend

Year	No. Of Vacancy
RRB NTPC Vacancy 2015	14023
RRB NTPC Vacancy 2019	35281
RRB NTPC Vacancy 2024	10,844

RRB NTPC 2024 Vacancy for Under Graduate Posts

Candidates can check the post-wise vacancy distribution for the RRB NTPC Under Graduate has been tabulated below.

S. No.	Name of the posts	Total Vacancies (All RRBs)
1	Junior Clerk cum Typist	990
2	Accounts Clerk cum Typist	361
3	Trains Clerk	68
4	Commercial cum Ticket Clerk	1985
Grand Total		3404

RRB NTPC 2024 Vacancy for Graduate Posts

Candidates can check the post-wise vacancy distribution for the RRB NTPC Graduate has been tabulated below.

S. No.	Name of the posts	Total Vacancies(All RRBs)
2	Goods Train Manager	2684
3	Chief Commercial cum Ticket Supervisor	1737
4	Senior Clerk cum Typist	725
5	Junior Account Assistant cum Typist	1371
8	Station Master	963
Grand Total		7479

RRB NTPC 2024 Eligibility Criteria

The Railway Recruitment Board will issue the RRB NTPC Notification 2024 which contains the required eligibility criteria i.e. minimum educational qualification, age limit, and other eligibilities. Check the details mentioned below.

RRB NTPC 2024 Educational Qualification

The minimum educational qualifications required to appear in the RRB NTPC Recruitment 2024 stage 1 exam have been mentioned below:

For the post of Commercial Apprentice (CA), Traffic Apprentice (TA), Enquiry-Cum-Reservation-Clerk, Assistant Station Master (ASM), Goods Guard Selection, and Traffic Assistant: Candidates with a Minimum Educational Qualification of a University Degree or its equivalent will be eligible to apply.

For the post of Senior Clerk-Cum-typist, Senior Time Keeper, Junior Accounts Assistant Cum Typist: Graduate Degree from a recognized university and equivalent Typing proficiency in Hindi/English on a computer.

Those awaiting results of the final examination of the prescribed minimum educational qualification SHOULD NOT apply.

Important Points

- Candidates can apply to only one RRB NTPC Post.
- Application to more than one will lead to the rejection of all the applications.
- Any attempt to submit more than one application by a candidate against this CEN shall result in disqualification and debarment.
- If candidates are eligible for more than one level of 7th CPC posts, then they can apply for those posts.
- The candidates are required to indicate their Post-wise and Railway/Production Unit (PU) wise preferences very carefully.

RRB NTPC Recruitment 2024 Age Limit

The crucial date for determining the age limit will be 1st July 2024. Check out the age limit for undergraduate and graduate-level posts mentioned in the detailed RB NRPC Notification 2024 including the relaxation given to various categories.

For Undergraduate level: Age between 18 to 30 years.

Age Group	Upper Limit Of Date Birth			Lower Limit of Date of Birth (Not Later Than) For Under Graduate posts
	UR	OBC Non-Creamy Layer	SC/ST	For All Community / Categories
18 to 30	02.07.1989	02.07.1986	02.07.1984	01.07.2006

Age Relaxation for Under Graduates:

Category	Relaxation in Upper Limit
OBC-Non Creamy Layer (NCL)	3 years
SC/ST	5 years
Ex-Servicemen (UR)	30 Years plus Number of years of service rendered in Defence plus 3 years
Ex-Servicemen (OBC-Non Creamy)	33 Years plus Number of years of service rendered in Defence plus 3 years
Ex-Servicemen (SC/ST)	35 Years plus Number of years of service rendered in Defence plus 3 years.

Category	Relaxation in Upper Limit
PwBD (UR)	10 years
PwBD (OBC-NCL)	13 years
PwBD (SC/ST)	15 years
Candidates have ordinarily been domiciled in the State of Jammu & Kashmir during the period from 01.01.1980 to 31.12.1989. (UR)	35 years
Candidates have ordinarily been domiciled in the State of Jammu & Kashmir during the period from 01.01.1980 to 31.12.1989. (OBC)	38 years
Candidates have ordinarily been domiciled in the State of Jammu & Kashmir during the period from 01.01.1980 to 31.12.1989. (SC/ST)	40 years
Candidates who are serving Group 'C' and erstwhile Group 'D' Railway Staff, Casual Labour, and Substitutes and put in a minimum of 3 years service (UR)	40 years
Candidates who are serving Group 'C' and erstwhile Group 'D' Railway Staff, Casual Labour, and Substitutes and put in a minimum of 3 years service (OBC)	43 years
Candidates who are serving Group 'C' and erstwhile Group 'D' Railway Staff, Casual Labour, and Substitutes and put in a minimum of 3 years service (SC/ST)	45 years
Candidates who are working in Quasi-Administrative offices of the Railway Organization (UR)	30 years plus length of service rendered or 5 years, whichever is lower
Candidates who are working in Quasi-Administrative offices of the Railway Organization (OBC)	33 years plus length of service rendered or 5 years, whichever is lower
Candidates who are working in Quasi-Administrative offices of the Railway organization (SC/ST)	35 years plus length of service rendered or 5 years, whichever is lower
Women candidates, who are widowed, divorced or judicially separated from their husbands but not remarried. (UR)	35 years
Women candidates, who are widowed, divorced or judicially separated from their husbands but not remarried. (OBC)	38 years
Women candidates are widowed, divorced or judicially separated from their husbands but not remarried. (SC/ST)	40 years

For Graduate level: Age between 18 to 33 Years after release of notification,

Age Group	Upper Limit Of Date Birth (Not Earlier Than)			Lower Limit of Date of Birth (Not Later Than) For Under Graduate posts
	UR	OBC - Non-Creamy Layer	SC/ST	For All Community / Categories
18 to 33	02.07.1986	02.07.1988	02.07.1981	01.07.2006

Age Relaxation for Graduates:

Category	Relaxation in Upper Limit
OBC-Non Creamy Layer (NCL)	3 years
SC/ST	5 years
Ex-Servicemen (UR)	33 Years plus Number of years of service rendered in Defence plus 3 years
Ex-Servicemen (OBC-Non Creamy)	36 Years plus Number of years of service rendered in Defence plus 3 years
Ex-Servicemen (SC/ST)	38 Years plus Number of years of service rendered in Defence plus 3 years.
PwBD (UR)	10 years
PwBD (OBC-NCL)	13 years
PwBD (SC/ST)	15 years
Candidates have ordinarily been domiciled in the State of Jammu & Kashmir during the period from 01.01.1980 to 31.12.1989. (UR)	38 years
Candidates have ordinarily been domiciled in the State of Jammu & Kashmir during the period from 01.01.1980 to 31.12.1989. (OBC)	41 years
Candidates have ordinarily been domiciled in the State of Jammu & Kashmir during the period from 01.01.1980 to 31.12.1989. (SC/ST)	43 years
Candidates who are serving Group 'C' and erstwhile Group 'D' Railway Staff, Casual Labour and Substitutes and put in a minimum of 3 years service (UR)	40 years
Candidates who are serving Group 'C' and erstwhile Group 'D' Railway Staff, Casual Labour and Substitutes and put in a minimum of 3 years service (OBC)	43 years
Candidates who are serving Group 'C' and erstwhile Group 'D' Railway Staff, Casual Labour and Substitutes and put in minimum of 3 years service (SC/ST)	45 years
Candidates who are working in Quasi-Administrative offices of the Railway organization (UR)	33 Years plus length of service rendered or 5 years, whichever is lower
Candidates who are working in Quasi-Administrative offices of the Railway Organization (OBC)	36 years plus length of service rendered or 5 years, whichever is lower

Category	Relaxation in Upper Limit
Candidates who are working in Quasi-Administrative offices of the Railway organization (SC/ST)	38 years plus length of service rendered or 5 years, whichever is lower
Women candidates are widowed, divorced or judicially separated from their husbands but not remarried. (UR)	35 years
Women candidates are widowed, divorced or judicially separated from their husbands but not remarried. (OBC)	38 years
Women candidates are widowed, divorced or judicially separated from their husbands but not remarried. (SC/ST)	40 years

RRB NTPC 2024 Selection Process

The RRB NTPC 2024 selection process for levels 2, 3, 4, 5, and 6 consists of 2 stages of computer-based tests followed by the skill test. Here is the summary of the selection process that candidates will go through for the final selection:

Sl. No.	Name of the post	Level in 7 th CPC	1st stage CBT	2nd stage CBT	Skill Test requirement
1	Junior Clerk cum Typist	2	Common for all posts	Common For all Level 2 Posts	Typing Skill Test
2	Accounts Clerk cum Typist	2			Typing Skill Test
3	Junior Time Keeper	2			Typing Skill Test
4	Trains Clerk	2			—————
5	Commercial cum Ticket Clerk	3		Separate for Level 3 post	—————
6	Traffic Assistant	4		Separate for Level 4 post	Computer Based Aptitude Test
7	Goods Guard	5		Common For all Level 5 posts	—————
8	Senior Commercial cum Ticket Clerk	5			—————
9	Senior Clerk cum Typist	5			Typing Skill Test
10	Junior Account Assistant cum Typist	5			Typing Skill Test
11	Senior Time Keeper	5			Typing Skill Test
12	Commercial Apprentice	6		Common For all Level 6 posts	—————
13	Station Master	6			Computer Based Aptitude Test

RRB NTPC 2024 Application Fee

The candidates willing to apply for the upcoming RRB NTPC Recruitment 2024 should be aware of the amount of application fee they will need to pay to complete the online application process. The category-wise application fee details are mentioned in the points below.

- UR & OBC: Rs. 500/-
- Out of this fee of Rs.500/-, an amount of Rs.400/- shall be refunded duly deducting bank charges, on appearing in First Stage CBT.
- SC / ST / Ex-Serviceman / PWDs / Female / Transgender / Minorities / Economically backward class: Rs. 250/-
- This fee of Rs.250/- shall be refunded duly deducting bank charges, on appearing in First Stage CBT.

RRB NTPC 2024 Salary

The Non-Technical Popular Categories Recruitment or RRB NTPC is a popular railway recruitment exam conducted by the Railway Recruitment Board (RRB). Along with the official notification, the RRB releases the detailed RRB NTPC Syllabus to help candidates know the requirements of the exam.

The RRB NTPC includes various posts in the Railways such as Accounts Clerk cum Typist, Commercial cum Ticket Clerk, Junior Clerk cum Typist, Goods Guard, etc. Candidates wishing to work at these posts must pass rigorous tests including two stages of Computer-Based Tests.

RRB NTPC Selection Process 2024

Lakhs of candidates appear in the RRB NTPC exam making it a cumbersome task to shortlist the most eligible ones. Therefore, the Railway Recruitment Board has mandated the following four stages for selecting the best candidates to work for the Indian Railways:

- 1st Stage Computer Based Test (CBT)
- 2nd Stage Computer Based Test (CBT)
- Typing Skill Test/Computer-Based Aptitude Test
- Document Verification/Medical Examination.

First Stage of CBT (Prelims)



Second Stage of CBT (Mains)



Typing Test (Skill Test)



Document Verification



Medical Examination



Final Selection

RRB NTPC CBT 1 Exam Pattern 2024

CBT 1 is the very first step in the selection process and is conducted as a screening test to shortlist suitable candidates for the CBT 2 stage. As per the Syllabus of RRB NTPC, the stage 1 exam contains 100 questions to be attempted in 90 minutes. The subject-wise exam pattern is given below:

RRB NTPC CBT 1 Exam Pattern			
Sections	Number of Ques.	Maximum Marks	Duration
General Awareness	40	40	90 Minutes
Mathematics	30	30	
General Intelligence and Reasoning	30	30	
Total	100	100	

RRB NTPC CBT 2 Exam Pattern 2024

The candidates qualifying for RRB NTPC CBT 1 will be eligible for the CBT 2 examination. The RRB NTPC CBT 2 examination is provided in the table below. Aspirants need to take note of the following information on CBT 2, which is provided in the official notification.

- Separate 2nd Stage CBT shall be taken for each of the 7th CPC levels i.e. levels 2, 3, 4, 5, and 6 with the graded difficulty level.
- All posts falling within the same level of the 7th CPC shall have a common 2nd-stage CBT.
- The exam duration for PWD candidates is 120 Minutes.
- A negative marking of 1/3 is there.
- The level of questions will be different for different levels of posts.
- Normalization of marks will be done.

RRB NTPC CBT 2 Exam Pattern			
Sections	No. of Questions	Total Marks	Duration
Mathematics	35	35	90 minutes
General Intelligence and Reasoning	35	35	
General Awareness	50	50	
Total	120	120	

RRB NTPC Syllabus 2024

In this section, candidates can find the complete list of topics that are part of CBT 1 and CBT 2. Both these stages have a common syllabus to some extent. Only the duration of the exam and difficulty level varies across Prelims and Mains.

Railway NTPC Syllabus 2024 For Stage 1

The Questions will be of objective type with multiple choice and will include questions from three subjects namely General Awareness, Mathematics, and General Intelligence and Reasoning. The level of questions will be of 10th standard and candidates need not have any specialization in these subjects.

The topic-wise syllabus for the stage 1 CBT has been provided in the table below for the reference of the candidates.

RRB NTPC EXAM Subjects (100 Marks)	Syllabus of RRB NTPC Topics
RRB NTPC Mathematics Syllabus (30 Marks)	• Number System • Decimals • Fractions • LCM and HCF • Ratio and Proportions • Percentage • Mensuration • Time and Work • Time and Distance • Simple Interest and Compound Interest • Profit and Loss • Elementary Algebra • Geometry • Trigonometry
RRB NTPC General Awareness Syllabus (40 Marks)	• Current Events of National and International Importance • Monuments and Places of India • Games and Sports • Art and Culture of India • Indian Literature • Indian Polity and Governance- constitution and political system • General Science and Life Science (up to 10th CBSE) • History of India and Freedom Struggle • UN and Other important World Organizations • Physical Social and Economic Geography of India and the World • General Scientific and Technological Developments including the Space and Nuclear Program of India • Environmental Issues Concerning India and the World at Large • Basics of Computers and Computer Applications • Abbreviations • Indian Economy • Flagship Government Programs • Famous Personalities of India and the World • Important Government and Public Sector Organizations of India etc.

RRB NTPC General Intelligence and Reasoning Syllabus (30 Marks)	• Completion of Number and Alphabetical Series • Mathematical Operations • Relationships • Analogies • Analytical Reasoning • Syllogism • Data Sufficiency • Statement- Conclusion • Statement- Courses of Action • Decision Making • Coding and Decoding • Jumbling • Venn Diagrams • Puzzle • Interpretation of Graphs, etc.
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RRB NTPC Stage 2 Syllabus 2024

The topics included in Stage 2 will be the same as that of Stage 1 but with a different marking scheme and duration. Moreover, the level of questions will also be different as the questions will test the candidates on their analytical and decision-making skills. The RRB NTPC Syllabus 2024 has the following topics coming in Stage 2:

RRB NTPC Subjects (120 Marks)	RRB NTPC Exam syllabus Subject wise Topics
RRB NTPC General Awareness Syllabus (50 Marks)	• Current Events of National and International Importance • Monuments and Places of India • Games and Sports • Art and Culture of India • Indian Literature • Indian Polity and Governance- constitution and political system • General Science and Life Science (up to 10th CBSE) • History of India and Freedom Struggle • UN and Other important World Organizations • Physical Social and Economic Geography of India and the World • General Scientific and Technological Developments including the Space and Nuclear Program of India • Environmental Issues Concerning India and World at Large • Basics of Computers and Computer Applications • Abbreviations • Transport Systems in India • Indian Economy • Flagship Government Programs • Flora and Fauna of India • Famous Personalities of India and the World • Important Government and Public Sector Organizations of India etc.

RRB NTPC Subjects (120 Marks)	RRB NTPC Exam syllabus Subject wise Topics
RRB NTPC Maths syllabus: Mathematics (35 Marks)	• Number System • Decimals • Fractions • LCM and HCF • Ratio and Proportions • Percentage • Mensuration • Time and Work • Time and Distance • Simple Interest and Compound Interest • Profit and Loss • Elementary Algebra • Geometry • Trigonometry • Elementary Statistics, etc.
RRB NTPC General Intelligence and Reasoning Syllabus (35 Marks)	• Completion of Number and Alphabetical Series • Mathematical Operations • Similarities and Differences • Relationships • Analogies • Analytical Reasoning • Syllogism • Data Sufficiency • Statement- Conclusion • Statement- Courses of Action • Decision Making • Maps • Coding and Decoding • Jumbling • Venn Diagrams • Puzzle • Interpretation of Graphs, etc.

RRB NTPC Exam Syllabus History

The History subject can be divided into three categories i.e. Ancient, Medieval, and Modern. It ranges from the pre-historic age to the Struggle for Independence. Candidates can check the History topics covered under the RRB NTPC exam syllabus.

RRB NTPC History Topics	Chapters of History
Ancient History of India	Pre-historic Period
	Harappan civilization
	The Vedic Civilization & Culture
	The emergence of Mahajanapadas & Magadh
	Religious Revolution
	The Mauryan Empire
	The Sangam Age
	The Gupta Empire
	Post-Gupta Period / Vardhana Dynasty
	India After Harsha
Medieval History of India	Rajput Age
	Sultanate Period
	The Vijayanagar Empire
	Sufi and Bhakti Movement
	The Mughal Empire
	Maratha State & Maratha Confederacy
	Advent Of Europeans
Modern History of India	Expansion Of British Power
	Economic Impact Of British Rule
	Socio-Religious Movements in the 19th -20th Century
	Revolt of 1857
	Moderate, Extremist Phase Of Congress
	The Indian National Movements
	The Gandhian Era
	First Phase Of Independence

RRB NTPC Indian Polity Syllabus

Polity consists of various features of the constitution of India, important articles, parts & schedules, constitutional bodies, etc. The following topics are important for preparing for the Polity Syllabus in the RRB NTPC Syllabus 2024.

RRB NTPC Syllabus - Polity	
• Evolution of the Indian Constitution, • Constituent Assembly and Making of the Constitution, • Different Sources of the Indian Constitution, • Important Articles of the Constitution • Important Amendments of the Constitution • Some Special features of the Indian Constitution. • Federal and Unitary Features of the Indian Union	• The Supreme Court • The High Court • Inter-State Council • Finance Commission • Planning Commission • National Development Council • National Integration Council

RRB NTPC Syllabus - Polity

- | | |
|---|--|
| <ul style="list-style-type: none"> The preamble Lapse of Paramountcy Integration and Merger of Indian States The Union and its Territories Reorganization of States Citizenship Fundamental Rights Directive Principles of State Policy Fundamental Duties The procedure of Amending the Constitution Executive of the Union | <ul style="list-style-type: none"> Inter-State Relations Emergency Provisions Public Service Commissions Election Delimitation Commission of India The Official Languages National Symbols The Parliament of India Executive of the States Special Position of J & K Panchayats Municipalities |
|---|--|

RRB NTPC Syllabus for Geography

Geography contains questions of two types. The first is the physical geography of India and the world and Human Geography. Here is the detailed syllabus and the names of topics that are covered during the RRB NTPC Syllabus for CBT 1 and CBT 2.

Geography Syllabus

- | | |
|--|--|
| <ul style="list-style-type: none"> The Solar System Continents and Oceans Biosphere, Lithosphere, Hydrosphere Latitudes and Longitudes Different heat zones of the earth Longitudes and time zones International Date Line The motion of the earth - Effect of the tilted axis on day and night The Atmosphere (composition and layer of the Atmosphere) Weather and Climate Atmospheric Pressure Internal Structure of the Earth Rocks Earthquakes and Volcanoes Various Landforms (Mountains, Plateaus, Plains, Grasslands, Landforms created by the river system, Landforms created by a glacier, Landforms created by the action of wind, Landforms created by the actions of Groundwater) Changed names Continent earth area Continents highest and lowest points Three deepest oceans | <ul style="list-style-type: none"> The Indian Subcontinent, Position, extent, and physical features, Climatic diversity in the Indian Sub-continent Soil resources of the Indian sub-continent Agriculture in India, Land use pattern of India Water resources and their utilization in India Multipurpose river valley projects Transport in India India-Facts and figures (States and their capitals, Population of India and states, Wildlife sanctuaries and national parks in India Important Irrigation and power projects, Indian satellites). General introduction to Asia. Geography of the Indian subcontinent Countries with their capitals and currency Riverside cities Wonders of the world Countries and their main products and industries Towns are associated with important industries. Famous Sites (India), Famous Sites (World), Highest mountain peaks (world) Important boundary lines Tribes and their homelands |
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RRB NTPC Economics Syllabus

Economics is one of the most important subjects asked in the RRB NTPC exam. It can be classified into microeconomics and macroeconomics. The focus of this section will be on the Indian Economy and its various features. The questions related to economics will be asked from the below topics.

Economics Syllabus	
• Highlights of the Indian Economy • Economy and Economics • Characteristics of the Indian Economy • Agriculture & Land Development • National Income • Planning • Unemployment • Trade & Commerce	• Indian Fiscal System • Banking in India • Tax System • Industry • Foreign Trade • New Economic Policy • Indian Financial System

RRB NTPC Science Syllabus

Basic Elementary Science is one of the most important subjects which can be divided into Physics, Chemistry and Biology. The questions are asked based on the real-life applications of the concepts and the latest developments in the field of science and technology. The syllabus of Science for RRB NTPC Syllabus 2024. The topics are as follows:

Physics	Chemistry	Biology
• Unit • Motion • Work Energy and Power • Gravitation • Pressure • Floatation • Surface Tension • Viscosity • Elasticity • Simple Harmonic Motion • Wave • Sound Wave • Heat • Light • Static Electricity • Current Electricity • Magnetism • Atomic & Nuclear Physics • Electronics • Scientific Instruments • Inventions • Important Discoveries Relating to Physics • Various Units of Measurement-Weight • Conversion of Units from one System to another System	• Substance & its nature • Atomic Structure • Periodic Classification of Elements • Chemical Bonding • Oxidation & Reduction • Acids, Bases & Salts • Behavior of Cases • Electrolysis • Carbon & its Compounds • Fuels • Metallurgy • Important Facts About Some Metals • Non-Metals • Common Facts	• Introduction of Organism • Cytology • Genetics • Organic Evolution • Botany: Classification of Plant Kingdom, Plant Morphology, Plant Tissue, Photo-synthesis, Plant Hormones, Plant Diseases, Ecology • Pollution. • Zoology: Classification of Animal Kingdom, Animal Tissue • Human Blood • The system of the Human Body • Nutrients • Human Diseases

Note: The typing test is only applicable to the candidates who have applied for the posts of Junior Accounts Assistant cum Typist, Senior Time Keeper, Junior Clerk cum Typist, Senior Clerk cum Typist, Accounts Clerk cum Typist, and Junior Time Keeper.

RRB NTPC 2024 Cut Off

RRB NTPC 2015 Stage 1 Official Cutoff (Total Number of Vacancies: 18252)						
S.No.	Zone	General	OBC	SC	ST	No. of Candidates Shortlisted For 2nd Stage CBT (Approx. 15 Times)
1	Ahmedabad	72.86	64.91	57.23	48.1	17748
2	Ajmer	77.39	70.93	62.13	59.74	16321
3	Allahabad	77.49	70.47	62.85	47.02	42972
4	Bangalore	64.97	57.28	30.1	29	9088
5	Bhopal	72.9	66.31	58.61	51.16	17271
6	Bhubaneshwar	71.91	65.76	53.09	48.79	11551
7	Bilaspur	68.79	60.7	51.49	50.07	4530
8	Chandigarh	82.27	71.47	71.87	46.71	4567
9	Chennai	72.14	69.11	57.67	46.84	14642
10	Gorakhpur	77.43	69.01	56.63	47.67	4756
11	Guwahati	66.44	57.11	52.53	52.91	6136
12	Jammu	68.72	50.88	52.27	38.05	2565
13	Kolkata	79.5	71.53	67.07	52.92	21123
14	Malda	61.87	48.42	43.11	31.89	4170
15	Mumbai	77.05	70.21	63.6	54.95	34019
16	Muzaffarpur	57.97	45.57	30.06	25	6873
17	Patna	63.03	53.57	38.55	26.69	10710
18	Ranchi	63.75	57.29	45.48	48.58	8431
19	Secunderabad	77.72	72.87	63.73	59.13	24271
20	Siliguri	67.52	56.26	54.31	45.9	4185
21	Thiruvananthapuram	79.75	75.1	56.14	36.45	7321

RRB NTPC Previous Year Paper 01

Direction (1-3): Use the following passage for the questions based on it.

Rahul and Kusum are good in Hindi and Maths. Sameer and Rahul are good in Hindi and Biology. Gita and Kusum are good in Marathi and Maths. Sameer, Gita and Mihir are good in History and Biology.

Q1. Who is good in both Biology and Marathi?

- (a) Gita
- (b) Kusum
- (c) Sameer
- (d) Mihir

Q2. Who is good in only Hindi, Marathi and Maths?

- (a) Sameer
- (b) Rahul
- (c) Kusum
- (d) Gita

Q3. Who is good in Maths, Biology and Hindi?

- (a) Gita
- (b) Rahul
- (c) Sameer
- (d) Mihir

Q4. Given below is a statement followed by some conclusions. You have to take the given statement to be true even if it seems to be at variance with the commonly known facts and then decide which of the given conclusions logically follow(s) from the given statement.

Statement:

Hrithik, in spite of his busy schedule, finds time to rest.

Conclusions:

I. Hrithik is an organized person.

II. Rest is the most important thing for a busy person.

Decide the right option from below.

- (a) Only conclusion I follows
- (b) Only conclusion II follows
- (c) Both I and II follow
- (d) Neither of them follows

Q5. Which among the following is true for the given numbers?

- (a) $13/33 < 32/47 < 20/47 < 25/27$
- (b) $13/33 < 20/47 < 25/27 < 32/47$
- (c) $13/33 < 20/47 < 32/47 < 25/27$
- (d) $20/47 < 13/33 < 32/47 < 25/27$

Q6. The colour of solid Iodine is–

- (a) White
- (b) Colorless
- (c) Purplish Grey to Black
- (d) Reddish Brown

Q7. Find the LCM of $25/7$, $15/28$, $20/21$.

- (a) $300/7$
- (b) 300
- (c) $320/23$
- (d) 320

Q8. Who was the last emperor of the Mauryan Dynasty?

- (a) Chandragupta
- (b) Ashoka
- (c) Brihadratha
- (d) Shatadhanvan

Q9. X is 5 ft tall and he notices that he casts a shadow that's 3 ft long. He then measures that the shadow cast by his school building is 30 ft long. How tall is the building?

- (a) 50 ft
- (b) 18 ft
- (c) 90 ft
- (d) 150 ft

Q10. 3 chairs and 2 tables cost Rs. 700 and 5 chairs and 3 tables cost Rs. 1100. What is the cost of 1 chair and 2 tables?

- (a) 350
- (b) 400
- (c) 500
- (d) 550

Q11. The LCM of two numbers is 210. If their HCF is 35 and one of the numbers is 105, find the other number.

- (a) 35
- (b) 70
- (c) 105
- (d) 140

Q12. Working alone, A can do a job in 15 days and B can do the same job in 18 days. In how many days will the job be completed if both work together?

- (a) 10/3 days
- (b) 90/11 days
- (c) 5/36 days
- (d) 15 days

Q13. In 2015, _____, a new species of the genus Homo was discovered in the Dinaledi Chamber of the Rising star cave system, Cradle of Humankind, South Africa.

- (a) Homo naledi
- (b) Homo erectus
- (c) Homo habilis
- (d) Homo rudolfensis

Q14. Given below is a statement followed by some conclusions. You have to take the given statement to be true even if it seems to be at variance with the commonly known facts and then decide which of the given conclusions logically follow(s) from the given statement.

Statement:

All hard-working people are successful.

Conclusions:

I. All successful people are hard-working.

II. Only hard work can guarantee success in life.

Decide the right option from below.

- (a) Only conclusion I follows
- (b) Only conclusion II follows
- (c) Both I and II follow
- (d) Neither of them follows

Q15. In a web browser, which of the following is used to save frequently visited websites?

- (a) History
- (b) Task Manager
- (c) Favorites
- (d) Save as

Q16. The Khajuraho Group of Monuments is a UNESCO World Heritage Site located in–

- (a) Madhya Pradesh
- (b) Uttar Pradesh
- (c) Uttarakhand
- (d) Chattisgarh

Q17. If '+' means $\times$, '-' means $\div$, ' $\times$ ' means + and ' $\div$ ' means – ; compute the value of the expression:

$$45 - 9 + 4 \times 5$$

- (a) 21
- (b) 25
- (c) 26
- (d) 23

Q18. On which lake is the Golden Temple located?

- (a) Amrit Sarovar Lake
- (b) Golden Lake
- (c) Harike Lake
- (d) Sukhna Lake

Q19. If three numbers are in the ratio of 1:3:5 and their sum is 10,800. Find the largest of the three numbers.

- (a) 1200
- (b) 3600
- (c) 6000
- (d) 5400

Q20. If $A = 1$ and $PAT = 37$, then $PART =$

- (a) 55
- (b) 52
- (c) 51
- (d) 54

Q21. A positive number exceed its positive square root by 30. Find the number.

- (a) 16
- (b) 36
- (c) 25
- (d) 49

Q22. A car travels at the speed of 50 km/hr for the first half of the journey and at the speed of 60 km/hr for the second half of the journey. What is the average speed of the car for the entire journey?

- (a) 54.54 km/hr
- (b) 36.36 km/hr
- (c) 50.5 km/hr
- (d) 45.45 km/hr

Q23. In 2016, who has partnered with ISRO to use space technology for 'predictive policing'?

- (a) Delhi Police
- (b) Mumbai Police
- (c) Chennai Metropolitan Police
- (d) Kolkata Police

Q24. Which of the following technological inventions came first?

- (a) Telegraph
- (b) Telescope
- (c) Telephone
- (d) Teletype

Q25. Rita introduced Seema as her mother's father's only son's daughter. How is Rita related to Seema?

- (a) Cousin
- (b) Paternal Aunt
- (c) Niece
- (d) Maternal Aunt

Q26. Which art form was Mrinalini Sarabhai associated with?

- (a) Pattachitra
- (b) Tanjore Painting
- (c) Bharatnatyam
- (d) Madhubani Painting

Q27. Choose the pair which is related in the same way as the words in the first pair from the given choices.

INDIA: TIGER :: USA : _____

- (a) UNICORN
- (b) BALD EAGLE
- (c) TURUL
- (d) DRUK

Q28. The dimensions of a luggage box are 80 cm, 60 cm and 40 cm. How many sq. cm of cloth is required to cover the box?

- (a) 10400 sq. cm
- (b) 20800 sq. cm
- (c) 20400 sq. cm
- (d) 10200 sq. cm

Q29. The sum of digits of a two-digit number is 10. When the digits are reversed, the number decreases by 54. Find the changed number.

- (a) 73
- (b) 28
- (c) 82
- (d) 37

Q30. The incomes of A and B are in the ratio of 3:2 and their expenditures are Rs. 14,000 and Rs. 10,000 respectively. If A saves Rs. 4000, then B's savings will be:

- (a) Rs. 4000
- (b) Rs. 2000
- (c) Rs. 3000
- (d) Rs. 5000

Q31. Ganesh said, "Anjali is my paternal grandfather's only daughter-in-law's only granddaughter". Ganesh is single and has only one sibling, i.e., an elder sister. How is Ganesh related to Anjali?

- (a) Maternal Uncle
- (b) Paternal Uncle
- (c) Cousin
- (d) Nephew

Q32. Which of the following type of rays does NOT penetrate Earth's atmosphere?

- (a) Visible Light
- (b) X-rays
- (c) Ultraviolet Rays
- (d) Radio Waves

Q33. Simplify: $(\frac{2}{9} + \frac{3}{5}) \div (\frac{2}{9} + \frac{2}{5})$

- (a) $\frac{37}{28}$
- (b) $\frac{47}{43}$
- (c) $\frac{43}{47}$
- (d) $\frac{41}{47}$

Q34. The first captain of the Indian Cricket team for One Day International was –

- (a) Ajit Wadekar
- (b) Sunil Gavaskar
- (c) Kapil Dev
- (d) C K Nayudu

Q35. The principle of regarding the beliefs, values, and practices of the culture from the viewpoint of that culture itself is called–

- (a) Cultural Functionalism
- (b) Cultural Relativism
- (c) Cultural Independence
- (d) Cultural Interdependence

Q36. Rearrange the following jumbled sentences to make a meaningful one:

P: are inhibiting progress

Q: they look for creative

R: rather than the conventional solution of outsourcing

S: solutions to problems that

The proper sequence should be:

- (a) SRQP
- (b) QSPR
- (c) PQRS
- (d) QRPS

Q37. P is twice as efficient as Q. Q takes 12 days to complete a job. If both of them work together, how much time will they take to complete the job?

- (a) 6 days
- (b) 5 days
- (c) 4 days
- (d) 3 days

Q38. In January 2016, Indian Defence Minister hoisted the world's largest tri-colour on the tallest flag-post at–

- (a) New Delhi
- (b) Jaipur
- (c) Ranchi
- (d) Leh

Q39. What is the median of the following list of numbers: 5, 3, 6, 9, 11, 19, and 1 ?

- (a) 5
- (b) 6
- (c) 9
- (d) 11

Q40. A sold a toy to B at a profit of 15%. Later on, B sold it back to A at a profit of 20%, thereby gaining Rs. 552. How much did A pay for the toy originally?

- (a) Rs. 2400
- (b) Rs. 2560
- (c) Rs. 2760
- (d) Rs. 2800

Q41. Which of the following is NOT a Greenhouse Gas?

- (a) Nitrous Oxide
- (b) Methane
- (c) Sulphur Hexafluoride
- (d) Copper Dioxide

Q42. On which festival did the Jallianwala Bagh Massacre take place?

- (a) Baisakhi
- (b) Guru Nanak Jayanti
- (c) Diwali
- (d) Holi

Q43. The 2016 World Economic Forum Annual Meeting took place in–

- (a) Germany
- (b) Switzerland
- (c) France
- (d) United Kingdom

Q44. Which of the following is NOT a computer virus?

- (a) AIDS
- (b) Anna Kournikova
- (c) Brain
- (d) Don

Q45. In the Republic of India, the administrative head of a Union Territory is–

- (a) Lieutenant Governor
- (b) Governor
- (c) President
- (d) Prime Minister

Q46. The Jayakwadi Project, which is one of the largest irrigation projects is on the river–

- (a) Godavari
- (b) Narmada
- (c) Krishna
- (d) Tapi

Q47. Which of the following is the largest glacier in India?

- (a) Gangotri Glacier
- (b) Drang Drung Glacier
- (c) Siachen Glacier
- (d) Shafat Glacier

Q48. Which was the first women's sport to be introduced in the Olympics?

- (a) Gymnastics
- (b) Volleyball
- (c) Golf
- (d) Badminton

Q49. A wire when bent in the form of a square encloses an area of 484 sq. cm. If the same wire is bent in the form of a circle, what is the area enclosed by it?

- (a) 264 sq. cm
- (b) 616 sq. cm
- (c) 488 sq. cm
- (d) 492 sq. cm

Q50. What will Rs. 40,000 amount to in 2 years at the rate of 20% p.a., if interest is compounded yearly?

- (a) Rs. 48,620
- (b) Rs. 58,564
- (c) Rs. 57,600
- (d) Rs. 60,000

Q51. How long will a sum of money take to double, if it is invested at 9.09% p.a. simple interest?

- (a) 12 years
- (b) 14 years
- (c) 11 years
- (d) 13 years

Q52. From 1337 to 1453, who were the main combatants in the Hundred Year's War?

- (a) Kingdom of Germany and Kingdom of France
- (b) Kingdom of Germany and Kingdom of Italy
- (c) Kingdom of France and Kingdom of Spain
- (d) Kingdom of England and Kingdom of France

Q53. A train crosses a stationary object in 10 seconds. What is the length of the train if the speed of the train is 25 m/s?

- (a) 300 m
- (b) 250 m
- (c) 320 m
- (d) 200 m

Q54. Google, in partnership with the Railway's telecom wing RailTel, introduced the first public Wi-Fi service at the _____ railway station.

- (a) Trivandrum Central
- (b) Mumbai Central
- (c) Howrah Station
- (d) Kanpur Central

Q55. If the pH value of a substance is lower than 7, it would be considered as-

- (a) Neutral
- (b) Base
- (c) Acid
- (d) Ion

Q56. In 2013, the first human liver was grown from stem cells in-

- (a) Japan
- (b) USA
- (c) Germany
- (d) France

Q57. Two poles of the height 12 m and 17 m stand vertically upright on a plane ground. If the distance between their feet is 12 m, find the distance between their tops.

- (a) 11 m
- (b) 12 m
- (c) 13 m
- (d) 14 m

Q58. In which state is the World Heritage Site 'Basilica of Bom Jesus' located?

- (a) Goa
- (b) Andhra Pradesh
- (c) Tamil Nadu
- (d) Kerala

Q59. If PLUTO = QKVSP, then SATURN=

- (a) TZUTSM
- (b) TATUTM
- (c) TZUTRO
- (d) RZUTSO

Q60. If P713 is divisible by 11, find the value of the smallest natural number P?

- (a) 5
- (b) 6
- (c) 7
- (d) 9

Q61. If '+' means $\times$, '-' means $\div$, ' $\times$ ' means + and ' $\div$ ' means - ; compute the value of the expression:
 $15 + 9 \times 10 \div 5$

- (a) 140
- (b) 190
- (c) 145
- (d) 130

Q62. Which of the following is NOT a rich source of Calcium?

- (a) Cheese
- (b) Collard Greens
- (c) Figs
- (d) Carrots

Q63. Pointing at a photograph, Ramesh said, "He is Rahul, my brother's son's only paternal uncle's wife's brother". How is Rahul related to Ramesh?

- (a) Brother-in-law
- (b) Brother
- (c) Cousin
- (d) Son

Q64. Who was the first Indian to become a Nobel Laureate?

- (a) Rabindranath Tagore
- (b) Mahatma Gandhi
- (c) C. V. Raman
- (d) Mother Teresa

Q65. Choose the pair which is related in the same way as the words in the first pair from the given choices.

OPHTHALMOLOGIST : EYE :: NEPHROLOGIST : _____

- (a) NERVOUS SYSTEM
- (b) LIVER
- (c) KIDNEY
- (d) STOMACH

Q66. Indian born Shiva Ayyadurai is associated with the invention of–

- (a) Email
- (b) Internet
- (c) Keyboard
- (d) Mouse

Q67. Below are given statements followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with the commonly known facts and then decide which of the given conclusions logically follow(s) from the given statements.

Statements:

- A. All boys are monkeys.
- B. Some plants are monkeys.

Conclusions:

- I. Some monkeys are boys.
- II. All plants are boys.

Decide which of the below conclusions logically follows from the given statements.

- (a) Only conclusion I follows
- (b) Only conclusion II follows
- (c) Both I and II follow
- (d) Neither of them follows

Q68. The average of 11 results is 50. The average of the first 6 results is 49 and that of the last 6 results is 52. What is the 6th result?

- (a) 48
- (b) 51
- (c) 56
- (d) 49

Q69. $5.36 \times 3.6 =$

- (a) 19.296
- (b) 18.946
- (c) 21.996
- (d) 20.26

Q70. Compute: $(18 + 2 \times 3.3) \div 0.003$

- (a) 11200
- (b) 5100
- (c) 8200
- (d) 1610

Q71. A ladder 10 m long is leaning against a vertical wall. It makes an angle of 60° with the ground. How far is the foot of the ladder from the wall?

- (a) 5 m
- (b) 8.66 m
- (c) 17.32 m
- (d) 15 m

Q72. Given below is a statement followed by some conclusions. You have to take the given statement to be true even if it seems to be at variance with the commonly known facts and then decide which of the given conclusions logically follow(s) from the given statement.

Statement:

Sachin Tendulkar was the greatest batsman in Indian Cricket.

Conclusions:

I. There will be no other batsman greater than Sachin Tendulkar in Indian Cricket.

II. Sachin Tendulkar is the greatest batsman in the world.

Choose the right option from below

- (a) Only conclusion I follows
- (b) Only conclusion II follows
- (c) Both I and II follow
- (d) Neither of them follows

Q73. In January 2016, the Union Cabinet approved the proposal of the Ministry of Power for amendments in the Tariff Policy with the focus on 4 Es. Which of the following is NOT a part of the 4 Es?

- (a) Electricity for all
- (b) Environment for sustainable future
- (c) Ease of doing business to attract investments
- (d) Ensuring affordable electrical goods to all

Q74. Choose the pair which is related in the same way as the words in the first pair from the given choices.

CRICKET : PITCH :: SKATING: _____

- (a) RINK
- (b) GROUND
- (c) COURT
- (d) RING

Q75. Below are two statements. You have to take the given statements to be true even if they seem to be at variance with the commonly known facts.

Statements:

I. Some trees are buildings.

II. All buildings are parrots.

Decide which of the below conclusions logically follows from the given statements.

- (a) All parrots are trees
- (b) All parrots are buildings
- (c) Some parrots are buildings
- (d) No parrot is a tree

Q76. Re-location of endangered or rare species from their natural habitat to protected areas equipped for their protection and preservation is called–

- (a) Ex situ conservation
- (b) In situ conservation
- (c) Exile conservation
- (d) Escaped conservation

Q77. From which country is the 'Fundamental Duties' of the Indian Constitution borrowed?

- (a) UK
- (b) USA
- (c) USSR
- (d) Australia

Q78. In India, the highest cricket ground above sea level lies in which state?

- (a) Himachal Pradesh
- (b) Sikkim
- (c) Uttar Pradesh
- (d) Assam

Directions (79-81): Study the following table and answer the questions based on it.

Given below is the list of expenditures (in lakh rupees) per annum of Company Z over the years.

Year	Expenditure Items for Company Z				
	Salary	Fuel and Transport	Bonus	Interest on Loans	Taxes
2011	412	227	15	133.4	98
2012	557	233	16.5	142.5	138
2013	656	245	17.3	151.6	174
2014	680	260	17.9	166.4	188
2015	720	284	18.5	179.4	198

Q79. What is the average amount of Bonus per year?

- (a) Rs. 17.04 Lakhs
- (b) Rs. 17 Lakhs
- (c) Rs. 17.4 Lakhs
- (d) Rs. 16.8 Lakhs

Q80. What is the total expenditure of Company Z in the year 2011?

- (a) Rs. 897.2 Lakhs
- (b) Rs. 827.5 Lakhs
- (c) Rs. 885.4 Lakhs
- (d) Rs. 727.1 Lakhs

Q81. What is the expenditure on Fuel and Transport as a percentage of expenditure on Salary for the year 2012?

- (a) 41.8%
- (b) 40.1%
- (c) 43.1%
- (d) 44.2%

Q82. The cost of 2 pencil, 4 pens and 8 erasers is Rs. 12 and the cost of 8 pens, 10 pencils and 4 erasers is Rs. 36. How much will 3 pencils, 3 pens and 3 erasers cost?

- (a) Rs. 10
- (b) Rs. 15
- (c) Rs. 12
- (d) Rs. 18

Q83. If BEAR = YVZI, then BUILDING =

- (a) ATHKCHMF
- (b) YFROWRMT
- (c) YFSWOSMR
- (d) ATHKCHMT

Q84. What is Geotropism?

- (a) Growth of plants in response to Gravity
- (b) Growth of plants in response to Sunlight
- (c) Growth of plants in response to Nutrients
- (d) Growth of plants in response to Water

Q85. If the cost price of 120 articles is equal to the selling price of 80 articles, find the profit percent.

- (a) 33.33%
- (b) 40%
- (c) 50%
- (d) 60%

Q86. In 2016, ISRO conducted 1st satellite-based warning system trial for Indian Railways in–

- (a) Mumbai
- (b) Ahmedabad
- (c) Kolkata
- (d) Delhi

Q87. In 1831, electricity became viable for use in technology when _____ created the electric dynamo.

- (a) Benjamin Franklin
- (b) Alessandro Volta
- (c) Michael Faraday
- (d) Thomas Edison

Q88. If RAILWAY is coded as 24-7-15-18-29-7-31 then how will you code STATION?

- (a) 25-24-7-24-15-21-19
- (b) 25-26-7-26-15-21-20
- (c) 25-24-8-24-15-21-19
- (d) 25-26-8-26-15-21-20

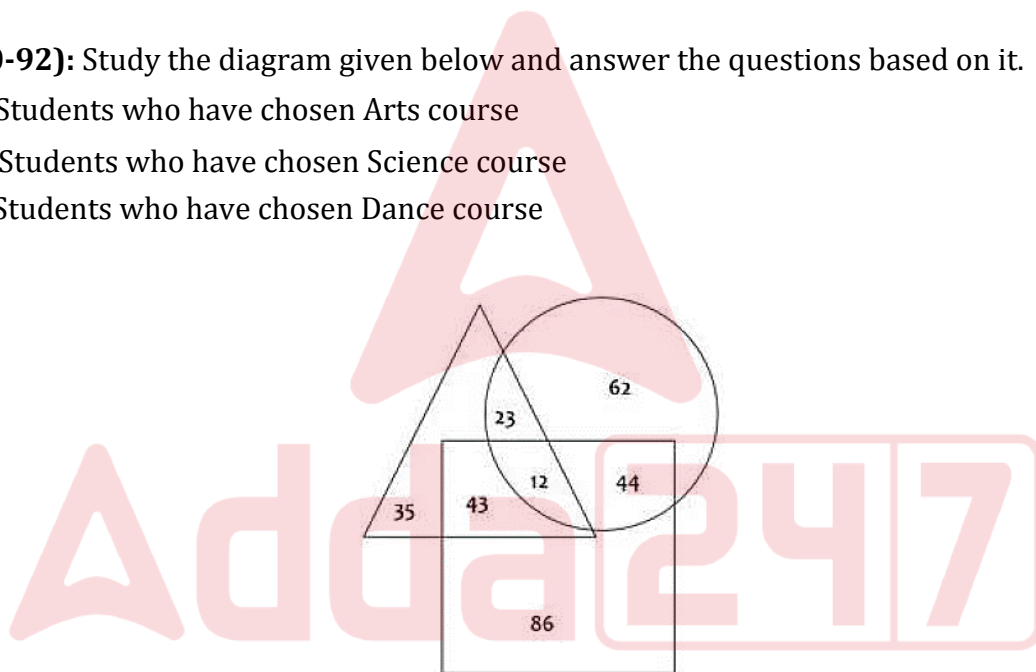
Q89. Select the correct set of symbols:

$64\ 4\ 5\ 8 = 88$

- (a) $\times, -, \div$
- (b) $+, \div, -$
- (c) $+, -, \div$
- (d) $\div, \times, +$

Direction (90-92): Study the diagram given below and answer the questions based on it.

- $\triangle$ represents Students who have chosen Arts course
 $\bigcirc$ represents Students who have chosen Science course
 $\square$ represents Students who have chosen Dance course



Q90. How many students have chosen the Science course?

- (a) 141
- (b) 185
- (c) 113
- (d) 145

Q91. How many students have chosen Dance course and Science course but not the Arts course?

- (a) 43
- (b) 44
- (c) 12
- (d) 23

Q92. How many students have chosen Arts course and Science course but not the Dance course?

- (a) 23
- (b) 12
- (c) 35
- (d) 44

Q93. When an object thrown straight upwards gets to the top of its path, its

- (a) Velocity is zero and its acceleration is zero
- (b) Velocity is zero and its acceleration is about 10 m/s^2
- (c) Velocity is 10 m/s and its acceleration is zero
- (d) Velocity is 10 m/s and its acceleration is about 10 m/s^2

Q94. Select the correct set of symbols:

$$21 \ 9 \ 13 \ 7 = 195$$

- (a) $\times, -, \div$
- (b) $+, \div, -$
- (c) $+, -, \div$
- (d) $\times, +, -$

Q95. Which of the following gases in air is responsible for the discoloration of Brass?

- (a) Hydrogen Sulphide
- (b) Carbon Dioxide
- (c) Nitrogen
- (d) Carbon Monoxide

Q96. Choose the one which is different or odd from the following.

- (a) Dal Lake
- (b) Sambhar Lake
- (c) Vembanad Lake
- (d) Wular Lake

Q97. What is the mode of the following list of numbers:

2, 4, 5, 6, 5, 4, 3, 5, 3, 1, and 7?

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

Q98. India's national motto, Satyameva Jayate (lit. "Truth alone triumphs"), is a mantra from the ancient Indian scripture–

- (a) Rigveda
- (b) Mundaka Upanishad
- (c) Bhagavad Gita
- (d) Matsya Purana

Q99. P bought an article for Rs. 400 and sold it at a profit of 10%. What would have been the increase in the profit percent if it was sold for Rs. 460?

- (a) 5%
- (b) 10%
- (c) 12%
- (d) 15%

Q100. In 2016, ISRO successfully launched its fifth navigation satellite called–

- (a) IRNSS 1D
- (b) IRNSS 1E
- (c) VELOX-C1
- (d) TeLEOS-1



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S1. Ans.(a)

Sol.

	Hindi	Maths	Biology	Marathi	History
Rahul	1	1	1	×	×
Kusum	1	1	×	1	×
Sameer	1	×	1	×	1
Gita	×	1	1	1	1
Mihir	×	×	1	×	1

1 means person knows the language

× means person does not know the language

Gita is good at both Biology and Marathi

S2. Ans.(c)

Sol. Kusum is good at Hindi, Marathi & Maths

S3. Ans.(b)

Sol. Rahul is good at Maths, Biology & Hindi

S4. Ans.(d)

Sol. Neither of them follows, through statement we cannot conclude any of the conclusions

S5. Ans.(c)

Sol. $\frac{32}{47} > \frac{20}{47}$

$$\frac{25}{27} > \frac{13}{33}, \frac{25}{27} > \frac{32}{47}, \frac{25}{27} > \frac{20}{47}$$

$$\frac{20}{47} > \frac{13}{33} \text{ as } 20 \times 33 > 13 \times 47$$

combining all the equations we get

$$\frac{13}{33} < \frac{20}{47} < \frac{32}{47} < \frac{25}{27}$$

S6. Ans.(c)

Sol. The halogens darken in colour as the group is descended: fluorine is a very pale yellow gas, chlorine is greenish-yellow, and bromine is a reddish-brown volatile liquid. Iodine conforms to the prevailing trend, being a shiny black crystalline solid that melts at 114 °C and boils at 183 °C to form a violet gas.

S7. Ans.(a)

Sol. LCM of $\left[\frac{25}{7}, \frac{15}{28}, \frac{20}{21}\right]$

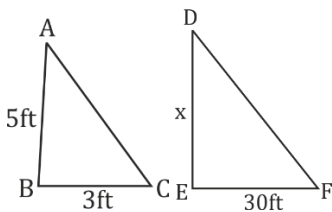
$$\text{Is } \frac{\text{LCM of } [25, 15, 20]}{\text{HCF of } [7, 28, 21]} = \frac{300}{7}$$

S8. Ans.(c)

Sol. Brihadratha was the last ruler of the Mauryan dynasty. He is assassinated by his commander-in-chief, Pushyamitra Shunga.

S9. Ans.(a)

Sol.



$$\frac{5}{x} = \frac{3}{30} \Rightarrow x = 50 \text{ ft}$$

S10. Ans.(c)

Sol. $3c + 2t = 700$ _____ (i)

$5c + 3t = 1100$ _____ (ii)

$1c + 2t = ?$

Multiply (i) by 3 and (ii) by 2 we get.

$9c + 6t = 2100$

$10c + 6t = 2200$

Subtracting both we get

$c = \text{Rs } 100$

And $t = \text{Rs } 200$

$1c + 2t = \text{Rs } 500$

S11. Ans.(b)

Sol. the two numbers be 105, y

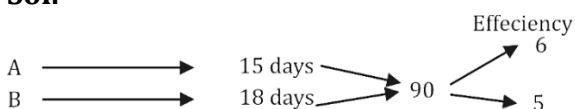
$\text{LCM} \times \text{HCF} = 105 \times y$

$210 \times 35 = 105 \times y$

$y = 70$

S12. Ans.(b)

Sol.



Total work = 90

Total efficiency = 11

Time = $\frac{90}{11}$ days

S13. Ans.(a)

Sol. Homo Naledi was formally described in September 2015 by a 47-member international team of authors led by South African paleoanthropologist Lee Berger of the University of the Witwatersrand, who proposed that the bones represent a new Homo species.

S14. Ans.(d)

Sol. Neither of them follows,

**S15. Ans.(c)**

Sol. Favourite is used to save frequently visited websites in a web browser.

S16. Ans.(a)

Sol. The Khajuraho Group of Monuments is a group of Hindu temples in Chhatarpur, Madhya Pradesh, India.

S17. Ans.(b)

Sol. $45 \div 9 \times 4 + 5 = 25$

S18. Ans.(a)

Sol. Shaped as large rectangular tank, Amrit Sarovar makes the perfect hinterland for the holy Golden Temple (Harmandir Sahib Gurudwara) and is one of the most beautiful parts of the city of Amritsar.

S19. Ans.(c)

Sol. $1x + 3x + 5x = 10,800$

$x = 1200 \Rightarrow 5x = 6000$

S20. Ans.(a)

Sol.

$A = 1$; PAT = 37, PART = 55

```

    16 1 20 16 1 18 20
    / | \ / | \
  
```

S21. Ans.(b)

Sol. $x = \sqrt{x} + 30$ _____ (i)

$x - 30 = \sqrt{x}$

Squaring both side we get

$$X^2 + 900 - 60x = x$$

$$X^2 - 61x + 900 = 0$$

$$X^2 - 36x - 25x + 900 = 0$$

$$X = 36, 25$$

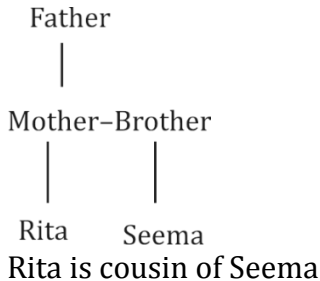
Only $x = 36$ satisfies (i)

S22. Ans.(a)**Sol.** Let the total distance = 2D

$$\frac{D}{50} + \frac{D}{60} = \text{Total time}$$

$$\text{Average speed} = \frac{2D}{\frac{D}{50} + \frac{D}{60}} = \frac{2 \times 50 \times 60}{110}$$

$$= \frac{600}{11} = 54.54 \text{ km/hr}$$

S23. Ans.(a)**Sol.** The Delhi Police will start using a 'predictive policing' mechanism in partnership with the Indian Space Research Organisation (ISRO).**S24. Ans.(b)****Sol.** Galileo made his first telescope in 1609. Samuel Morse independently developed and patented a recording electric telegraph in 1837. Alexander Graham Bell was awarded the first U.S. patent for the invention of the telephone in 1876. Teletype machines from the AP, UPI and Reuters, were invented in 1924, and phased out in the 1970s.**S25. Ans.(a)****Sol.****S26. Ans.(c)****Sol.** Mrinalini Sarabhai was an Indian Classical Bharatnatyam and Kathakali dancer.**S27. Ans.(b)****Sol.** Tiger is national animal of India Similarly bold eagle is national animal of USA**S28. Ans.(b)****Sol.** Surface area of box

$$= 2[80 \times 60 + 60 \times 40 + 40 \times 80]$$

$$= 2[4800 + 2400 + 3200]$$

$$= [10400]2 = 20800 \text{ cm}^2$$

S29. Ans.(b)

$$\text{Sol. } 10x + y - 10y - x = 54$$

$$9(x - y) = 54$$

$$x - y = 6$$

$$x + y = 10$$

From this we get $x = 8, y = 2$

Number = 28

S30. Ans.(b)

Sol. $\frac{3x - 14000}{2x - 10000}$

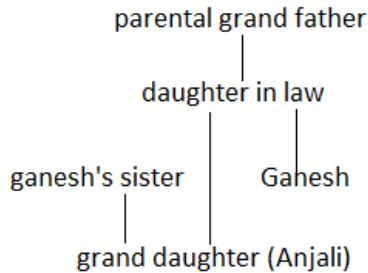
$$3x - 14000 = 4000 \Rightarrow x = \text{Rs } 6000$$

B's income = 2×6000

Saving of B = Rs 2000

S31. Ans.(a)

Sol.



S32. Ans.(b)

Sol. Fortunately for life on Earth, our atmosphere blocks out harmful high-energy radiation like x-rays, gamma rays and most of the ultraviolet rays. The atmosphere also absorbs most of the infrared radiation which reaches the Earth from space.

S33. Ans.(a)

Sol.

$$\frac{\frac{2}{9} + \frac{3}{5}}{\frac{2}{9} + \frac{2}{5}} = \frac{10 + 27}{10 + 18} = \frac{37}{28}$$

S34. Ans.(a)

Sol. First Captain for Indian ODI team is Ajit Wadekar (1974). First Captain for Indian T20 team is Virender Sehwag (2006).

S35. Ans.(b)

Sol. Cultural relativism is the idea that a person's beliefs, values, and practices should be understood based on that person's own culture, rather than be judged against the criteria of another.

S36. Ans.(b)

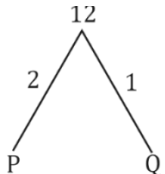
Sol. QSPR $\rightarrow$ "They look for creative solutions to problems that are inhibiting progress rather than the conventional solution of outsourcing."

S37. Ans.(c)

Sol. P : Q = 2 : 1 [efficiency]

Q takes 12 days

P takes 6 days



$$\text{Time taken by both} = \frac{12}{3} = 4 \text{ days}$$

S38. Ans.(c)

Sol. Indian Defence Minister Manohar Parrikar hoisted the world's largest tri-colour on the tallest flag-post at Ranchi's popular, Pahari Mandir, or 'Fansi Dungri'.

S39. Ans.(b)

Sol. Median = 1, 3, 5, 6, 9, 11, 19, Median = 6

S40. Ans.(a)

Sol. A → 100 – CP for A

B = 115 – CP for B

B sold it to A at a profit of 20%

$$20\% = \frac{1}{5}$$

SP – 6

CP – 5 → 115

$$SP = \frac{6 \times 115}{5} = 138$$

Gain for B = 138 – 115 = 23

23 → 552 ⇒ 1 → 24

100 → Rs 2400

S41. Ans.(d)

Sol. Copper dioxide is not a Greenhouse Gas.

S42. Ans.(a)

Sol. On the Jallianwala baug massacre, around 50 troops of the British Indian Army, under the command of Colonel Reginald Dyer, fired rifles into a crowd of Baishakhi pilgrims, who had gathered in Jallianwala Bagh, Amritsar, Punjab.

S43. Ans.(b)

Sol. The World Economic Forum Annual Meeting 2016, Mastering the Fourth Industrial Revolution, will be held in Davos-Klosters, Switzerland 20 - 23 January 2016.

S44. Ans.(d)

Sol. Among the given options “Don” is not a computer virus.

S45. Ans.(a)

Sol. Lieutenant-Governor is the administrative head of a Union Territory.

S46. Ans.(a)

Sol. Jayakwadi irrigation project is located on Godavari river at the site of Jayakwadi village in Paithan taluka of Aurangabad district in Maharashtra State of India.

S47. Ans.(c)

Sol. Siachen Glacier is the largest glacier in India, located in Jammu and Kashmir. It is also the largest glacier outside the polar and the sub-polar regions.

S48. Ans.(c)

Sol. Women participated for the first time at the 1900 Paris Games with the inclusion of women's events in lawn tennis and golf.

S49. Ans.(b)

Sol. area of square = 484 sq cm

Side = 22 cm

Perimeter = 88 cm

$2\pi r = 88$

$R = 14$ cm

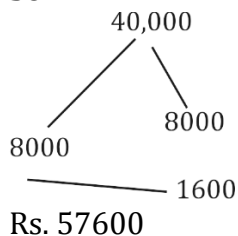
Area = $\pi \times 14^2$

$= \frac{22}{7} \times 14 \times 14$

$= 22 \times 28 = 616$ sq .cm

S50. Ans.(c)

Sol.



S51. Ans.(c)

Sol. $x = \frac{xRT}{100}$

$R = 9.09\%$

$\frac{100}{9.09} = T \Rightarrow T = 11$ years

S52. Ans.(d)

Sol. The Hundred Years' War was fought between France and England during the late Middle Ages.

S53. Ans.(b)

Sol. length of train = $10 \times 25 = 250$ m

S54. Ans.(b)

Sol. Google introduced first free WiFi service at Mumbai Central station in January 2016.

S55. Ans.(c)

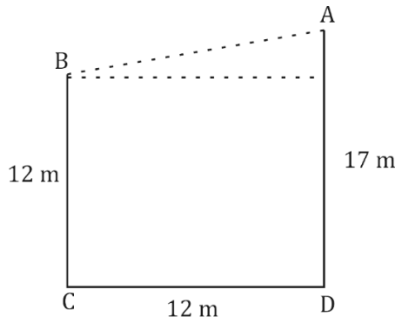
Sol. A pH of 7 is neutral. A pH less than 7 is acidic. A pH greater than 7 is basic.

S56. Ans.(a)

Sol. Tiny functioning human livers have been grown from stem cells in the laboratory by scientists in Japan.

S57. Ans.(c)

Sol.



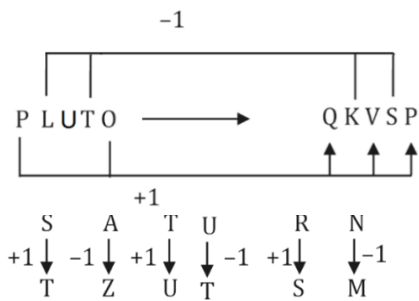
$$AB = \sqrt{12^2 + 5^2} = 13 \text{ m}$$

S58. Ans.(a)

Sol. The Basilica of Bom Jesus or Borea Jezuchi Bajilika is located in Goa, India, and is part of the Churches and convents of Goa UNESCO World Heritage Site.

S59. Ans.(a)

Sol.



S60. Ans.(d)

Sol. 9713 is divisible by 11

S61. Ans.(a)

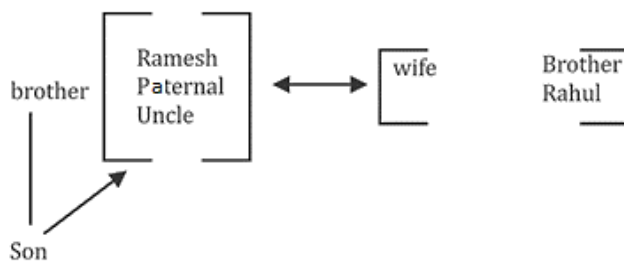
Sol. $15 \times 9 + 10 - 5 = 140$

S62. Ans.(d)

Sol. Carrots are rich in beta-carotene, which is converted to vitamin A in the body. Except Carrot all mentioned are rich source of Calcium.

S63. Ans.(a)

Sol.



Rahul is Brother in law to Ramesh

S64. Ans.(a)

Sol. Rabindranath Tagore was the first person of Indian origin and also first Asian to be awarded with the Nobel Prize. He received the prize for Literature in 1913.

S65. Ans.(c)

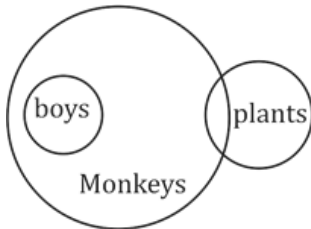
Sol. Ophthalmologist is related to Eye similarly Nephrologist is related to kidney

S66. Ans.(a)

Sol. Shiva Ayyadurai is associated with the invention of Email.

S67. Ans.(a)

Sol.



Only Conclusion 1 follows

S68. Ans.(c)

Sol. Sum of all = 50×11

Sum of first 6 = 49×6

Sum of last 6 = 52×6

6th term = $49 \times 6 + 52 \times 6 - 50 \times 11$
 $= 294 + 312 - 550 = 606 - 550 = 56$

S69. Ans.(a)

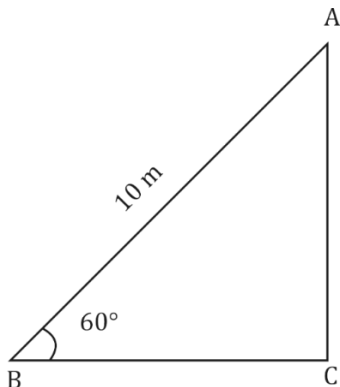
Sol. $5.36 \times 3.6 = 19.296$

S70. Ans.(c)

Sol. $\frac{18 + 2 \times 3.3}{0.003} = \frac{18 + 6.6}{0.003} = \frac{24.6 \times 1000}{3} = 8200$

S71. Ans.(a)

Sol.



Distance between B and C = $10 \cos 60 = 5$ m

S72. Ans.(d)

Sol. We cannot predict future from the past.

Through statement we get to know only about Indian cricket not of the world.

S73. Ans.(d)

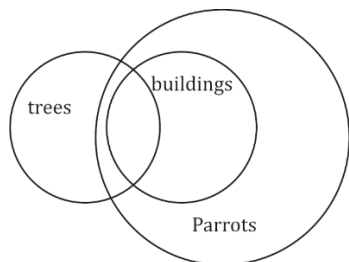
Sol. The revised Tariff Policy was notified by Ministry of Power on 28.01.2016 with a focus on '4 Es' i.e. Electricity for all, Efficiency to ensure affordable tariffs, Environment for a sustainable future, Ease of doing business to attract investments and ensure financial viability.

S74. Ans.(a)

Sol. Cricket is played on pitch similarly skating is played on Rink

S75. Ans.(c)

Sol.



A ×

B ×

C ✓

D ×

S76. Ans.(a)

Sol. Ex situ conservation literally means, "off-site conservation". It is the process of protecting an endangered species, variety or breed, of plant or animal outside its natural habitat.

S77. Ans.(c)

Sol. Fundamental duties are borrowed from Soviet Constitution (USSR, now Russia).

S78. Ans.(a)

Sol. Located at an altitude of 7,500 feet above sea-level, the Chail cricket ground in Himachal Pradesh is described to be the highest cricket ground in the world.

S79. Ans.(a)

Sol. Average Bonus = $\frac{15+16.5+17.3+17.9+18.5}{5}$
 $= \frac{85.2}{5} = 17.04$

S80. Ans.(c)

Sol. Total expenditure in 2011 = 885.4 laksh

S81. Ans.(a)

Sol. In 2012 = fuel and Transport = 233 lakhs

Salary in 2012 = 557 lakhs

$$\% = \frac{233}{557} \times 100 = 41.8\%$$

S82. Ans.(c)

Sol. $2p + 4pe + 8e = 12$ _____ (1)

$8p + 10pe + 14e = 36$ _____ (2)

$3p + 3pe + 3e = ?$

Subtracting (1) from (2)

$$8p + 10pe + 14e = 36$$

$$- 2p + 4pe + 8e = 12$$

$$6p + 6pe + 6e = 24$$

$$3p + 3pe + 3e = 12$$

S83. Ans.(b)

Sol. A B C D E F G H I J K L M

Z Y X W V U T S R Q P O N

BEAR $\rightarrow$ YVZI

BUILDING = YFROWRMT

S84. Ans.(a)

Sol. Geotropism is the growth of the parts of plants in response to the force of gravity. The upward growth of plant shoots is an instance of negative geotropism; the downward growth of roots is positive geotropism.

S85. Ans.(c)

Sol.

	Quantity
CP	120
SP	80

Ratio = 3:2

Amount = 2:3

Profit = 50%

S86. Ans.(b)

Sol. The first trial run for developing a satellite-based system to warn train drivers of unmanned railway crossings was conducted by ISRO scientists in Ahmedabad.

S87. Ans.(c)

Sol. The word "dynamo" was coined in 1831 by Michael Faraday, who utilized his invention toward making many discoveries in electricity (Faraday discovered electrical induction) and magnetism.

S88. Ans.(b)

Sol. R _____ $24 = 18+6$

A _____ $7 = 1+6$

I _____ $15 = 9+6$

L _____ $18 = 12+6$

W _____ $29 = 23+6$

A _____ $7 = 1+6$

Y _____ $31 = 25+6$

S = $19+6 = 25$

T = $20+6 = 26$

A = $1+6 = 7$

T = $20+6 = 26$

I = $9+6 = 15$

O = $15+6 = 21$

N = $14+6 = 20$

S89. Ans.(d)

Sol. $64 \div 4 \times 5 + 8 = 88$

S90. Ans.(a)

Sol. $62+44+12+23=141$

S91. Ans.(b)

Sol. 44

S92. Ans.(a)

S93. Ans.(b)

Sol. When an object thrown straight upwards gets to the top of its path, its Velocity is zero and its acceleration is about 10 m/s^2 .

S94. Ans.(d)

Sol. $21 \times 9 + 13 - 7 = 195$

S95. Ans.(a)

Sol. Brass gets discolored in air because of the presence of Hydrogen sulphide.

S96. Ans.(b)

Sol. The Sambhar Salt Lake, India's largest inland salt lake, is located 80 km southwest of the city of Jaipur and 64 km northeast of Ajmer, Rajasthan. All other are freshwater lakes.

S97. Ans.(c)

Sol. 1, 2, 3, 3, 4, 4, 5, 5, 5, 6, 7

Mode = highest frequency = 5

S98. Ans.(b)

Sol. "Satyameva Jayate" is a mantra from the ancient Indian scripture Mundaka Upanishad.

S99. Ans.(a)

Sol. CP for P= Rs 400

Profit = 10%

SP = Rs 440

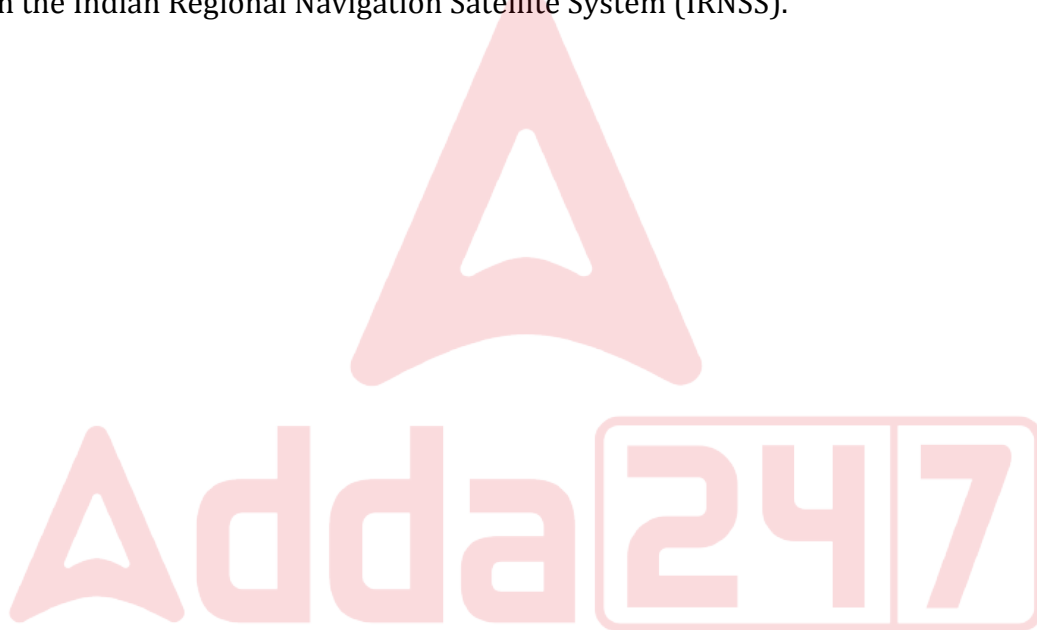
If sold at Rs 460

$$\text{New profit} = \frac{460-400}{400} \times 100 = \frac{60}{4} = 15\%$$

$$\text{Increase in profit \%} = (15-10)=5\%$$

S100. Ans.(b)

Sol. ISRO's Polar Satellite Launch Vehicle, PSLV-C31, successfully launched the 1425 kg IRNSS-1E, the fifth satellite in the Indian Regional Navigation Satellite System (IRNSS).



RRB NTPC Previous Year Paper 02

Q1. Rearrange the following jumbled sentences to make a meaningful one:

P: weather conditions across a vast geographic

S: the climate of India

R: scale and varied topography

S: comprises of a wide range of

The proper sequence should be:

(a) SRQP

(b) QSPR

(c) PQRS

(d) QRPS

Q2. Choose the pair which is related in the same way as the words in the first pair from the given choices.

SOLDIERS : ARMY :: MUSICIANS: _____

(a) FLOCK

(b) GANG

(c) COLONY

(d) BAND

Q3. The process when the computer is switched on and the operating system gets loaded from hard disk to main memory is called–

(a) Booting

(b) Fetching

(c) Processing

(d) Multi-Processing

Q4. Which Indian won the 2014 Nobel Prize for Peace?

(a) Kailash Satyarthi

(b) Malala Yosufzai

(c) Sanjiv Chaturvedi

(d) Anshu Gupta

Q5. If three numbers are in the ratio 2:3:5 and the twice their sum is 100. Find the square of the largest of the three numbers.

(a) 225

(b) 625

(c) 25

(d) 100

Q6. Who was the first President of the Indian National Congress?

- (a) Womesh Chandra Bannerjee
- (b) Bal Gangadhar Tilak
- (c) Allan Octavian Hume
- (d) Dadabhai Naoroji

Q7. What is the compound interest on Rs. 48,000 for 2 years at 20% p.a., if interest is compounded annually?

- (a) Rs. 69,120
- (b) Rs. 21,120
- (c) Rs. 76,800
- (d) Rs. 72,000

Q8. A ladder 20 m long is leaning against a vertical wall. It makes an angle of 30° with the ground. How high on the wall does the ladder reach?

- (a) 10 m
- (b) 17.32 m
- (c) 34.64 m
- (d) 30 m

Q9. Ram said, "Sita is my paternal great grandfather's only son's only daughter-in-law". How is Sita related to Ram?

- (a) Maternal Aunt
- (b) Paternal Aunt
- (c) Mother
- (d) Sister

Q10. A piece of cloth costs Rs. 35. If the piece were 4 m longer and each meter were to cost Rs. 1 lesser, then the total cost would remain unchanged. How long is the piece of cloth?

- (a) 10 m
- (b) 14 m
- (c) 12 m
- (d) 8 m

Q11. In 2013, the first woman to be elected as the President of South Korea is–

- (a) Park Young-sun
- (b) Yuk Young-soo
- (c) Park Geun-hye
- (d) Sim Sang-jung

Q12. The Mughal empire was founded by–

- (a) Babur
- (b) Humayun
- (c) Akbar
- (d) Shah Jahan

Q13. Two poles of the height 15 m and 20 m stand vertically upright on a plane ground. If the distance between their feet is 12 m, find the distance between their tops.

- (a) 11 m
- (b) 12 m
- (c) 13 m
- (d) 14 m

Q14. How is Sammer related to Akbar if Sameer introduced Akbar as his maternal grandmother's only son's son?

- (a) Brother
- (b) Son
- (c) Maternal Uncle
- (d) Cousin

Q15. Given below is a statement followed by some conclusions. You have to take the given statement to be true even if it seems to be at variance with the commonly known facts and then decide which of the given conclusions logically follow(s) from the given statement.

Statement:

According to a recent health survey, people who exercise for at least half an hour every day are less prone to lifestyle diseases.

Conclusion:

I. Moderate exercise is essential to lead a healthy life.

II. Everyone with no exercise on their routine suffer from lifestyle diseases.

- (a) Only conclusion I follows
- (b) Only conclusion II follows
- (c) Both I and II follow
- (d) Neither of them follows

Q16. Choose the one which is different or odd form the following.

- (a) Knight
- (b) Rook
- (c) Bishop
- (d) Pawn

Q17. The oldest oil field in Asia is located in–

- (a) Gujarat
- (b) Assam
- (c) Arunachal Pradesh
- (d) Nagaland

Q18. The simple interest on a certain sum of money invested at a certain rate for 2 years amounts to Rs. 1200. The compound interest on the same sum of money invested at the same rate of interest for 2 years amounts to Rs. 1290. What was the principal?

- (a) Rs. 12000
- (b) Rs. 16000
- (c) Rs. 6000
- (d) Rs. 4000

Q19. Which of the following is false?

Sound waves are _____ waves.

- (a) Pressure
- (b) Longitudinal
- (c) Electromagnetic
- (d) Mechanical

Q20. Given below is a statement followed by some conclusions. You have to take the given statement to be true even if it seems to be at variance with the commonly known facts and then decide which of the given conclusions logically follow(s) from the given statement.

Statement:

In some tier 2 cities in India, transportation is one of the major problems.

Conclusions:

I. All tier 2 cities are not well connected.

II. Lack of transportation facilities is the only problem in Indian metros.

- (a) Only conclusion I follows
- (b) Only conclusion II follows
- (c) Both I and II follow
- (d) Neither of them follows

Q21. Below are given statements. You have to take the given statements to be true even if they seem to be at variance with the commonly known facts and then decide which of the given conclusions logically follows from the given statements.

Statements:

I. All rats are hills.

II. All hills are rivers.

- (a) Some rivers are rats
- (b) No river is a hill
- (c) All hills are rats
- (d) No river is a rat

Q22. How many bones does a new born human baby have?

- (a) 305
- (b) 206
- (c) 211
- (d) 411

Q23. Which country built the Bird's Nest Stadium for 2008 Summer Olympics?

- (a) China
- (b) Brazil
- (c) Australia
- (d) Germany

Q24. Which of the following coloured light has the lowest frequency?

- (a) Green
- (b) Blue
- (c) Red
- (d) Violet

Q25. In 2015, which auto manufacturer manipulated emissions testing data leading to the resignation of its CEO Martin Winterkom?

- (a) Volkswagen
- (b) Ford
- (c) Toyota
- (d) General Motors

Q26. A closed wooden rectangular box made of 1 cm thick wood has the following outer dimensions: length 22 cm, breadth 17 cm, and height 12 cm. It is filled to capacity with cement. What is the volume of the cement in the box?

- (a) 1488 cu. cm
- (b) 3000cu. cm
- (c) 4488 cu. cm
- (d) 2880 cu. cm

Q27. If the code for MOTHER is JRQKBU then what is the code for PRINCIPAL?

- (a) MRFKZLMXI
- (b) SULQFLSDO
- (c) MUFQZLMDI
- (d) MRFKZFMXI

Q28. The only non-metal which is liquid at room temperature is–

- (a) Mercury
- (b) Bromine
- (c) Chlorine
- (d) Gallium

Q29. Maanch is a folk dance from–

- (a) Haryana
- (b) Kerala
- (c) Assam
- (d) Madhya Pradesh

Q30. Which of the following insecticides' harmful effects came under media attention when health issues in Kerala were publicized?

- (a) Endosulfan
- (b) Lethal
- (c) Thimet
- (d) Monocil

Q31. The HCF and LCM of two numbers are 3 and 2730 respectively. If one of the numbers is 78, find the other number.

- (a) 107
- (b) 103
- (c) 105
- (d) 102

Q32. If $A = 1$ and $OAR = 34$, then $ROAR =$

- (a) 52
- (b) 53
- (c) 51
- (d) 50

Q33. Choose the one which is different or odd form the following.

- (a) Aluminum
- (b) Iron
- (c) Copper
- (d) Brass

Q34. According to the Constitution, the ratio between the length and breadth of the national tricolor should be–

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

Q35. If P travelled the first half of a journey at 40 km/hr and the remaining distance at 50 km/hr, what is the average speed of his travel?

- (a) 44.44 km/hr
- (b) 53.33 km/hr
- (c) 45 km/hr
- (d) 60 km/hr

Q36. Find the LCM of 15, 25 and 29.

- (a) 2335
- (b) 3337
- (c) 2175
- (d) 2375

Q37. In 1981, ISRO launched India's first geostationary satellite called–

- (a) Aryabhata
- (b) APPLE
- (c) Bhaskara II
- (d) INSAT 1B

Q38. Which of the following was the first antibiotic discovered by Alexander Fleming in 1928?

- (a) Penicillin
- (b) Prontosil
- (c) Streptomycin
- (d) Teracyline

Q39. If '+' means $\times$, '-' means $\div$, ' $\times$ ' means + and ' $\div$ ' means -; compute the value of the expression:

$$17 + 6 \times 13 \div 8$$

- (a) 100
- (b) 107
- (c) 110
- (d) 109

Q40. Which among the following is true for the given numbers?

- (a) $3/8 < 19/73 < 29/47 < 17/39$
- (b) $19/73 < 3/8 < 17/39 < 29/47$
- (c) $19/73 < 3/8 < 29/47 < 17/39$
- (d) $19/73 < 29/47 < 3/8 < 17/39$

Q41. Divide 3740 in three parts in such a way that half of the first part, one-third of the second part and one-sixth of the third part are equal.

- (a) 700, 1000, 2040
- (b) 340, 1360, 2040
- (c) 680, 1020, 2040
- (d) 500, 1200, 2040

Q42. Where is White Desert is located?

- (a) Gujarat
- (b) Tamil Nadu
- (c) Jammu and Kashmir
- (d) Sikkim

Q43. Which of the following Acts under the Indian Constitutions is described by Article 21 A?

- (a) Right to Education
- (b) Right to Information
- (c) Representation of the People
- (d) Right to Freedom of Religion

Q44. Which of the following monuments built by Muhammad Quli Qutb Shah is said to be built to commemorate the eradication of plague?

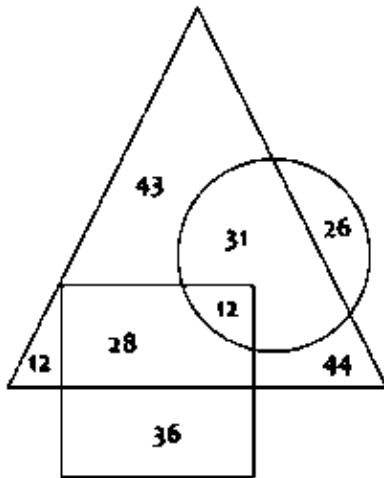
- (a) Alai Minar
- (b) Charminar
- (c) Fateh Burj
- (d) Qutub Minar

Q45. Which of the following is not an example of a Word Processor?

- (a) IBM Lotus Symphony
- (b) Microsoft Word
- (c) Google Docs
- (d) Microsoft Excel

Direction [46–48]: Comprehension: Study the diagram given below and answer the questions based on it.

- △ represents Persons who like Reading
○ represents Persons who like Cycling
□ represents Persons who like Trekking



Q46. How many persons like Reading?

- (a) 170
(b) 154
(c) 176
(d) 117

Q47. How many persons like Trekking and Reading but not Cycling?

- (a) 12
(b) 31
(c) 44
(d) 28

Q48. How many persons like Reading and Cycling but not Trekking?

- (a) 31
(b) 12
(c) 26
(d) 28

Q49. There are 90 coins, comprising of 5 and 10 paisa coins. The value of all the coins is Rs. 7. How many 5 paisa coins are there?

- (a) 50
(b) 45
(c) 40
(d) 35

Q50. How high is the badminton net at the center?

- (a) 5 feet
(b) 5.1 feet
(c) 5.5 feet
(d) 4.8 feet

Q51. Given below is a statement followed by some conclusions. You have to take the given statement to be true even if it seems to be at variance with the commonly known facts and then decide which of the given conclusions logically follow(s) from the given statements.

Statement:

Success cannot be achieved without hard work.

Conclusions:

I. Every hardworking persons is successful.

II. Every successful person is hardworking.

- (a) Only conclusion I follows
- (b) Only conclusion II follows
- (c) Both I and II follow
- (d) Neither of them follows

Q52. Find the mode of the given numbers .

52 , 54 ,55 , 56 ,55 , 54 ,53 , 55 ,53 ,51 and 57 .

- (a) 53
- (b) 54
- (c) 55
- (d) 52

Direction (53-55): Comprehension: Use the following passage for the questions based on it.

Here are six flats on a floor in two rows. Out of these, three are north facing and the other three are south facing flats. The flats are to be allotted amongst Arun, Biswajyot, Chitra, Derek, Evan and Fatima. Biswajyot gets a north facing flat and is not next to Derek. Derek and Fatima get diagonally opposite flats. Chitra is next to Fatima, and get a south facing flat. Evan gets a north facing flat.

Q53. Except Derek and Fatima, which other pair is diagonally opposite to each other?

- (a) Arun and Biswajyot
- (b) Arun and Chitra
- (c) Evan and Derek
- (d) Evan and Chitra

Q54. Which of the following pairs is exactly opposite to each other?

- (a) Derek and Evan
- (b) Fatima and Chitra
- (c) Evan and Chitra
- (d) Evan and Arun

Q55. Which of the following combination gets south facing flats?

- (a) Arun, Chitra and Fatima
- (b) Chitra, Biswajyot and Derek
- (c) Evan, Arun and Fatima
- (d) Derek, Arun and Biswajyot

Q56. 30 men working 5 hours a day can do a task in 16 days. In how many days will 40 men working 6 hours a day do the same task?

- (a) 12 days
- (b) 10 days
- (c) 15 days
- (d) 18 days

Direction (57-59): Comprehension: Study the following table and answer the questions based on it. Below is the Household Expenditure (in Thousand Rupees) per annum.

Year	Household Expenditure				
	Grocery	Rent	Leisure	EMI	Taxes
2010	32	12	5	3.4	9
2011	37	13	6.5	4.5	13
2012	46	14	7.3	5.6	17
2013	48	16	7.9	6.4	18
2014	52	18	8.5	7.4	19

Q57. What is the total Household Expenditure for the year 2012?

- (a) Rs. 89,900
- (b) Rs. 87,120
- (c) Rs. 89,100
- (d) Rs. 88,200

Q58. Expenditure on EMI forms what percentage of expenditure on Grocery for the year 2014?

- (a) 11.34%
- (b) 14.23%
- (c) 13.22%
- (d) 15.55%

Q59. What is the average spending on Leisure per annum?

- (a) Rs. 7,040
- (b) Rs. 6,500
- (c) Rs. 7,100
- (d) Rs. 7,400

Q60. A triangle has a perimeter of 200. If two of its sides are equal and the third side is 20 more than the equal sides, what is the length of the third side?

- (a) 60
- (b) 50
- (c) 80
- (d) 70

Q61. The operating system UNIX is the trademark of–

- (a) Microsoft
- (b) Bell Laboratories
- (c) Apple
- (d) Motorola

Q62. The first large scale electrical air conditioning was invented and used in 1902 by–

- (a) Willis Carrier
- (b) John Gorrie
- (c) Stuart Cramer
- (d) H. H. Schultz

Q63. The area of a triangle ABC is 63 sq. units. Two parallel lines DE, FG, are drawn such that they divide the line segments AB and AC into three equal parts. What is the area of the quadrilateral DEGF?

- (a) 28 sq. units
- (b) 35 sq. units
- (c) 21 sq. units
- (d) 48 sq. units

Q64. Which of the following is the most common kidney stone-forming compound?

- (a) Calcium oxalate
- (b) Magnesium oxide
- (c) Sodium bicarbonate
- (d) Magnesium citrate

Q65. Compute: $(50 + 0.5 \times 20) \div 0.7$

- (a) 8.571
- (b) 857.1
- (c) 85.71
- (d) 72.85

Q66. Working together, P, Q and R reap a field in 6 days. If P can do it alone in 10 days and Q in 24 days, in how many days will R alone be able to reap the field?

- (a) 32 days
- (b) 40 days
- (c) 45 days
- (d) 60 days

Q67. In 2015, underground glaciers of frozen water were discovered on–

- (a) Mars
- (b) Venus
- (c) Jupiter
- (d) Saturn

Q68. A shopkeeper marks the price of an article at Rs. 320. Find the cost price if after allowing a discount of 10%, he still gains 20% on the cost price.

- (a) Rs. 240
- (b) Rs. 280
- (c) Rs. 300
- (d) Rs. 264

Q69. Which leader adopted Orthodox Christianity as the official religion of Russia?

- (a) Vladimir the Great
- (b) Michael Romanov
- (c) Ivan IV
- (d) Boris Godunov

Q70. If RUN = 182114 and BIN = 2914, then BRING =

- (a) 2189147
- (b) 1178136
- (c) 31910158
- (d) 21910158

Q71. On an average, how many taste buds are present in a human tongue?

- (a) 2000 to 8000
- (b) 50000 to 100000
- (c) 1 million to 10 million
- (d) More than 10 million

Q72. $5.16 \times 3.2 =$

- (a) 15.502
- (b) 16.512
- (c) 17.772
- (d) 17.52

Q73. Choose the pair which is related in the same way as the words in the first pair from the given choices.

DOG : KENNEL :: BEE:_____

- (a) HIVE
- (b) BARN
- (c) HOLE
- (d) NEST

Q74. Below are given statements followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with the commonly known facts and then decide which of the given conclusions logically follow(s) from the given statements.

Statements:

- A.** Some fruits are vegetables.
- B.** All vegetables are plants.

Conclusions:

- I.** Some plants are vegetables.
 - II.** Some fruits are plants.
- (a) Only conclusion I follows
 - (b) Only conclusion II follows
 - (c) Both I and II follow
 - (d) Neither of them follows

Q75. A table was sold at a profit of 10%. If its cost price was 5% less and it was sold for Rs. 7 more, the gain would have been 20%. Find the cost price of the table.

- (a) Rs. 175
- (b) Rs. 200
- (c) Rs. 250
- (d) Rs. 150

Q76. Which of the following can reproduce only through a sexual method?

- (a) Coral
- (b) Hydra
- (c) Sponges
- (d) Annelida

Q77. Who had discovered Heliocentric theory?

- (a) Nicolaus Copernicus
- (b) Galileo Galilei
- (c) Johannes Kepler
- (d) Friedrich Bessel

Q78. The 'Father of Indian Space Program' is–

- (a) Dr. A. P. J. Abdul Kalam
- (b) Dr. Vikram A. Sarabhai
- (c) Dr. K. Kasturirangan
- (d) Prof. Satish Dhawan

Q79. The filament of a light bulb is made up of–

- (a) Platinum
- (b) Tantalum
- (c) Tungsten
- (d) Antimony

Q80. Who among the following became the first tourist to space by spending \$20 million for 8 days in orbit?

- (a) Greg Olsen
- (b) Charles Simonyi
- (c) Dennis Tito
- (d) Mark Shuttleworth

Q81. P bought an article for Rs. 1600 and sold it at a profit of 10%. What would have been the increase in the profit percent if it was sold for Rs. 1840?

- (a) 5%
- (b) 10%
- (c) 12%
- (d) 15%

Q82. Which of the following Ancient humanoid belongs to the Upper Paleolithic in Europe of modern human?

- (a) Ergaster line
- (b) Cro-magnon
- (c) Neanderthal
- (d) Proconsul

Q83. What is $C_{12}H_{22}O_{11}$ also known as–

- (a) Sand
- (b) Sugar
- (c) Salt
- (d) Clay

Q84. Select the correct set of symbols:

$$27 \ 3 \ 19 \ 10 = 90$$

- (a) $\times, -, \div$
- (b) $+, \div, -$
- (c) $+, -, \div$
- (d) $\times, +, -$

Q85. Simplify: $(2/7 + 3/5) \div (2/5 + 2/7)$

- (a) $31/24$
- (b) $24/31$
- (c) $26/25$
- (d) $12/13$

Q86. Select the correct set of symbols:

$$44 \ 4 \ 7 \ 5 = 82$$

- (a) $\times, -, \div$
- (b) $+, \div, -$
- (c) $+, -, \div$
- (d) $\div, \times, +$

Q87. If R019 is divisible by 11, find the value of the smallest natural number R?

- (a) 5
- (b) 6
- (c) 7
- (d) 8

Q88. Malini said, "Rohit is my maternal aunt's mother's only son's son". How is Malini related to Rohit?

- (a) Cousin
- (b) Mother
- (c) Sister
- (d) Daughter

Q89. In Tennis, hard court is the type of court whose surface is made of–

- (a) Concrete
- (b) Clay
- (c) Grass
- (d) Carpet

Q90. If '+' means $\times$, '-' means $\div$, ' $\times$ ' means $+$ and ' $\div$ ' means $-$; compute the value of the expression:

$$36 - 4 + 7 \times 8$$

- (a) 72
- (b) 71
- (c) 74
- (d) 75

Q91. The average of first 20 multiples of 12 is:

- (a) 124
- (b) 120
- (c) 126
- (d) 130

Q92. What is the median of the following list of numbers: 55, 53, 56, 59, 61, 69, and 31?

- (a) 55
- (b) 56
- (c) 59
- (d) 61

Q93. The sum of digits of a two-digit number is 9. When the digits are reversed, the number decreases by 45. Find the changed number.

- (a) 45
- (b) 72
- (c) 63
- (d) 27

Q94. If MENTOR=NVMGLI then PROFESSOR =

- (a) QSPGFTTPS
- (b) KILUVHHLI
- (c) KSLGVTHMI
- (d) KILGFHHLI

Q95. The national song of India was composed by-

- (a) Rabindranath Tagore
- (b) Bankim Chandra Chatterjee
- (c) Pydimarri Venkata Subba Rao
- (d) Pingali Venkayya

Q96. Which of the following is NOT an effect of Noise Pollution?

- (a) Death of Animals
- (b) Tinnitus
- (c) Hypertension
- (d) Ozone Depletion

Q97. The upstream speed of the boat is 40 km/hr and the speed of the boat in still water is 55 km/hr. What is the downstream speed of the boat?

- (a) 75 km/hr
- (b) 70 km/hr
- (c) 60 km/hr
- (d) 65 km/hr

Q98. Choose the pair which is related in the same way as the words in the first pair from the given choices.

TENNIS: COURT :: BOXING: _____

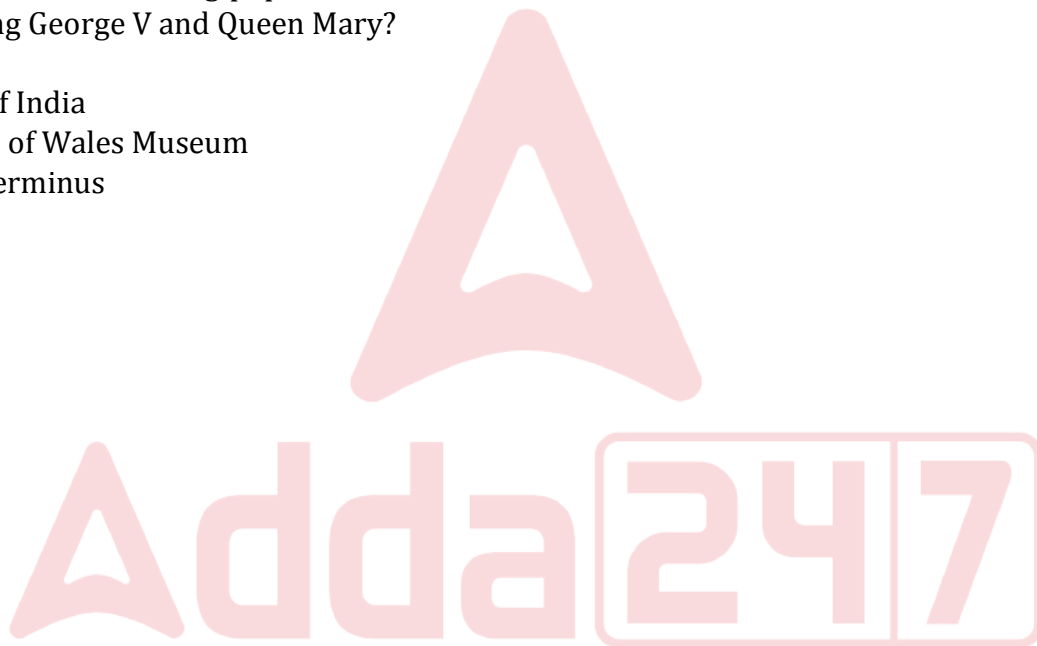
- (a) STADIUM
- (b) RING
- (c) PITCH
- (d) GROUND

Q99. Six years ago, the ratio of the ages of the two persons P and Q was 3:2. Four years hence the ratio of their ages will be 8:7. What is P's age?

- (a) 10 years
- (b) 12 years
- (c) 14 years
- (d) 8 years

Q100. Which of the following popular tourist destinations of India were built in 1911 to commemorate the visit of King George V and Queen Mary?

- (a) India Gate
- (b) Gateway of India
- (c) The Prince of Wales Museum
- (d) Victoria Terminus



RRB NTPC Previous Year Paper 02

1. Ans.(b):

Sol. QSPR

2. Ans.(d):

Sol. Soldiers are present in army

Musicians are present in band.

3. Ans.(a):

Sol. The operating system is loaded through a bootstrapping process, more succinctly known as booting. A boot loader is a program whose task is to load a bigger program, such as the operating system.

4. Ans.(a):

Sol. The 2014 Nobel Peace Prize was shared, in two equal parts, between Kailash Satyarthi and Malala Yousafzai "for their struggle against the suppression of children and young people and for the right of all children to education".

5. Ans.(b):

Sol. $2(2x + 3x + 5x) = 100$

$$20x = 100$$

$$1x = 5$$

$\therefore$ square of largest number

$$= (5x)^2 = (25)^2 = 625$$

6. Ans.(a):

Sol. The first president of the Indian National Congress was Womesh Chandra Bannerjee, a lawyer from Calcutta (Kolkata).

7. Ans.(b):

$$\text{Sol. CI} = P \left[\left(1 + \frac{r}{100} \right)^2 - 1 \right]$$

$$= 48000 \left[\left(1 + \frac{20}{100} \right)^2 - 1 \right]$$

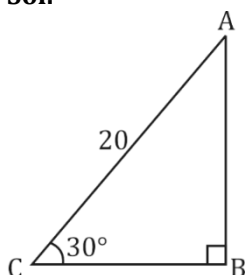
$$= 48000 \left[\left(\frac{6}{5} \right)^2 - 1 \right]$$

$$= 48000 \left[\frac{36-25}{25} \right]$$

$$= 48000 \times \frac{11}{25} = 21120$$

8. Ans.(a):

Sol.

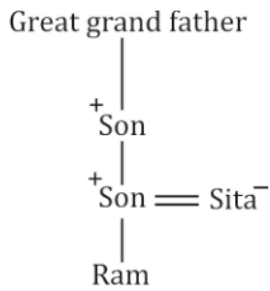


$$AB = AC \sin 30^\circ$$

$$= 20 \times \frac{1}{2} = 10 \text{ m}$$

9. Ans.(c):

Sol.



∴ Sita is the mother of Ram

10. Ans.(a):

Sol. Let total length = x m

ATQ,

$$35 = (x + 4) \times \left(\frac{35}{x} - 1 \right)$$

By solving the equation

$$x^2 + 4x - 140 = 0$$

$$\therefore x = 10 \text{ m}$$

11. Ans.(c):

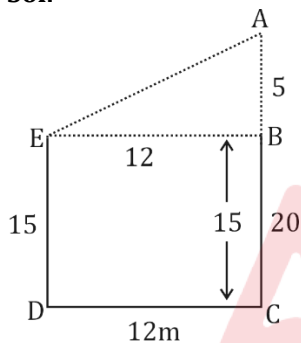
Sol. Park Geun-hye was sworn in as South Korea's first female president in 2013.

12. Ans.(a):

Sol. The Mughal Empire was founded by Babur (reigned 1526–1530).

13. Ans.(c):

Sol.

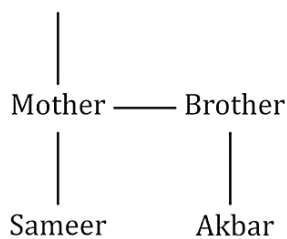


$$\therefore \text{Distance between their tops} = \sqrt{12^2 + 5^2} \\ = 13 \text{ m}$$

14. Ans.(d):

Sol.

Maternal Grand Mother



Sameer is the cousin of Akbar.

15. Ans.(a):

Sol. Only conclusions I follows

16. Ans.(d):

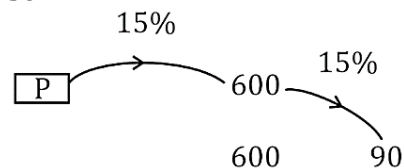
Sol. Unlike all other pieces, pawn cannot move backward.

17. Ans.(b):

Sol. Crude oil was discovered here in late 19th century. Digboi is known as the Oil City of Assam where the first oil well in Asia was drilled.

18. Ans.(d):

Sol.



$$\therefore \frac{15}{100} \times P = 600$$
$$P = 4000$$

19. Ans.(c):

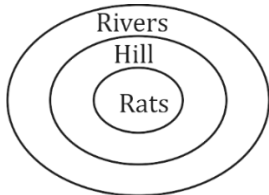
Sol. Electromagnetic waves do not require a medium in order to transport their energy. Mechanical waves are waves that require a medium in order to transport their energy from one location to another. Sound is a mechanical wave and cannot travel through a vacuum. A sound wave traveling through air, the vibrations of the particles are best described as longitudinal. Longitudinal waves are waves in which the motion of the individual particles of the medium is in a direction that is parallel to the direction of energy transport.

20. Ans.(d):

Sol. Neither of them follows

21. Ans.(a):

Sol.



22. Ans.(a):

Sol. New born babies have around 305 bones. A baby's skeleton is mostly made up of cartilage. As a person grows up, most of this cartilage turns into bone in a process called ossification. By adulthood, the skeleton has just 206 bones.

23. Ans.(a):

Sol. The centerpiece of the 2008 Summer Olympics was the Beijing National Stadium, nicknamed "The Bird's Nest" because of its nest-like skeletal structure.

24. Ans.(c):

Sol. The lowest frequency of visible light, which is red, has the least energy.

25. Ans.(a):

Sol. In 2015, Volkswagen auto manufacturer manipulated emissions testing data leading to the resignation of its CEO Martin Winterkom.

26. Ans.(b):

Sol. Volume of the cement in the box
 $= (22 - 2) \times (17 - 2) \times (12 - 2)$
 $= 20 \times 15 \times 10$
 $= 3000 \text{ cm}^3$

27. Ans.(c):

Sol. $-3, +3$ series

28. Ans.(b):

Sol. Non-metals liquid at room temperature - Bromine (Br).

29. Ans.(d):

Sol. Maanch dance is a lyrical folk ballet originating from the central Indian state of Madhya Pradesh.

30. Ans.(a):

Sol. Endosulfan insecticides' harmful effects came under media attention when health issues in Kerala were publicized.

31. Ans.(c):

Sol. Other number = $\frac{3 \times 2730}{78} = 105$

32. Ans.(a):

Sol. ROAR = $18 + 15 + 1 + 18 = 52$

33. Ans.(d):

Sol. Brass is an alloy.

34. Ans.(a):

Sol. The National Flag of India is a horizontal rectangular tricolour of India saffron, white and India. According to the Flag code of India, the Indian flag has a ratio of two by three.

35. Ans.(a):

Sol. Let total distance = 100 km

∴ ATQ,

$$\text{Total time} = \frac{50}{40} + \frac{50}{50}$$

$$= \frac{5}{4} + 1 = \frac{9}{4} \text{ hr}$$

$$\therefore \text{Average speed} = \frac{100}{\frac{9}{4}} \times 4 = \frac{400}{9} \text{ km/hr}$$

$$= 44.44 \text{ km/hr}$$

36. Ans.(c):

Sol. LCM of 15, 25 and 29 = 2175

37. Ans.(b):

Sol. On June 19, 1981 India launched its first geostationary satellite called APPLE. It was an **experimental** communication satellite launched by the Indian Space Research Organisation (ISRO) with a C-band transponder.

38. Ans.(a):

Sol. In 1928 Alexander Fleming (1881–1955) discovered penicillin, made from the *Penicillium notatum* mold.

39. Ans.(b):

Sol. $17 + 6 \times 13 \div 8$

$$17 \times 6 + 13 - 8$$

$$= 102 + 13 - 8$$

$$= 115 - 8 = 107$$

40. Ans.(b):

Sol. $\frac{3}{8} = 0.37$

$$\frac{19}{73} = 0.26$$

$$\frac{29}{47} = 0.61$$

$$\frac{17}{39} = 0.43$$

$$\therefore \frac{19}{73} < \frac{3}{8} < \frac{17}{39} < \frac{29}{47}$$

41. Ans.(c):

Sol. ATQ,

$$2K + 3K + 6K = 3740 \Rightarrow k = 340$$

∴ 3 parts are : -

$$(340 \times 2); (3 \times 340); (6 \times 340)$$

$$680 ; 1020 ; 2040$$

42. Ans.(a):

Sol. The Rann of Kutch is famous for its white salty desert sand and is reputed to be the largest salt desert in the world. It is known as White Desert.

43. Ans.(a):

Sol. Article 21-A in the Constitution of India to provide free and compulsory education of all children in the age group of six to fourteen years as a Fundamental Right in such a manner as the State may, by law, determine.

44. Ans.(b):

Sol. Charminar, the iconic monument built by the fifth king, Muhammad Quli Qutb Shah, to commemorate the eradication of a plague, became one of India's most recognizable symbols.

45. Ans.(d):

Sol. Microsoft Excel is a spreadsheet developed by Microsoft for Windows, macOS, Android and iOS.

46. Ans.(a):

Sol. Persons like reading

$$= 43 + 31 + 12 + 44 + 28 + 12 = 170$$

47. Ans.(d):

Sol. 28

48. Ans.(a):

Sol. 31

49. Ans.(c):

Sol. Let 5 paise coin = x

Let 10 paise coin = (90 - x)

ATQ,

$$7 \times 100 = 5x + 10(90 - x)$$

$$700 = 5x + 900 - 10x \Rightarrow x = 40$$

$$\therefore 5 \text{ paise coin} = 40 \text{ coins}$$

50. Ans.(a):

Sol. The net is 1.55 metres (5 ft 1 inch) high at the edges and 1.524 metres (5 ft) high in the centre.

51. Ans.(b):

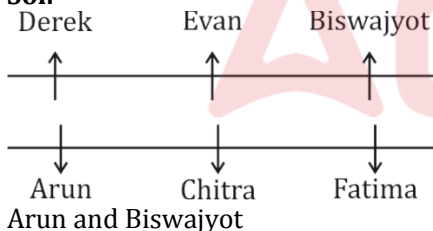
Sol. Only conclusion II follows

52. Ans.(c):

Sol. Mode = 55 (maximum repetition)

53. Ans.(a):

Sol.



54. Ans.(c):

Sol. So. Evan and Chitra

55. Ans.(a):

Sol. Arun, Chitra and Fatima

56. Ans.(b):

$$\text{Sol. } 30 \times 5 \times 16 = 40 \times 6 \times N$$

$$\therefore N = 10 \text{ days}$$

57. Ans.(a):

Sol. Total household expenditure for the year

$$2012 = 46 + 14 + 7.3 + 5.6 + 17$$

$$= 89.9 \times 1000 = 89,900$$

58. Ans.(b):

Sol. Required % = $\frac{7.4}{52} \times 100 = 14.23\%$

59. Ans.(a):

Sol. Required value = $\frac{5 + 6.5 + 7.3 + 7.9 + 8.5}{5} \times 1000$
= 7040

60. Ans.(c):

Sol. $x + x + x + 20 = 200$

$3x = 180 \Rightarrow x = 60$

$\therefore$ Third side = $60 + 20 = 80$

61. Ans.(b):

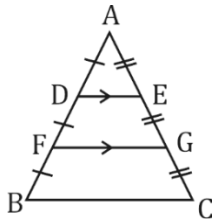
Sol. Unix is a family of multitasking, multiuser computer operating systems that derive from the original AT&T Unix, development starting in the 1970s at the Bell Labs research center by Ken Thompson.

62. Ans.(a):

Sol. Willis Carrier invented the first, large-scale electrical air conditioner in 1902, meant to control the air temperature at a publishing company where humidity and air temperature was affecting the manufacturing process.

63. Ans.(c):

Sol.



Area of DEGF

$= \frac{1}{3} \times 63 = 21 \text{ sq. units}$

64. Ans.(a):

Sol. Calcium stones are the most common type of kidney stones. They are usually made of calcium and oxalate (a natural chemical found in most foods), but are sometimes made of calcium and phosphate. Uric acid stones form when your urine is often too acidic.

65. Ans.(c):

Sol. $(50 + 0.5 \times 20) \div 0.7$
 $= (50 + 10) \div 0.7$
 $= \frac{600}{7} = 85.71$

66. Ans.(b):

Sol.

$$\begin{array}{rcl} P+Q+R & \text{---} & 6 \\ P & \text{---} & 10 \\ Q & \text{---} & 24 \end{array} \begin{array}{l} \nearrow 20 \\ \xrightarrow{12} \\ \searrow 5 \end{array} \rightarrow 120$$

$\therefore$ R alone can do it in $= \frac{120}{3} = 40$ days

67. Ans.(a):

Sol. In 2015, underground glaciers of frozen water were discovered on Mars.

68. Ans.(a):

Sol. $100 - 320$

$\therefore 90 - \frac{320}{100} \times 90$ Ans.(After discount)

SP = 288

$\therefore 120\% = 288$

$\therefore$ CP (100%) = $\frac{288}{120} \times 100 = 240$

69. Ans.(a):

Sol. This act was followed by the acceptance of Christianity as the state religion after the baptism of Olga's grandson Vladimir I, prince of Kiev, in 988.

70. Ans.(a):

Sol. Position of letters in alphabetical series

71. Ans.(a):

Sol. On average, the human tongue has **2,000–8,000 taste buds**, implying that there are hundreds of thousands of receptor cells.

72. Ans.(b):

Sol. $5.16 \times 3.2 = 16.512$

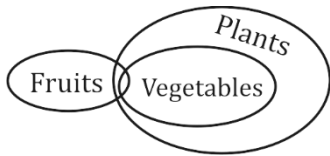
73. Ans.(a):

Sol. Kennel is the shelter of dog.

Hive is the shelter of bee.

74. Ans.(c):

Sol.



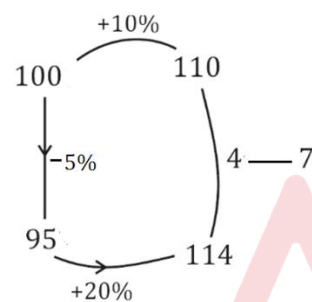
I. ✓

II. ✓

Both I and II follow

75. Ans.(a):

Sol. Let CP = 100



$\therefore 4 = 7$

$\therefore 100 = \frac{7}{4} \times 100 = 175$

76. Ans.(b):

Sol. **Hydra reproduce** asexually by producing buds in the body wall, which grow to be miniature adults and break away when they are mature.

77. Ans.(a):

Sol. Heliocentrism is the astronomical model in which the Earth and planets revolve around the Sun at the center of the Solar System. Nicholas Copernicus, a Polish scientist living about a century before Galileo, had already come up with the unorthodox idea that the Sun was at the center of the solar system. Galileo knew about and had accepted Copernicus's heliocentric (Sun-centered) theory

78. Ans.(b):

Sol. Vikram Ambalal Sarabhai was an Indian scientist and innovator widely regarded as the father of India's space programme.

79. Ans.(c):

Sol. This wire is called a filament. The filament is the part of the light bulb that

produces light. Filaments in incandescent light bulbs are made of tungsten. When Electric current goes through the filament, the filament glows.

80. Ans.(c):

Sol. Dennis Anthony Tito (born August 8, 1940) is an American engineer and multimillionaire, most widely known as the first space tourist to fund his own trip into space.

81. Ans.(a):

Sol. When SP = 1840

$$\therefore P\% = \frac{240}{1600} \times 100 = 15\%$$

$$\therefore \text{Increase in profit \%} = 15\% - 10\% = 5\%$$

82. Ans.(b):

Sol. Cro-magnon are the earliest humanoid of Europe.

83. Ans.(b):

Sol. $C_{12}H_{22}O_{11}$ also known as Sugar.

84. Ans.(d):

$$\text{Sol. } 27 \times 3 + 19 - 10 = 90$$

$$\Rightarrow 81 + 19 - 10 = 90$$

$$\Rightarrow 100 - 10 = 90 \Rightarrow 90 = 90$$

85. Ans.(a):

$$\text{Sol. } \left(\frac{2}{7} + \frac{3}{5}\right) \div \left(\frac{2}{5} + \frac{2}{7}\right)$$

$$\Rightarrow \left(\frac{10+21}{7 \times 5}\right) \times \left(\frac{5 \times 7}{14+10}\right) \Rightarrow \frac{31}{24}$$

86. Ans.(d):

$$\text{Sol. } 44 \div 4 \times 7 + 5 = 82$$

$$\Rightarrow 11 \times 7 + 5 = 82$$

$$\Rightarrow 77 + 5 = 82 \Rightarrow 82 = 82$$

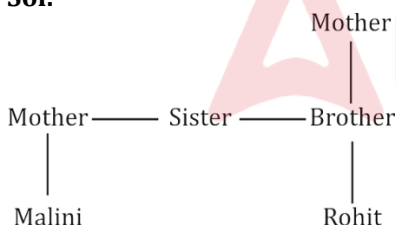
87. Ans.(d):

Sol. $R + 1 = 0 + 9$ [for divisibility with 11]

$$R = 9 - 1 \Rightarrow R = 8$$

88. Ans.(a):

Sol.



$\therefore$ Malini is the cousin of Rohit.

89. Ans.(a):

Sol. A hardcourt (or hard court) is a surface or floor on which a sport is played, most usually in reference to tennis courts. They are typically made of rigid materials such as asphalt or concrete.

90. Ans.(b):

$$\text{Sol. } 36 - 4 + 7 \times 8$$

$$\Rightarrow 36 \div 4 \times 7 + 8$$

$$\Rightarrow 9 \times 7 + 8 \Rightarrow 63 + 8 = 71$$

91. Ans.(c):

$$\text{Sol. Required average} = \frac{12 \times (1+2+3+\dots+20)}{20}$$

$$= (1 + 2 + 3 + \dots + 20) \times \frac{3}{5}$$

$$= \frac{20 \times 21}{2} \times \frac{3}{5} = 126$$

92. Ans.(b):

Sol. 31, 53, 55, 56, 59, 61, 69

∴ Numbers are odd in number

∴ Median = $\left(\frac{n+1}{2}\right)^{\text{th}}$ term

= $\left(\frac{7+1}{2}\right)^{\text{th}}$ term = 4th term = 56

93. Ans.(d):

Sol. Let the number be xy

∴ $x + y = 9$... (i)

Atq,

Ans. $(10x + y) - (10y + x) = 45$

$9x - 9y = 45$

$x - y = 5$... (ii)

by solving (i) and (ii)

$x = 7, y = 2$

∴ changed number = $10y + x = 20 + 7 = 27$

94. Ans.(b):

Sol. Pair of opposite letters

95. Ans.(b):

Sol. Vande Mataram is the National Song of India written by Bankim Chandra Chattopadhyay in 1882 in a novel, Anandamath. Originally it was written in two languages i.e. Bengali and Sanskrit.

96. Ans.(d):

Sol. Ozone Depletion is NOT an effect of Noise Pollution.

97. Ans.(b):

Sol. Upstream speed = 40

Boat – stream = 40

$55 - \text{stream} = 40$

∴ stream = 15

∴ Downstream speed = $55 + 15 = 70 \text{ km/hr}$

98. Ans.(b):

Sol. Tennis is played in the court

Similarly, boxing is played in the ring

99. Ans.(b):

Sol. Let present age of P = P

Present age of Q = Q

Atq,

$$\frac{P-6}{Q-6} = \frac{3}{2} \Rightarrow 2P - 3Q = -6$$

$$\& \frac{P+4}{Q+4} = \frac{8}{7} \Rightarrow 7P - 8Q = 4$$

By solving both equations

$P = 12 \text{ yrs}$

100. Ans.(b):

Sol. Gateway of India was erected to commemorate the landing of King George

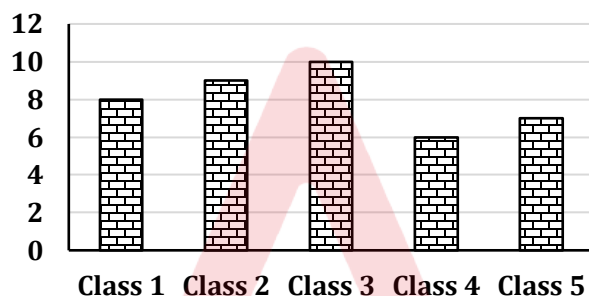
V and Queen Mary at Apollo Bunder on their visit to India in 1911.

RRB NTPC Previous Year Paper 03

Q1. What among the following is FALSE about the Richter scale?

- (a) It was developed by Charles Richter and Gutenberg in 1935.
- (b) It is a logarithmic scale
- (c) It can be measured using a seismometer
- (d) Magnitude of 8-9 on a Richter scale means it is a micro earthquake.

Q2. Following figure shows the number of 5 students in Mathematics out of 10 marks



How much more marks did student 3 & 5 got than 4 & 1?

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

Q3. Which device converts digital signal into analog signal?

- (a) WiFi
- (b) Modem
- (c) Port
- (d) USB

Q4. If $N:38::3:57$, Find N.

- (a) $\frac{2}{3}$
- (b) $\frac{1}{3}$
- (c) 3
- (d) 2

Q5. The distance between two points A and B is covered in $5\frac{1}{2}$ hours at a speed of 50 km/hr. If the speed is increased by 5 km/hr, how much time would be saved?

- (a) 5 minutes
- (b) 15 minutes
- (c) 50 minutes
- (d) 30 minutes

Q6. If $x=7-4\sqrt{3}$ find the value of $\sqrt{x} + \frac{1}{\sqrt{x}}$

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

Q7. Which is India's longest river that does not flow into the sea?

- (a) Ganga
- (b) Jamuna
- (c) Tapti
- (d) Kaveri

Q8. What is the most cultivated crop in India?

- (a) Ragi
- (b) Wheat
- (c) Corn
- (d) Rice

Q9. In which city is the value of Gold determined?

- (a) California
- (b) Sydney
- (c) Rome
- (d) London

Q10. Find the similarity in the following:

Elephant, Camel, Buffalo, Giraffe

- (a) The milk produced by all of them cannot be consumed by people.
- (b) All of them have horns.
- (c) None of them are mammals.
- (d) The young ones of all of them are called calf.

Q11. If $y = \frac{2x-1}{x+3}$, find x when $y = 1$

- (a) 4
- (b) -4
- (c) $\frac{3}{2}$
- (d) $\frac{4}{3}$

Q12. Which vitamin among the following is crucial for blood clotting?

- (a) Vitamin K
- (b) Vitamin D
- (c) Vitamin A
- (d) Vitamin E

Q13. If the mathematical operators, '+' and '×' are interchanged, what will be the value of the equation $9 \div 5 + 10 - 23 \times 2$

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

Q14. A wire is in the shape of a rectangle. Its length is 42.7m and breadth is 21.8m. If the same wire is re-bent in the shape of a square, what will be the measure of the side of the square?

- (a) 16.125
- (b) 32.25
- (c) 11.35
- (d) 22.70

Q15. According to the Swachh Bharat 2015 survey, which is the cleanest city in India?

- (a) Chennai
- (b) Delhi
- (c) Ahmedabad
- (d) Mysore

Q16. Which is the most peaceful country according to the 2015 Global Peace Index?

- (a) Iceland
- (b) Bhutan
- (c) Austria
- (d) New Zealand

Q17. Where did the Chipko movement begin?

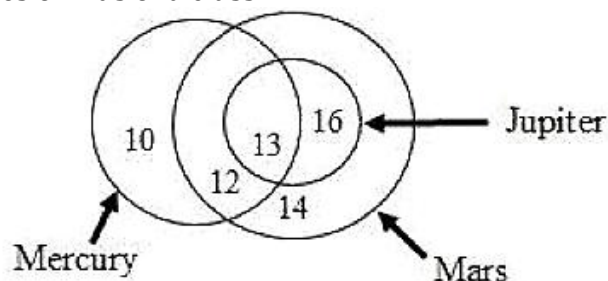
- (a) Rajasthan
- (b) Assam
- (c) Arunachal Pradesh
- (d) Mizoram

Q18. Rearrange the jumbled letters to make a meaningful word and then select the one which is different.

- (a) ORIN
- (b) NADS
- (c) POPCER
- (d) DLOG

Direction (19-21): Study the following diagram and answer questions based on it.

The diagram represents the likes of kids of a class.



Q19. The ratio of kids who like only Mars to those who like all the three is

- (a) 7/5
- (b) 7/8
- (c) 7/6
- (d) 14/13

Q20. What is the difference between the kids who like Mercury and Jupiter?

- (a) 6
- (b) 8
- (c) 10
- (d) 12

Q21. How many people who like Mars like Jupiter also?

- (a) 45
- (b) 29
- (c) 26
- (d) 13

Q22. Name the capital of Uganda?

- (a) Mogadishu
- (b) Kampala
- (c) Lusaka
- (d) Bulenga

Q23. What is Madhubani art?

- (a) The art of Storytelling
- (b) The art of Gujarat
- (c) A folk art practiced in Bihar
- (d) The art of honey extraction

Q24. What is 'Planet Nine'?

- (a) A planet in the Comet Galaxy
- (b) A planet in Andromeda Galaxy
- (c) A planet where the 'Star Wars' series took place
- (d) A large icy planet proposed in the outer Solar System

Q25. Which is NOT an Operating System?

- (a) OS X
- (b) Windows 7
- (c) DOS
- (d) C++

Q26. What is the smallest number of 5 digits which is exactly divisible by 12, 24, 48, 60 and 96?

- (a) 10000
- (b) 10024
- (c) 10160
- (d) 10080

Q27. Find the cost in rupees for carpeting a room 65dm× 30 dm at Rs. 45 per sq.m

- (a) 877.50
- (b) 87750
- (c) 87.75
- (d) 8775

Q28. What is most common treatment for bacterial infections in humans?

- (a) Aspirin
- (b) Antibodies
- (c) Antibiotics
- (d) Antigen

Q29. The ratio of ages of Jai and Joy is 5:2. The sum of their ages is 63. After 9 years what will be the ratio of their ages?

- (a) 5:2
- (b) 2:1
- (c) 3:2
- (d) 4:3

Q30. By selling 90 chocolates for Rs. 160, a chocolate trader loses 20%. How many chocolates should he sell for Rs. 96 to make a profit of 20%?

- (a) 45
- (b) 36
- (c) 54
- (d) 28

Q31. What is an archipelago?

- (a) Group, chain, cluster or collection of Islands
- (b) The meeting of Land and Sea
- (c) An Architect's paradise
- (d) A type of Church

Direction (32-34): Six animals-horse, cow, pig, dog, donkey and goat are tied to a pole each, in a circle, facing each other, in random order.

Consider the following information and answer the questions based on it.

1. Goat is to the immediate right of pig.
2. Cow is not tied next to either donkey or dog.
3. If the animals mark the vertices of a hexagon, then the horse is diagonally opposite to the pig.

Q32. The cow is tied to the immediate left of

- (a) Goat
- (b) Pig
- (c) Horse
- (d) Dog

Q33. Which pair is tied next to each other?

- (a) Horse and Goat
- (b) Pig and Cow
- (c) Goat and Dog
- (d) Donkey and Dog

Q34. Which animal is tied to the immediate left of pig?

- (a) Goat
- (b) Donkey
- (c) Dog
- (d) Cannot be determined

Q35. Who is Sabari Karthik?

- (a) Indian karate player
- (b) Rugby player
- (c) Cricket Player
- (d) Kabaddi Player

Q36. Which among the following is popularly called Laughing Gas?

- (a) Nitric oxide
- (b) Nitrogen dioxide
- (c) Nitrous oxide
- (d) Nitrogen peroxide

Q37. Four pairs of words are given. Find the odd one out.

- (a) 65th anniversary : Diamond Jubilee
- (b) 50th anniversary : Golden Jubilee
- (c) 40th anniversary : Ruby Jubilee
- (d) 25th anniversary : Silver Jubilee

Q38. A lady wants to buy the following items in the given price range–

1. Tomato between Rs. 40 and Rs. 45 per kg.
2. Grapes in the price range of Rs. 80 and Rs. 90 per kg.
3. Milk packets at Rs. 23 per litre.

In which shop from the following will she definitely get all her items?

- (a) Shop S sells tomato at Rs. 22.5 per half kg, grapes at Rs. 82 per kg and milk at Rs. 24 per litre.
- (b) Shop H sells grapes at Rs. 21 per quarter kg, milk at 12.5 per half litre and tomato at Rs. 22 per half kg.
- (c) Shop O sells milk at Rs. 11.5 per half litre, tomato at 21 per half kg and grapes at Rs. 43 per half kg.
- (d) Shop P sells tomato at Rs. 23.5 per half kg, grapes at Rs. 85 per kg and milk at Rs. 23 per litre.

Q39. What did M. S. Swaminathan an Indian geneticist, play a leading role in?

- (a) Yellow Revolution
- (b) White Revolution
- (c) Green Revolution
- (d) Black Revolution

Q40. What is the mean of the marks scored by students in a science exam?

41, 39, 52, 48, 54, 62, 46, 52, 40, 96, 42, 40, 98, 60, 52

- (a) 54.8
- (b) 58.4
- (c) 53.4
- (d) 53.8

Q41. Simplify: $(-4.6) \times (-4.6) \div (-4.6 + 0.6)$

- (a) -5.29
- (b) -0.529
- (c) -4.06
- (d) 5.01

Q42. Indian currency notes are printed in which place?

- (a) New Delhi
- (b) Bombay
- (c) Nashik
- (d) Agra

Q43. The price of $4\frac{1}{2}$ m of cloth is Rs. $60\frac{3}{4}$. Find the cost per meter.

- (a) $15\frac{1}{2}$
- (b) $13\frac{1}{2}$
- (c) $14\frac{3}{4}$
- (d) $13\frac{3}{4}$

Q44. What is the number of Galilean moons of Jupiter discovered by Galileo Galilei in January 1610?

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

Q45. Mica is available abundantly in which state?

- (a) West Bengal
- (b) Madhya Pradesh
- (c) Bihar
- (d) Goa

Q46. If $X = 24$ and $BE = 7$, then $RING = ?$

- (a) 41
- (b) 47
- (c) 48
- (d) 49

Q47. The product of two consecutive odd numbers is 399. Find the lower of them.

- (a) 17
- (b) 19
- (c) 21
- (d) 23

Q48. Between which stations does India's longest train run?

- (a) Kanyakumari – Baramulla
- (b) Dibrugarh - Naliya
- (c) Dibrugarh – Kanyakumari
- (d) Thiruvananthapuram - New Delhi

Q49. Which of the following statements regarding the Supreme Court of India is not correct?

- (a) It acts as the guardian of the liberties of the people of India.
- (b) It acts as the guardian of the Constitution.
- (c) It acts as the protector of the Directive Principles of State Policy.
- (d) It has final power to investigate disputes regarding election of the President and the Vice-President.

Q50. What is The Siberian ibex?

- (a) Mountain Lions
- (b) Large and heavily built goats
- (c) Mountain Deer
- (d) A type of Horse

Q51. Cost price of 25 chairs equals the selling price of 20 chairs. Find the profit %.

- (a) 20%
- (b) 33%
- (c) 25%
- (d) 12.5%

Q52. A trader marks his goods at 20% above cost price. If he allows a discount of 5% what is his final profit%?

- (a) 12%
- (b) 14%
- (c) 15%
- (d) 18%

Q53. What is Swadeshi?

- (a) Made in India, from materials that have also been produced in India
- (b) Made in Foreign Lands from materials that are foreign
- (c) A charkha that is used to spin cotton wool
- (d) A Country Flag that is made of Cotton

Q54. Which among the following happens in an oxidation reaction?

- (a) Electrons are gained
- (b) Electrons are lost
- (c) Protons are gained
- (d) Protons are lost

Q55. Where is the Masai Mara National Reserve?

- (a) Mali
- (b) Kenya
- (c) Gabon
- (d) Zambia

Q56. Find the compound interest to the nearest rupee on Rs. 7500 for 2 years 4 months at 12% p.a reckoned annually?

- (a) 2284
- (b) 2176
- (c) 2097
- (d) 2235

Directions (57-59): The following table represents the percentage marks of four students in six subjects. Consider the table and answer questions based on it.

Student	Maths	Science	History	Geography	English	Hindi
Shamita	75	80	65	68	75	65
Smita	80	85	75	65	70	70
Shilpa	82	88	70	69	71	70
Sheela	78	87	65	70	75	74

Q57. The average marks obtained by the students in Geography and History are

- (a) 68.75 and 68
- (b) 70.5 and 69
- (c) 68 and 68.75
- (d) 68.75 and 68.5

Q58. Average marks obtained in Science is higher than that of Maths by

- (a) 1.5
- (b) 20
- (c) 6.25
- (d) 40

Q59. Who has the highest total marks?

- (a) Shamita
- (b) Smita
- (c) Shilpa
- (d) Sheela

Q60. If $\cos \theta + \sin \theta = m$, $\sec \theta + \operatorname{cosec} \theta = n$, what is m/n ?

- (a) 1
- (b) $\sin \theta \cos \theta$
- (c) $\sec \theta \operatorname{cosec} \theta$
- (d) $\cot \theta \tan \theta$

Q61. M is the son of N. O is the father of N. P is the father of M. How is N related to P?

- (a) Wife
- (b) Husband
- (c) Father
- (d) Mother

Q62. What is Sepak Takraw?

- (a) A Bird
- (b) An ancient hunting team in Malaysia
- (c) Kick Volleyball
- (d) A Type of Combat Flight

Q63. X, Y and Z take 18 days to complete a piece of work. If X works alone he finishes the work in 36 days and if Y works alone he finishes it in 60 days. How long will it take Z to complete the work alone?

- (a) 78 days
- (b) 90 days
- (c) 96 days
- (d) 114 days

Q64. Which is the capital of Sri Lanka?

- (a) Colombo
- (b) Kandy
- (c) Jayawardenepura Kotte
- (d) Anuradhapura

Q65. Solve: $\frac{\sin \theta}{1+\cos \theta} + \frac{1+\cos \theta}{\sin \theta} = ?$

- (a) $\tan \theta$
- (b) $\cot \theta$
- (c) $\frac{2}{\sin \theta}$
- (d) $\frac{2}{\cos \theta}$

Q66. The Panchatantra fables are thought to be composed by

- (a) Mullah Nasruddin
- (b) Vishnu Sharma
- (c) King Sudhrashan
- (d) Tenali Raman

Q67. What was the code name of the nuclear tests conducted by India in Pokhran in 1998?

- (a) Operation Desert Storm
- (b) Operation Vijay
- (c) Operation Shakti
- (d) Operation Kaboom

Q68. An assertion (A) and a reason (R) are given below?

Assertion (A): Penguins are birds, found in the hottest regions of the earth.

Reason (R): Birds in hot regions do not have wings.

Choose the correct option.

- (a) Both A and R are true and R is the correct explanation of A
- (b) Both A and R are true, but R is not the correct explanation of A
- (c) A is true, but R is false
- (d) Both A and R are false

Q69. Who is Anjolie Ela Menon?

- (a) An Indian politician
- (b) Bharatanatyam dancer
- (c) A popular musician
- (d) Indian Female Artist

Q70. The sum of the digits of a 2 digit number is 9. When 27 is added to the number, the digits get interchanged. Find the number.

- (a) 45
- (b) 36
- (c) 18
- (d) 27

Q71. Find the missing (?) in the series 13, 14, 18, 27, ?, 68, 104

- (a) 36
- (b) 41
- (c) 43
- (d) 54

Q72. Kitty said, "Uthara is one of the two daughters of my mother's brother's wife". How is Kitty's mother related to Uthara's sister?

- (a) Maternal Aunt
- (b) Mother
- (c) Grandmother
- (d) Sister

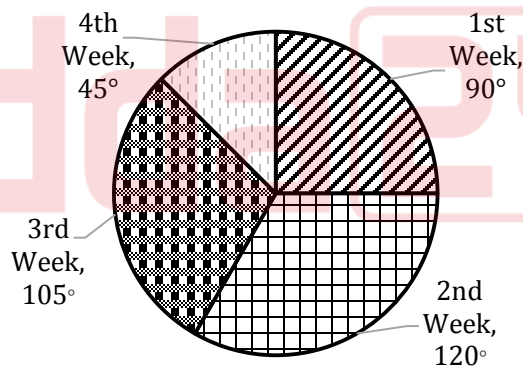
Q73. One angle of a triangle is 55° . If the other two angles are in the ratio 9:16, find the angles?

- (a) 65° and 115°
- (b) 90° and 160°
- (c) 55° and 165°
- (d) 45° and 80°

Q74. Which contemporary painter made a series of paintings on Mahatma Gandhi?

- (a) Amrita Shergill
- (b) Ram Kinkar
- (c) M.F. Hussain
- (d) Atul Doliya

Q75. The income of a person has been shown in the pie-chart. If his total income is 3,60,000 rs. Then find the income of his second week.



- (a) 90,000 rs
- (b) 120,000 rs
- (c) 45,000 rs
- (d) 105,000 rs

Q76. If HOUSES = GNAYDR, then DIARY = _____

- (a) CHGXZ
- (b) CHEWZ
- (c) CHGXX
- (d) CHEWX

Q77. What does “Satyameva Jayate” mean?

- (a) “Truth alone triumphs”
- (b) “True Faith is Rare”
- (c) “Truth is Divine”
- (d) “Truth is a Treasure”

Q78. Malé is the capital of which Country?

- (a) Mauritius
- (b) Lakshadweep
- (c) Maldives
- (d) Malaysia

Q79. Select the alternative that does not have a similar relationship as the given pair-

Forward: Backward

- (a) Hope : Despair
- (b) Love : Hate
- (c) Anger : Wrath
- (d) Light : Dark

Q80. A statement followed by some conclusions are given below?

Statement: Religions teach the guiding principles for leading one’s life.

Conclusions:

I. Religion is a way of life.

II. Religion is a teacher.

Find which of the given conclusions logically follow from the given statement.

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

Q81. If H_2O : Hydrogen, then KOH: _____

- (a) Cobalt
- (b) Phosphorous
- (c) Potassium
- (d) Krypton

Q82. Simplify: $\frac{9}{13} \div \frac{18}{26} \div \frac{90}{52}$

- (a) 45/26
- (b) 13/45
- (c) 26/45
- (d) 45/13

Q83. Zero degree centigrade is equal to what degree Fahrenheit?

- (a) 100°F
- (b) 30°F
- (c) 34°F
- (d) 32°F

Q84. If SHELF is FURYS, then ZEBRA is

- (a) NRMEO
- (b) MRNEO
- (c) NROEM
- (d) MROEN

Q85. What is the normal resting heart rate range for adults (beats/min)?

- (a) 60 to 100
- (b) 50 to 80
- (c) 120 to 180
- (d) 75 to 120

Q86. Q's father is B's son-in-law. C is Q's sister and the daughter of P. P is the maternal aunt of D. How is P related to B?

- (a) Son
- (b) Daughter
- (c) Grandson
- (d) Granddaughter

Q87. Who was the first woman to reach summit of Mt. Everest?

- (a) Bachendri Pal
- (b) Junko Tabei
- (c) Arunima Sinha
- (d) Pemplata Agarwal

Q88. 6 carpenters make 96 windows in 16 days. If 8 carpenters work for 4 days how many windows will they make?

- (a) 16
- (b) 28
- (c) 36
- (d) 32

Q89. A factory produced 18, 58, 509 cassettes in the month of January, 7623 more cassettes in the month of February and owing to short supply of electricity produced 25, 838 less cassettes in March than in February. Find the total production in all?

- (a) 55,57,312
- (b) 59,83,245
- (c) 55,64,935
- (d) 56,08,988

Q90. What is Makar Sankranti?

- (a) Solar Eclipse
- (b) Lunar Eclipse
- (c) Kite Festival
- (d) Puppet Show

Q91. Statements followed by some conclusions are given below.

Statements:

- A. Confusion causes mental tension.
- B. Mental tension causes anxiety.

Conclusions:

- I. Anxiety is a disease.
- II. Confusion leads to anxiety.

Find which of the given conclusions logically follow from the given statements.

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

Q92. If 'Mango, lemon and melon are fruits' is written as 439516; 'Mango and lemon are yellow' is 04396 and 'Melon is green' is 857, which digit represents 'melon'?

- (a) 5
- (b) 8
- (c) 7
- (d) Cannot be determined

Q93. Find the missing (?) in the series AIQ, BJR, CKS, DLT, ?, ...

- (a) ENU
- (b) EMV
- (c) ENV
- (d) EMU

Q94. Sanjay and Jacob start running in opposite directions from the same point at speeds of 7m/s and 5m/s. After 42 minutes, how far would they be from each other?

- (a) 30.24 km
- (b) 504 km
- (c) 8.4 km
- (d) 69.5 km

Q95. Which country has joined WTO (World Trade Organisation) as 164th member in 2016?

- (a) Philippines
- (b) Liberia
- (c) Jordan
- (d) Afghanistan

Q96. Find the difference between compound interest and simple interest on 5000 for 2 years at 8% p.a payable annually.

- (a) 45
- (b) 32
- (c) 57
- (d) 84

Q97. Solve: $12 - [26 - \{2 + 5 \times (6 - 3)\}]$

- (a) 2
- (b) 3
- (c) 7
- (d) 8

Q98. Abdul prepared 42 litres of medicine and filled it in bottles of 280 ml each. Find how many bottles would be required?

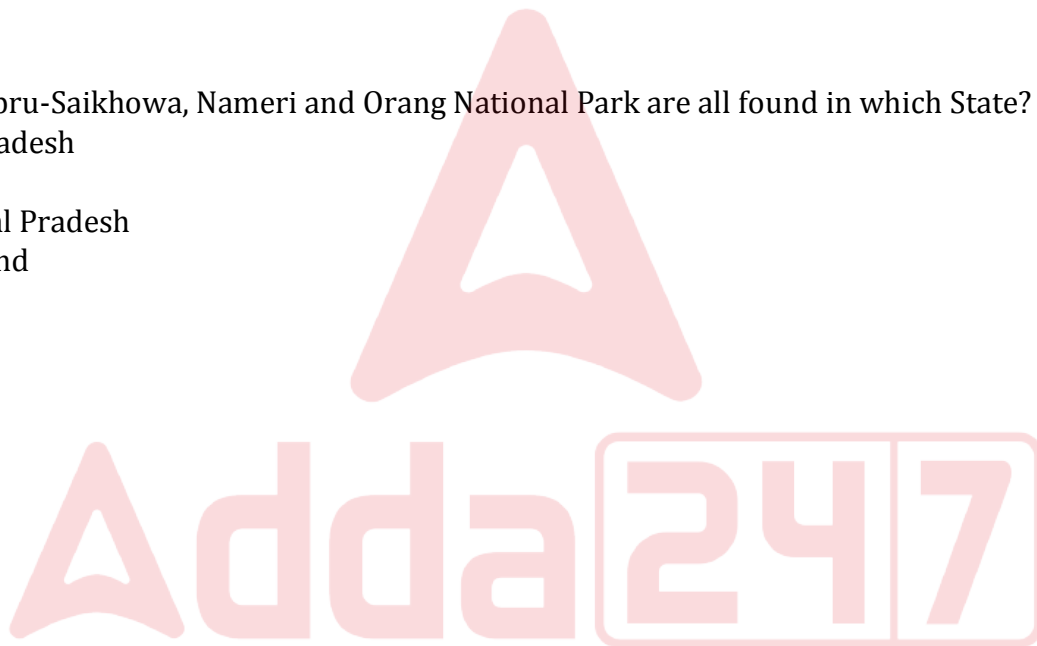
- (a) 15
- (b) 1500
- (c) 150
- (d) 300

Q99. The LCM of two consecutive even numbers is 144, find the numbers?

- (a) 16 and 18
- (b) 14 and 16
- (c) 18 and 20
- (d) 22 and 24

Q100. The Dibru-Saikhowa, Nameri and Orang National Park are all found in which State?

- (a) Andhra Pradesh
- (b) Assam
- (c) Arunachal Pradesh
- (d) Uttarakhand



RRB NTPC Previous Year Paper 03_(Solutions)

1. Ans.(d):

Sol. Earthquakes with magnitude of about 2.0 or less are usually called micro earthquakes. Although the Richter Scale has no upper limit, the largest known shocks have had magnitudes in the 8.8 to 8.9 range.

2. Ans.(c):

Sol. Required = $(10 + 7) - (6 + 8)$

Difference = 3

3. Ans.(b):

Sol. Modem stands for MOdulator/DEModulator. A modem converts digital signals generated by the computer into analog signals which can be transmitted over a telephone or cable line and transforms incoming analog signals into their digital equivalents.

4. Ans.(d):

Sol. N: 38:: 3:57

$$\frac{N}{38} = \frac{3}{57} \Rightarrow N=2$$

5. Ans.(d):

Sol. Distance covered = speed $\times$ time

$$= \left(50 \times \frac{11}{2}\right) \text{ km} = 275 \text{ km}$$

$$\therefore \text{Time taken with new speed} = \frac{275}{55} = 5 \text{ h}$$

$$\therefore \text{Time saved} = 5\frac{1}{2} \text{ h} - 5 \text{ h} = 30 \text{ min}$$

6. Ans.(c):

$$\text{Sol. } x = 7 - 4\sqrt{3}$$

$$x = (2)^2 + (\sqrt{3})^2 - 2 \times 2 \times \sqrt{3}$$

$$x = (2 - \sqrt{3})^2$$

$$\therefore \sqrt{x} + \frac{1}{\sqrt{x}} = 2 - \sqrt{3} + \frac{(2 + \sqrt{3})}{(2 - \sqrt{3}) \times (2 + \sqrt{3})}$$

$$= 2 - \sqrt{3} + 2 + \sqrt{3} = 4$$

7. Ans.(b):

Sol. After passing Paonta Sahib, Yamuna flows along the boundary of Haryana and Uttar Pradesh and after exiting Haryana it continues to flow till it merges with the river Ganga (Ganges) at Sangam or Prayag in Allahbad (Uttar Pradesh). While Ganga, tapti and Kaveri flows to the respective sea.

8. Ans.(d):

Sol. Rice is one of the chief grains of India. Moreover, this country has the largest area under rice cultivation, as it is one of the principal food crops.

9. Ans.(d):

Sol. The value of GOLD is determined in London.

10. Ans.(d):

Sol. The young ones of all of them i.e. Elephant, Camel, Buffalo, Giraffe are called calf.

11. Ans.(a):

Sol. $y = \frac{2x-1}{x+3}$

$\Rightarrow$ Put $y=1$

$x+3 = 2x-1 \Rightarrow x=4$

12. Ans.(a):

Sol. Vitamin K, which is needed for blood clotting and also plays a role in bone metabolism, as well as in the renal reabsorption of Ca^{++} .

13. Ans.(c):

Sol.

$9 \div 5 \oplus 10 - 23 \otimes 2$

$= 9 \div 5 \times 10 - 23 + 2$

$= 18 - 23 + 2 = -3$

14. Ans.(b):

Sol. Length of the wire = Perimeter of rectangle

$= 2(l+b)$

$= 2 \times (42.7+21.8) = 129 \text{ m}$

Length of side of square $= \left(\frac{129}{4}\right) \text{ m} = 32.25 \text{ m}$

15. Ans.(d):

Sol. Mysore city in Karnataka has topped the Swachh Bharat Rankings(2015) of 476 cities in the country with three more from the State figuring in the top 10.

16. Ans.(a):

Sol. The most peaceful country according to the 2015 Global Peace Index is Iceland.

17. Ans.(a):

Sol. The Chipko movement had started in the early 18th century in Rajasthan. A local woman, Amrita Devi, risked her life along with 84 villagers to protect the forest trees from being cut on the order of the king

18. Ans.(b):

Sol. ORIN $\rightarrow$ IRON

POPCER $\rightarrow$ COPPER

DLOG $\rightarrow$ GOLD

NADS $\rightarrow$ SAND (not an element like above three)

19. Ans.(d):

Sol. 14/13

20. Ans.(a):

Sol. Required difference = $(10+12+13) - (16+13) = 6$

21. Ans.(b):

Sol. $13+16 = 29$

22. Ans.(b):

Sol. Kampala is the capital and largest city of Uganda.

23. Ans.(c):

Sol. Madhubani painting/Mithila painting originated in a small village, known as Maithili, of the Bihar state of India. Madhubani painting/Mithila painting was traditionally created by the women of various communities in Mithila region of India and Nepal.

24. Ans.(d):

Sol. Planet Nine is a hypothetical planet in the outer region of the Solar System.

25. Ans.(d):

Sol. C++ is a general-purpose programming language not an Operating System.

26. Ans.(d):

Sol. LCM of 12, 24, 48, 60, 96 = 480

Smallest 5 digit multiple of 480 = 10080

27. Ans.(a):

Sol. Total area to be carpented = $(65 \times 30) \times 10^{-2} \text{ m}^2$

$\therefore$ Cost = Rs $(65 \times 30 \times 10^{-2} \times 45)$

= Rs 877.50

28. Ans.(c):

Sol. Antibiotics is the most common treatment for bacterial infections in humans. Antibiotics can only treat bacterial infections. This includes strep throat and urinary infections

29. Ans.(b):

Sol.

$$\frac{\text{Jai}}{\text{Joy}} = \frac{5x}{2x} \begin{matrix} \nearrow 45y \\ \searrow 18y \end{matrix}$$

ATQ, $7x = 63 \Rightarrow x = 9$

$\therefore$ After 9 years.

$$\frac{\text{Jai}}{\text{Joy}} = \frac{45+9}{18+9} = \frac{54}{27} = \frac{2}{1}$$

30. Ans.(b):

Sol. SP of 1 chocolate = $\frac{160}{90} = \text{Rs } \frac{16}{9}$

$\therefore$ C P of 1 chocolate = $\frac{16}{9} \times \frac{5}{4} = \frac{20}{9}$

For profit of 20%

SP of n no. of chocolates

$$\Rightarrow \frac{20}{9} \times \frac{6}{5} \times n = 96$$

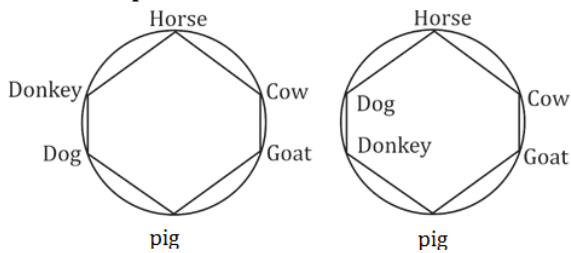
$$\Rightarrow n = \frac{96}{20 \times 6} \times 9 \times 5 = 36$$

31. Ans.(a):

Sol. An archipelago is a chain, cluster or collection of islands, or sometimes a sea containing a small number of scattered islands.

32. Ans.(c):

Sol. Two possibilities



33. Ans.(d):

34. Ans.(d):

35. Ans.(a):

Sol. Sabari Karthik is an Indian karate player. He represents India in various Karate tournaments, across the globe.

36. Ans.(c):

Sol. Nitrous oxide, commonly known as laughing gas or nitrous, is a chemical compound, an oxide of nitrogen with the formula N_2O .

37. Ans.(a):

Sol. 60th anniversary is called diamond jubilee.

38. Ans.(c):

Sol. She will get

Tomato $\rightarrow$ Rs 42 / kg

Grapes $\rightarrow$ Rs 86 / kg

Milk $\rightarrow$ Rs 23 / lt

39. Ans.(c):

Sol. MS Swaminathan, known as the 'Father of Green Revolution' was born on August 7, 1925.

40. Ans.(a):

Sol. Mean

$$= \frac{41+39+52+48+54+62+46+52+40+96+42+40+98+60+52}{15}$$
$$= 54.8$$

41. Ans.(a):

Sol. $\frac{-4.6 \times -4.6}{-4} = -5.29$

42. Ans.(c):

Sol. Currency notes are printed at the Currency Note Press in Nashik, the Bank Note Press in Dewas, the Bharatiya Reserve Bank Note Mudran (P) Ltd at Salboni and Mysore and at the Watermark Paper Manufacturing Mill in Hoshangabad.

43. Ans.(b):

Sol. Cost per meter $= \frac{243}{4 \times 9} \times 2 = 13\frac{1}{2}$

44. Ans.(c):

Sol. In January 1610, Italian astronomer Galileo Galilei discovered four of Jupiter's moons — now called Io, Europa, Ganymede and Callisto

45. Ans.(c):

Sol. Important mica bearing pegmatite occurs in Andhra Pradesh, Jharkhand, Bihar and Rajasthan.

46. Ans.(c):

Sol. $X = 24$

$BE = 2+5=7$

$RING = 18+9+14+7=48$

47. Ans.(b):

Sol. Let the two consecutive numbers be x & $(x+2)$

$\therefore x(x+2) = 399$

$\Rightarrow x^2 + 2x = 399$

$\Rightarrow x^2 + 2x - 399 = 0$

$\Rightarrow x^2 + 21x - 19x - 399 = 0$

$\Rightarrow x = 19, x = 21$

$\therefore x = 19$

48. Ans.(c):

Sol. The longest train route in the Indian Subcontinent joins Dibrugarh in Assam, North-East India to Kanyakumari, Tamil Nadu which is the southernmost tip of Mainland India.

49. Ans.(c):

Sol. DPSPs are not enforceable in a court of law. They were made non-justiciable keeping in view that the state may not have resources to implement them. All of them are novel principles which call upon the state to provide a welfare government which can bring live ideals of the constitution.

50. Ans.(b):

Sol. Siberian ibex is a type of wild goat. It can be found in the North and Central Asia. Siberian ibex inhabits steep mountain terrains, rocky areas with scarce vegetation and alpine meadows, on the altitude from 1.600 to 16.000 feet.

51. Ans.(c):

Sol. 25 CP=20 SP

$$\frac{CP}{SP} = \frac{4}{5}$$

$$\therefore \text{Profit}\% = \frac{1}{4} \times 100 = 25\%$$

52. Ans.(b):

Sol. Let CP = 100

MP = 120

$$SP = 120 \times \frac{95}{100} = 114$$

$$\therefore \text{Profit}\% = \frac{114-100}{100} \times 100 = 14\%$$

53. Ans.(a):

Sol. Swadeshi means 'of our country'. Any product produced or manufactured in our country is known as swadeshi.

54. Ans.(b):

Sol. The molecule that is oxidized loses an electron and the molecule that is reduced gains the electron that was lost by the oxidized molecule.

55. Ans.(b):

Sol. Maasai Mara National Reserve is an area of preserved savannah wilderness in southwestern Kenya, along the Tanzanian border.

56. Ans.(a):

Sol. Calculating compound interest using the Tree method

I → 900

II → 900 108

III → 900 216 12.96

Compound Interest for 2 years & 4 months

$$= 900 + 900 + 108 + \frac{1}{3} \times (900 + 216 + 12.96)$$

$$= \text{Rs } 2284 \text{ (approx.)}$$

57. Ans.(c):

$$\text{Sol. Ave marks of geography} = \frac{68+65+69+70}{4} = 68$$

$$\text{Avg marks of History} = \frac{65+75+70+65}{4} = 68.75$$

58. Ans.(c):

$$\text{Sol. Avg marks of Science} = \frac{80+85+88+87}{4} = 85$$

$$\text{Avg marks of maths} = \frac{75+80+82+78}{4} = 78.75$$

$$\text{Difference} = 85 - 78.75 = 6.25$$

59. Ans.(c):

Sol. Shilpa = 450

Sheela = 449

Shamita = 428 Smita = 445

Hence, Shilpa

60. Ans.(b):

Sol. $\Rightarrow \cos \theta + \sin \theta = m$ _____(i)

& $\sec \theta + \cos \theta = n$

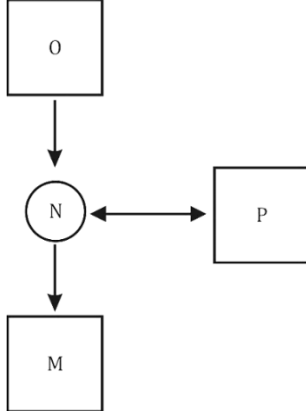
$\Rightarrow \sin \theta + \cos \theta = n \sin \theta \cos \theta$

$\Rightarrow m = n \sin \theta \cos \theta$ (from (i))

$\Rightarrow \frac{m}{n} = \sin \theta \cdot \cos \theta$

61. Ans.(a):

Sol.



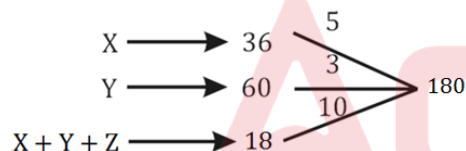
N is wife of P

62. Ans.(c):

Sol. Sepak takraw or kick volleyball, is a sport native to Southeast Asia. Sepak takraw differs from the similar sport of footvolley in its use of a rattan ball and only allowing players to use their feet, knee, chest and head to touch the ball.

63. Ans.(b):

Sol.



Efficiency of Z = $10 - 5 - 3$

$Z = 2$

$\therefore \text{Time} = \frac{180}{2} = 90 \text{ days}$

64. Ans.(c):

Sol. The capital of Sri Lanka is Jayawardenepura Kotte while commercial capital is Colombo.

65. Ans.(c):

Sol. $\frac{\sin \theta}{1 + \cos \theta} + \frac{1 + \cos \theta}{\sin \theta} = 0$

$= \frac{\sin^2 \theta + \cos^2 \theta + 1 + 2 \cos \theta}{\sin \theta (1 + \cos \theta)} = \frac{2}{\sin \theta}$

66. Ans.(b):

Sol. The Panchatantra collection of short stories was written in Sanskrit by Indian scholar and author, Vishnu Sharma.

67. Ans.(c):

Sol. Many names have been assigned to these tests; originally these were collectively called Operation Shakti-98, and the five nuclear bombs were designated Shakti-I through to Shakti-V. More recently, the operation as a whole has come to be known as Pokhran II, and the 1974 explosion as Pokhran-I

68. Ans.(d):

Sol.

69. Ans.(d):

Sol. Anjolie Ela Menon is one of India's leading contemporary artists. Her paintings are in several major collections. In 2006 her work "Yatra" was acquired by the Asian Art Museum of San Francisco, California.

70. Ans.(b):

Sol. $x \rightarrow$ tens place, $y \rightarrow$ unit place

$$\Rightarrow x + y = 9 \text{ ----- (1)}$$

$$\Rightarrow 10x + y + 27 = 10y + x$$

$$\Rightarrow 9y - 9x = 27$$

$$\Rightarrow y - x = 3 \text{ ----- (2)}$$

$$\text{Ans.(1)} + (2)$$

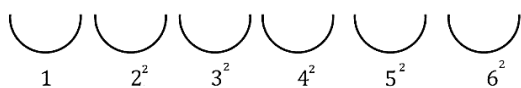
$$\Rightarrow 2y = 12 \Rightarrow y = 6$$

$$\therefore \text{The number} = 36$$

71. Ans.(c):

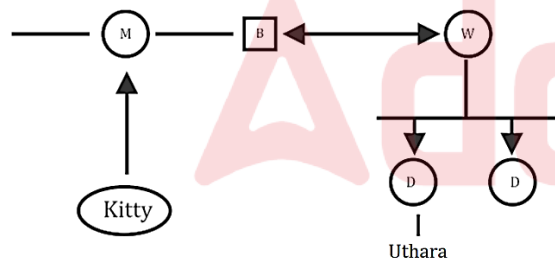
Sol. The difference is square of numbers increasing from 1

13 , 14 , 18 , 27 , 43 , 68 , 104



72. Ans.(a):

Sol.



Maternal Aunt

73. Ans.(d):

$$\text{Sol. } 55 + 9x + 16x = 180^\circ \Rightarrow x = 5^\circ$$

$$\therefore \text{Angles} = 45^\circ \text{ \& } 80^\circ$$

74. Ans.(d):

Sol. Born in 1959 in Mumbai, Atul Dodiya is widely considered as one of India's most significant artists. Trained in both Mumbai and Paris, he became known in the 90s for hyperrealist paintings depicting middle-class Indian life and for his watercolour series on Mahatma Gandhi.

75. Ans.(b):

$$\text{Sol. Earning is 2}^{\text{nd}} \text{ week} = \frac{120}{360} \times 360000 = 120,000$$

76. Ans.(c):

Sol. H O U S E S
8 15 21 19 5 19
7 14 1 25 4 18
G N A Y D R

∴ D I A R Y
4 9 1 18 25
↓ ↓ ↓ ↓ ↓
-1 -1 +6 +6 -1
3 8 7 24 27
C H G X X

77. Ans.(a):

Sol. "Satyameva Jayate" (lit. "Truth alone triumphs.") is a mantra from the ancient Indian scripture Mundaka Upanishad.

78. Ans.(c):

Sol. Malé is the densely populated capital of the Maldives, an island nation in the Indian Ocean

79. Ans.(c):

Sol. Given Relationship → Antonym
∴ Anger & Wrath → Not an antonym

80. Ans.(a):

Sol.

81. Ans.(c):

Sol. Potassium hydroxide is an inorganic compound with the formula KOH, and is commonly called caustic potash.

82. Ans.(c):

Sol. $\frac{9}{13} \times \frac{26}{18} \times \frac{52}{90} = \frac{26}{45}$

83. Ans.(d):

Sol. 0 degrees Celsius ($^{\circ}\text{C}$) is equal to 32 degrees Fahrenheit ($^{\circ}\text{F}$)

84. Ans.(d):

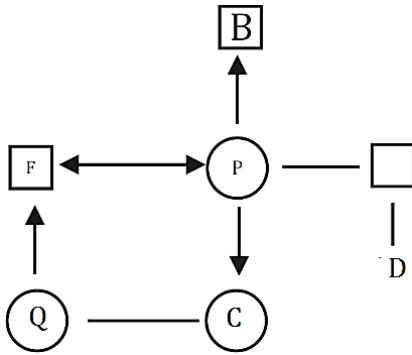
Sol. + 13 series.

85. Ans.(a):

Sol. A normal resting heart rate for adults ranges from 60 to 100 beats per minute. Generally, a lower heart rate at rest implies more efficient heart function and better cardiovascular fitness. For example, a well-trained athlete might have a normal resting heart rate closer to 40 beats per minute.

86. Ans.(b):

Sol.



87. Ans.(b):

Sol. Junko Tabei was a Japanese mountaineer. She was the first woman to reach the summit of Mount Everest, and the first woman to ascend all Seven Summits by climbing the highest peak on every continent.

88. Ans.(d):

Sol. $\left(\frac{\text{MHD}}{W}\right)_1 = \left(\frac{\text{MHD}}{W_2}\right)$
 $\Rightarrow \frac{6 \times 16}{96} = \frac{8 \times 4}{n} \Rightarrow n = 32$

89. Ans.(c):

Sol. Total production
= 18, 58, 509 + 18,66,132 + 1840, 294
= 55, 64, 935

90. Ans.(c):

Sol. Makar Sankranti is also known as Uttarayan or Festival of Kites in Gujarat and Rajasthan. This is a full kite-flying day, colorful kites in the sky convert Sankranti into the beautiful colors of kites.

91. Ans.(b):

Sol.

92. Ans.(a):

Sol. Clearly Melon $\rightarrow$ 5

93. Ans.(d):

Sol. Increasing by +1

94. Ans.(a):

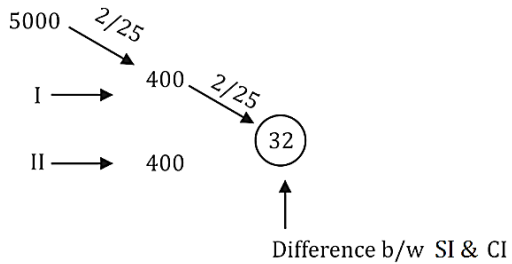
Sol. Distance = Relative speed $\times$ time
= $12 \times 42 \times 60$
= 30240 m
= 30.24 km

95. Ans.(d):

Sol. Afghanistan has become 164th member nation of the World Trade Organisation (WTO), global trade body after 11 years of negotiations in 2016.

96. Ans.(b):

Sol. $8\% = \frac{2}{25}$



97. Ans.(b):

Sol. $12 - [26 - \{2 + 5 \times 3\}] = 12 - [26 - 17] = 12 - 9 = 3$

98. Ans.(c):

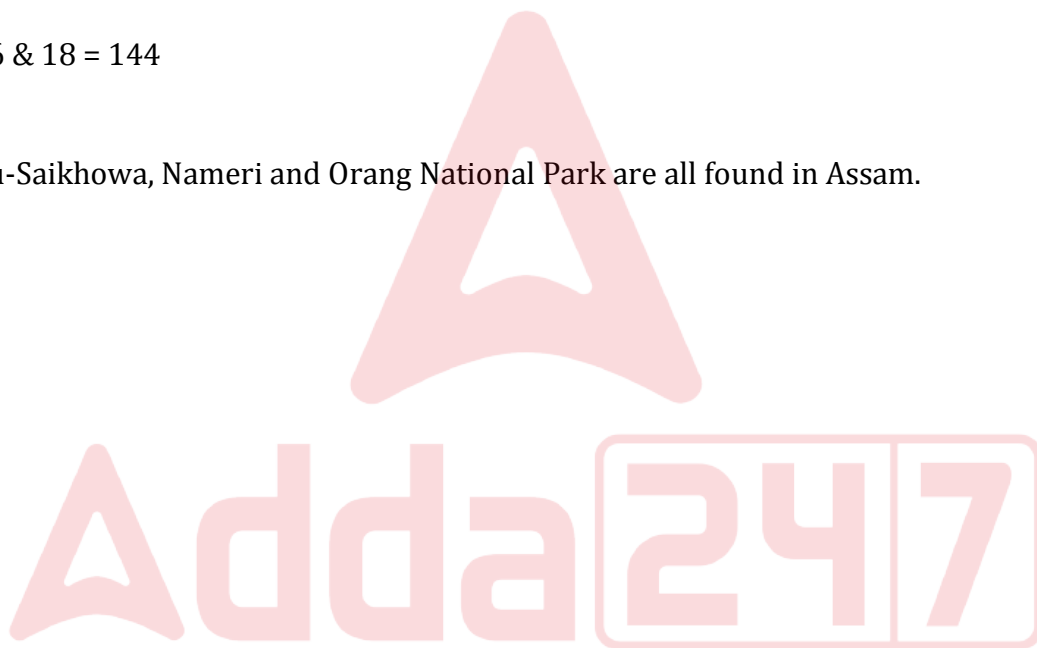
Sol. Number of bottles = $\frac{42 \times 1000}{280} = 150$

99. Ans.(a):

Sol. LCM of 16 & 18 = 144

100. Ans.(b):

Sol. The Dibru-Saikhowa, Nameri and Orang National Park are all found in Assam.



RRB NTPC Previous Year Paper 04

Q1. The Make In India Logo is made up of what?

- (a) Lion made of Cogs
- (b) Eagle Made of Steel
- (c) Chakra Made of Cotton
- (d) Tiger Made of Khadi

Q2. The median of the following numbers arranged in ascending order is 2.5, if so find x?

0, 0, 1, 1, 2, 2, x, 3, 3, 4, 5, 7,

- (a) 2
- (b) 3
- (c) 4
- (d) 0

Q3. How do Indians celebrate Holi?

- (a) By playing pranks on each other
- (b) By throwing coloured powder and water on each other
- (c) By Lighting Lamps
- (d) By setting pigeons free

Q4. X is the only daughter of Y's grandfather's only son. Y's grandfather has only one child. How is X related to Y?

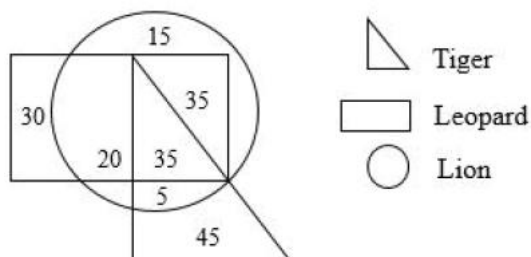
- (a) Mother
- (b) Sister
- (c) Paternal Aunt
- (d) Grandmother

Q5. In Indian sport what does HIL stand for?

- (a) Himachal Indian Lions
- (b) Haryana Indus League
- (c) Hockey India League
- (d) Hyderabad India League

Directions (6-8): Study the following diagram and answer questions based on it.

The diagram represents the likes of children in a society.



Q6. The difference between children who like leopard to those who like tiger is

- (a) 50
- (b) 35
- (c) 30
- (d) 5

Q7. How many children like both lion and leopard?

- (a) 35
- (b) 55
- (c) 90
- (d) 95

Q8. How many children who like lion, also like the tiger?

- (a) 5
- (b) 15
- (c) 35
- (d) 40

Q9. Find the missing (?) in the series

50, 49.5, ?, 45.5, 42, 37.5, ...

- (a) 49
- (b) 48
- (c) 47.5
- (d) 46

Q10. Malgudi Days is based on the works of which Indian Writer?

- (a) Shankar Nag
- (b) R. K. Lakshman
- (c) R.K. Narayan
- (d) Girish Karnad

Q11. Statements followed by some conclusions are given below.

Statements:

- 1. Employees are well paid.
- 2. Rajan earns well.

Conclusions:

- I. Rajan is an employee.
- II. Rajan is self-employed.

Find which of the given conclusions logically follows from the given statements.

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

Q12. At what time did India Gain Independence of 15th August 1947?

- (a) Morning
- (b) Midevening
- (c) Midnight
- (d) Noon

Q13. A train having a length of 500 m passes through a tunnel of 1000 m in 1 minute. What is the speed of the train in Km/hr?

- (a) 75 Km/hr
- (b) 90 Km/hr
- (c) 87 Km/hr
- (d) 96 Km/hr

Q14. What is the science or art of designing and accelerating projectiles so as to achieve a desired performance called?

- (a) Ballistics
- (b) Catapulting
- (c) Ejection
- (d) Rocket Science

Q15. Find the similarity in the following:

Orange, Peach, Olive, Carmine

- (a) All of them are fruits.
- (b) All of them are names of seasons.
- (c) All of them are colours.
- (d) All of them are shades of orange.

Q16. What does WLAN stand for?

- (a) Wireless Local Area Network
- (b) Wide Local Area Network
- (c) Wind Light Atmospheric Nature
- (d) Wireless Local Area Node

Q17. What does "Bicameral Legislature" mean?

- (a) Legislators are divided into 4 separate assemblies
- (b) Legislators are grouped as 1 assembly
- (c) Legislators are divided into 2 separate assemblies
- (d) Legislators are divided into 8 separate assemblies

Q18. Find the missing (?) in the series

....., HG, IJ, LK, MN, ?, ...

- (a) OP
- (b) PO
- (c) QP
- (d) PQ

Q19. A small shop owner keeps inventory satisfying the following criteria–

1. Shampoo sachets that are priced between Rs. 4 and Rs. 10 per sachet.
2. Chocolates in the price range of Re. 1 and Rs. 60 per piece.
3. Dry fruits priced more than Rs. 125 per 100 grams.

Q4. Milk packets in the price range of Rs. 21 and Rs. 29 per litre.

Which list among the following will definitely NOT be found in his shop?

- (a) Shampoo A at Rs. 4 per sachet, chocolate B at Rs. 1.5 per piece and dry fruit C, at Rs. 250 per 125 gram.
- (b) Shampoo P at Rs. 5 per sachet, milk packet Q at Rs. 23 per litre and dry fruit R at Rs. 150 per 100 gram.
- (c) Shampoo X at Rs. 5 per sachet, chocolate Y at Rs. 1 per piece and dry fruit Z at Rs. 100 per 100 gram.
- (d) Shampoo L at Rs. 4 per sachet, milk packet M at Rs. 24.5 per packet, and chocolate N at Rs. 35 per piece and dry fruit O at Rs. 350 per 200 gram.

Q20. Which is the most abundant combustible natural gas?

- (a) Propane
- (b) Methane
- (c) Ethane
- (d) Butane

Q21. Which among the following is the Largest Freshwater Lake in India?

- (a) Dal Lake
- (b) Thol Lake
- (c) Pushkar Lake
- (d) Wular Lake

Q22. Manu sold a dozen watches for Rs. 1454.64 per watch and made a profit of 16%. Find the cost price of the watches?

- (a) 1254.00
- (b) 1362.36
- (c) 15048.00
- (d) 16348.32

Q23. The famous camel trading event is a part of this annual fair.

- (a) Udaipur Mela
- (b) Thar Mela
- (c) Kumbh Mela
- (d) Pushkar Mela

Q24. What is the rate of change of position of an object with respect to a frame of reference, which is a function of time called?

- (a) Mechanics
- (b) Vector
- (c) Velocity
- (d) Magnitude

Q25. If DELHI is QRYUV, then BOMBAY is

- (a) OBZNOL
- (b) OZBNOL
- (c) OZBONL
- (d) OBZONL

Q26. If GOING is 38253 and CASUAL is 409106, then LOGICAL is

- (a) 6034286
- (b) 6834206
- (c) 6032486
- (d) 6832406

Q27. Manju takes 16 days to complete a work. If she works with her friend Jenny they complete it in 12 days. How many days will it take for Jenny to complete the work alone?

- (a) 48
- (b) 32
- (c) 36
- (d) 24

Q28. Solve: $10^9 \times 10^2 \div 10^3$

- (a) 10^8
- (b) 10^6
- (c) 10^2
- (d) 10^5

Q29. If the circumference of a circle is 22 cm, find the area of the semicircle.

- (a) 38.5 sq.cm
- (b) 19.25 sq.cm
- (c) 44 sq.cm
- (d) 77 sq.cm

Q30. Find the interest on Rs. 25000 at 12% p.a compounded annually for 3 years.

- (a) 9,000
- (b) 9,833.40
- (c) 10,123.20
- (d) 10,678.90

Q31. The LCM and HCF of 2 numbers are 168 and 6 respectively. If one of the numbers is 24, find the other.

- (a) 36
- (b) 38
- (c) 40
- (d) 42

Q32. Seeta said, "Ram's only brother is the father of my son's father".

How is Ram's brother related to Seeta's son?

- (a) Father
- (b) Grandfather
- (c) Maternal Uncle
- (d) Paternal Uncle

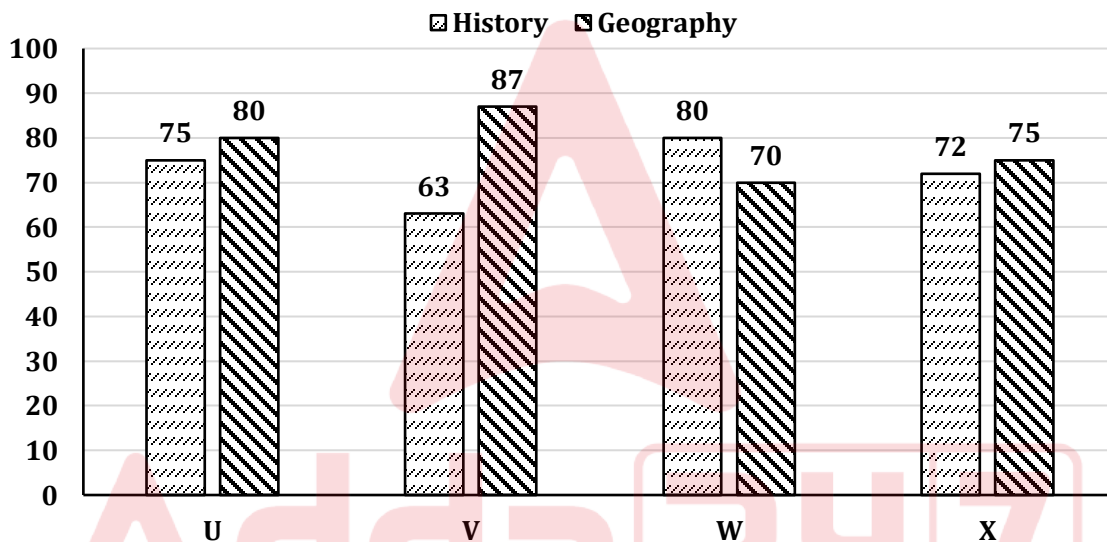
Q33. 78 books, 114 crayons and 141 notebooks were distributed to school children equally. It was found that 6 were left undistributed in each. What was the total number of children?

- (a) 9
- (b) 8
- (c) 13
- (d) 12

Q34. What are Vivipara?

- (a) Vertebrates that are born live
- (b) Type of cactus
- (c) Type of algae
- (d) Type of yeast

Directions (35-37): The bar chart represents percentage marks scored by four students U, V, W and X in History and Geography. Consider the bar chart and answer questions based on it.



35. Who scored the highest percentage in both the subjects combined?

- (a) Both V and W
- (b) V
- (c) W
- (d) U

Q36. What is the percentage of marks obtained in Geography and History together by W ?

- (a) 75.8%
- (b) 80%
- (c) 77.5%
- (d) 75%

Q37. What is the average percentage marks obtained in History by all students?

- (a) 78%
- (b) 75%
- (c) 72.5%
- (d) 70%

Q38. If $A^{x+y} = a^6$ and $x > y$ by 2 find x.

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

Q39. What is a Limerick?

- (a) A Type of Lime Stone
- (b) A form of poetry mostly in five-lines
- (c) A type of Theatre Play
- (d) A type of Word game

Q40. If Annual: One year, then Quinquennial: _____

- (a) Five years
- (b) Ten years
- (c) Hundred years
- (d) Thousand years

Q41. Andromeda is a

- (a) Galaxy neighboring the Milky way
- (b) Planet
- (c) Name of a black hole
- (d) Comet

Q42. Whose quote is "In practice of tolerance, one's enemy is the best teacher"?

- (a) Gautama Buddha
- (b) Mahatma Gandhi
- (c) Barack Obama
- (d) The Dalai Lama

Q43. What is Shigmo?

- (a) A Goan Spring Festival
- (b) The tallest peak in Nilgiris
- (c) A type of Rangoli
- (d) One of the Names of Lord Shiva

Q44. In computers, what does Yosemite, Mavericks, Mountain Lion, Lion, Snow Leopard, Leopard, Tiger, Panther, Jaguar, Puma and Cheetah stand for?

- (a) versions of Mac OS X
- (b) Types of Storage Servers
- (c) Macintosh Clones
- (d) PowerBooks

Q45. Rearrange the jumbled letters to make a meaningful word and then select the one which is different.

- (a) ENNI
- (b) NEO
- (c) EPPI
- (d) REETH

Q46. Solve: $\frac{12}{13} \times \frac{285}{96} \div \frac{171}{169} = ?$

- (a) $3\frac{2}{3}$
- (b) $\frac{65}{24}$
- (c) $\frac{7}{8}$
- (d) $\frac{11}{24}$

Q47. LIGO, Laser Interferometer Observatory was recently in the news. Why?

- (a) Discovery of water in Mars
- (b) Discovery of a diamond-filled star
- (c) Detection of Gravitational waves
- (d) Proving Big Bang theory as wrong

Q48. In which century did Portuguese merchants first land in Goa?

- (a) 14th
- (b) 15th
- (c) 16th
- (d) 17th

Q49. In 1999 who was the Prime Minister of Pakistan who was overthrown by a Military coup led by General Pervez Musharraf?

- (a) Zulfikar Ali Bhutto
- (b) Zia ul-Haq
- (c) Nawaz Sharif
- (d) Yusuf Raza Gilani

Q50. What is C_6H_6 ?

- (a) Chloroform
- (b) Hydro Chloric Acid
- (c) Benzene
- (d) toluene

Q51. What is Oneirology, the study of?

- (a) Gods
- (b) Dreams
- (c) Sleep
- (d) Colour

Q52. Which was the host city of the first modern summer Olympic games held in 1896?

- (a) Athens
- (b) Paris
- (c) London
- (d) Amsterdam

Q53. I take a book from a library containing 378 pages to be returned in a week's time. If I can read 14 pages an hour for three hours daily, for how long should it be renewed so that the book can be fully read?

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

Q54. Carl Sagan was

- (a) An American astronomer
- (b) British Physicist
- (c) French Astronaut
- (d) American President

Q55. Eggs sold by a shopkeeper over a week is given in the table below.
Eggs sold in dozens

Day	Sales in dozen
Sunday	12
Monday	8
Tuesday	11
Wednesday	5
Thursday	9
Friday	10
Saturday	10

If the price of one egg was Rs. 2.50, how much more did he earn on Friday than on Monday?

- (a) 55 rupees
- (b) 60 rupees
- (c) 45 rupees
- (d) 62 rupees.

Q56. The mean of the marks scored by 12 students of a class is 67.4. If the mean of another class consisting of 15 students is 72.3, find their combined mean?

- (a) 70.12
- (b) 69.85
- (c) 71.23
- (d) 68.94

Q57. If GUITAR = HTJSBQ, then VIOLIN = _____

- (a) WHPKHM
- (b) WHPKJM
- (c) WHKPHM
- (d) WHKPJM

Q58. A man walks at a certain speed and reaches his destination which is 6 km in 1 hr 40 minutes. If he runs the same distance in 1 hour 20 minutes what is the difference in speed?

- (a) 1 km/hr
- (b) 0.9 km/hr
- (c) 1.5 km/hr
- (d) 1.9 km/hr

Q59. What is "Binary Electronic Sequence Calculator" (BESK), created in 1953?

- (a) Electronic computer
- (b) Analogous Computer
- (c) Digital Computer
- (d) A Banker's Calculator

Q60. Find $\sin (90^\circ - \theta)$

- (a) $\cos 90^\circ$
- (b) $1/2$
- (c) 1
- (d) $\cos \theta$

Q61. What is India's famous comic series started by Anant Pai called?

- (a) Raj Comics
- (b) Amar Chitra Katha
- (c) Tinkle
- (d) Chandamama

Q62. Find $(x+y)^2 - (x-y)^2$?

- (a) $2x^2y^2$
- (b) $4xy$
- (c) $2x^2 + 2y^2$
- (d) $x^2 - y^2 + 2xy$

Q63. The area of a rectangle is 42 sq. cm and its length is 7cm. Find its perimeter.

- (a) 14 cm
- (b) 21 cm
- (c) 26 cm
- (d) 24 cm

Q64. If by selling 20 cycles Vinay incurs a loss equal to the selling price of 2 cycles, find his loss percentage.

- (a) 10%
- (b) 11%
- (c) $13\frac{1}{3}\%$
- (d) $9\frac{1}{11}\%$

Q65. Read the following and answer the question based on it.

Proteins are used by the body for energy, metabolism, gene growth and maintenance. 10 to 35 percent of the daily calorie intake should ideally consist of proteins. They are found in all cells of the body. Hair and nail are made up of a protein called keratin, having Sulphur bonds. Curlier hair has more Sulphur links. Too much intake of proteins can sometimes lead to body weight. Proteins_____

- (a) Are to used by the body for any of its functions.
- (b) Are required by the body in adequate quantities.
- (c) Makes hair shiny, lengthy and black.
- (d) Do not cause weight gain.

Q66. Consider the following information and answer questions based on it.

Five pickles – mango, lime, tomato, gooseberry and garlic are kept in five jars, in a row, in a random order, from left to right.

1. Gooseberry is not on either extremes.
2. There is one jar between mango and garlic.
3. Tomato is placed on the left side of lime.

4. The second jar from the left contains garlic.
There are two jars between which of the following–
(a) Lime and Gooseberry
(b) Gooseberry and Tomato
(c) Mango and Lime
(d) Tomato and Mango

Q67. Lime is in the _____ jar from left.

- (a) Fifth
- (b) Fourth
- (c) Third
- (d) First

Q68. The middle jar contains

- (a) Mango
- (b) Tomato
- (c) Gooseberry
- (d) Lime

Q69. What is an interstellar cloud of dust, hydrogen, helium and other ionized gases called?

- (a) Galaxy
- (b) Supernova
- (c) Nebula
- (d) Black Hole

Q70. Where is the mosque, Adhai din ka Jhonpra located?

- (a) Agra
- (b) Ajmer
- (c) Ahmedabad
- (d) Mt. Abu

Q71. What is the official language in Bhutan?

- (a) English
- (b) Hindi
- (c) Dzongkha
- (d) Khmer

Q72. If the mathematical operator '+' means '×', '÷' means '-', '-' means '+', and '×' means '÷', find the value of $1 \times 2 + 6 - 2 \div 7$

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

Q73. When did Sikkim become a state of India?

- (a) 1975
- (b) 1973
- (c) 1972
- (d) 1950

Q74. What does PNR stand for?

- (a) Public Number in Railway
- (b) Passenger Name Record
- (c) Passenger Number Reservation
- (d) Priority Number in Reservation

Q75. A politician distributed 285 kg of sugar among the people of a village counting 1487. Find out how much sugar does each person get.

- (a) 1.91 kg
- (b) 191 kg
- (c) 0.191 kg
- (d) 19.1 kg

Q76. A sum borrowed at 6% p.a earns an interest which is $\frac{1}{3}$ rd of its principal in x years. Find x.

- (a) $5\frac{5}{9}$
- (b) $4\frac{2}{9}$
- (c) $6\frac{3}{7}$
- (d) $5\frac{3}{4}$

Q77. +91 is the country calling code for which nation?

- (a) Canada
- (b) U.S.A
- (c) India
- (d) China

Q78. What plant has the scientific name Solanum Tuberosum?

- (a) Potato
- (b) Tomato
- (c) Pumpkin
- (d) Onion

Q79. Which signs should be interchanged if the equation below needs to be true?

$$2 \div 16 - 2 + 6 \times 1 = 0$$

- (a) $\times$ and $-$
- (b) $-$ and $+$
- (c) $-$ and $\div$
- (d) $+$ and $\times$

Q80. Who is called India's Child Surgeon?

- (a) Akrit Pran Jaswal
- (b) Tathagat Avtar Tulsi
- (c) Nischal Narayanam
- (d) Sudhma Verma

Q81. Yash sells vegetables at 40 per kg and incurs a loss of 10%. If the total loss incurred is 144, what is the weight of vegetables sold? (Rounded off)

- (a) 36 kg
- (b) 32.40 kg
- (c) 35 kg
- (d) 39.2 kg

Q82. Name the inter-governmental organization to promote international co-operation?

- (a) NATO
- (b) UN
- (c) WHO
- (d) IGO

Q83. 1.08 tonne = ? kg

- (a) 10800
- (b) 108
- (c) 1080
- (d) 1.08

Q84. Looking at a photo, Anand said, "This man is the eldest son of my father's mother-in-law". How is Anand's mother related to this man?

- (a) Mother
- (b) Daughter
- (c) Maternal Aunt
- (d) Sister

Q85. An assertion (A) and a reason (R) are given below.

Assertion (A): Leaves are green in colour.

Reason (R): Chlorophyll, a green pigment is present in leaves.

Choose the correct option.

- (a) Both A and R are true and R is the correct explanation of A
- (b) Both A and R are true, but R is not the correct explanation of A
- (c) A is true, but R is false
- (d) A is false, but R is true

Q86. What is the opposite of Dharma?

- (a) Adharma
- (b) Karma
- (c) Moksha
- (d) Maya

Q87. A statement followed by some conclusions are given below.

Statement: The price of pulses has increased steeply.

Conclusions:

I. People cannot buy pulses.

II. Pulses have become a rare commodity.

Find which of the given conclusions logically follow from the given statement.

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

Q88. Who has never been a Vice President of India?

- (a) Mohammad Hamid Ansari
- (b) A P J Abdul Kalam
- (c) Ramaswamy Venkataraman
- (d) Shankar Dayal Sharma

Q89. Solve: $1 + \tan^2 \theta = ?$

- (a) $\cos^2 \theta$
- (b) $\sec^2 \theta$
- (c) $\tan^2 \theta$
- (d) 2

Q90. If x is an even number, what is the consecutive odd number?

- (a) $x-1$
- (b) $x+1$
- (c) $x+2$
- (d) $x-2$

Q91. Select the alternative that shows a similar relationship as the given pair–

Truthful : Honest

- (a) Notwithstanding : Nevertheless
- (b) Including : Excluding
- (c) Winning : Losing
- (d) Procuring : Disposing

Q92. Four pairs of words are given. Find the odd one out.

- (a) Ear : Hearing
- (b) Tongue : Taste
- (c) Mouth : Speech
- (d) Light : Vision

Q93. If INSECT = @&*!#\$ and OR = %?, then CISTERS = _____

- (a) #@*\$!%&
- (b) #@*\$?!&
- (c) #@*\$!%&
- (d) #@*\$%!&

Q94. How many litres of water can be stored in a tank of 1m length, $\frac{1}{2}$ m breadth, and $\frac{1}{2}$ m tall?

- (a) 25,000
- (b) 250
- (c) 25
- (d) 2,500

Q95. What was recently discovered hidden under ice in Antarctica?

- (a) A massive mountain range
- (b) A lost Kingdom
- (c) A massive canyon system and lake
- (d) A huge Dinosaur Skeleton

Q96. Jane won a lottery and gets $\frac{1}{3}$ rd of the winning amount and donates Rs. 6000 which is $\frac{1}{6}$ th, find how much the lottery was worth.

- (a) 36000
- (b) 18000
- (c) 54000
- (d) 108000

Q97. Find the difference between the place value and face value of the digit 9 in the number 229301?

- (a) 9292
- (b) 8991
- (c) 0
- (d) 220

Q98. The sum of two numbers is 437 and their product is 21982. Find the numbers.

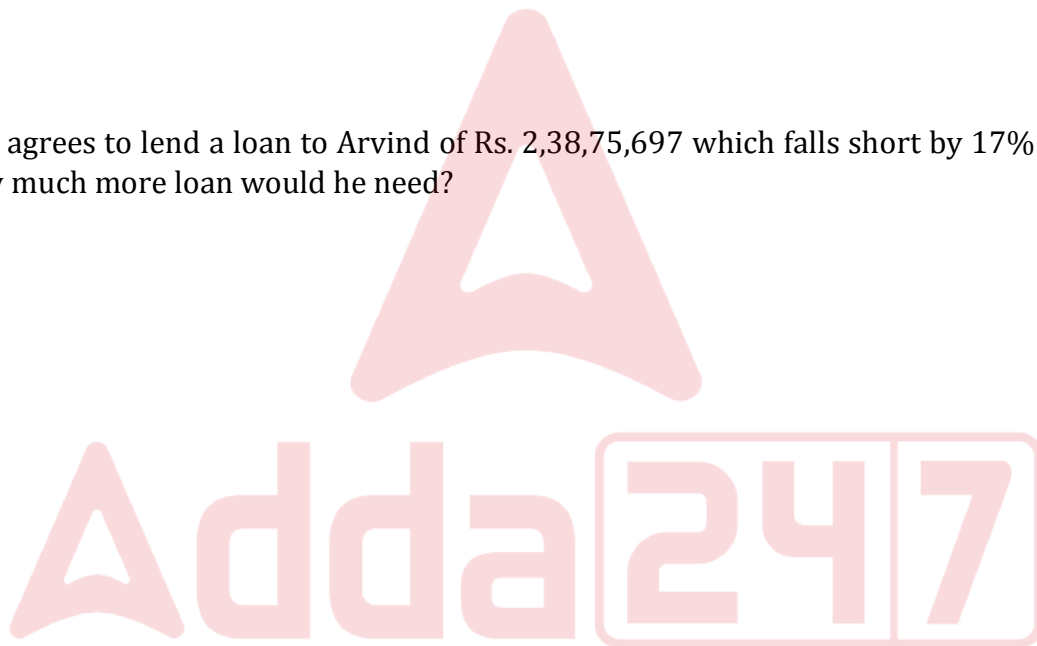
- (a) 399 and 38
- (b) 295 and 142
- (c) 58 and 379
- (d) 323 and 114

Q99. What is the gravitational force exerted on a mass called?

- (a) Stress
- (b) Inertia
- (c) Weight
- (d) Work

Q100. A bank agrees to lend a loan to Arvind of Rs. 2,38,75,697 which falls short by 17% for starting his business. How much more loan would he need?

- (a) 4890203
- (b) 4375303
- (c) 5700108
- (d) 5125533



RRB NTPC Previous Year Paper 04_(Solutions)

1. Ans.(a):

Sol. The logo is the silhouette of a lion on the prow, made entirely of cogs, symbolising manufacturing, strength and national pride.

2. Ans.(b):

Sol. Data is 0, 0, 1, 1, 2, 2, x, 3, 3, 4, 5, 7.

Here number of terms is 12 i.e. even

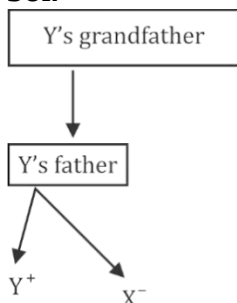
$$\therefore \text{Median} = \frac{2+x}{2} \Rightarrow 2.5 = \frac{2+x}{2} \Rightarrow x = 3$$

3. Ans.(b):

Sol. Holi is celebrated by throwing coloured powder and water on each other.

4. Ans.(b):

Sol.



5. Ans.(c):

Sol. The Hockey India League (HIL).

6. Ans.(b):

$$\begin{aligned} \text{Sol. Difference} &= (30 + 20 + 35 + 35) - (35 + 5 + 45) \\ &= 120 - 85 = 35 \end{aligned}$$

7. Ans.(c):

$$\begin{aligned} \text{Sol. Required number} &= 20 + 35 + 35 \\ &= 90 \end{aligned}$$

8. Ans.(d):

$$\text{Sol. Required number} = 35 + 5 = 40$$

9. Ans.(b):

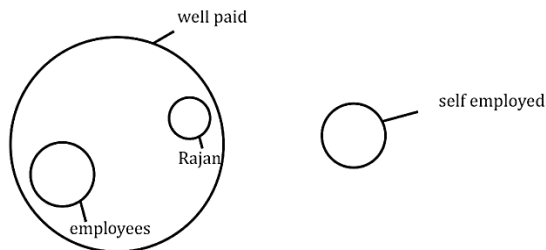
Sol. The series follows -0.5, -1.5, -2.5, -3.5, ... pattern
 $\therefore ? = 49.5 - 1.5 = 48$

10. Ans.(c):

Sol. The book *Malgudi Days* is a collection of short stories written by R.K. Narayan and published by Indian Thought Publications in India in the year 1943. Outside India the book was republished by Penguin Classics in 1982.

11. Ans.(d):

Sol.



I. X

II. X

12. Ans.(c);

13. Ans.(b):

Sol. Speed of train = $\frac{(500 + 1000)m}{60 \text{ sec}} \times \frac{18}{5}$
= 90 kmph

14. Ans.(a):

Sol. Ballistics is the field of mechanics that deals with the launching, flight, behavior, and effects of projectiles.

15. Ans.(c):

Sol. All of them are colours.

16. Ans.(a):

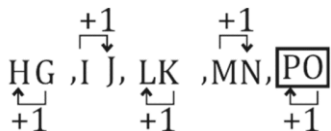
Sol. WLAN, which stands for Wireless Local Area Network, is when a mobile user connects to a local area network via a wireless connection.

17. Ans.(c):

Sol. A bicameral legislature simply refers to a particular body of government that consists of two legislative houses or chambers.

18. Ans.(b):

Sol.



19. Ans.(c):

Sol. On checking options, the combination of option (c) are not in the shop.

20. Ans.(b):

Sol. Common combustible gases include methane (natural gas), propane, butane, hydrogen. The most common combustible gas is Methane.

21. Ans.(d):

Sol. Wular Lake, One of the Largest Freshwater Lakes in India. Wular Lake, located in the state of Jammu and Kashmir, is often referred to as the largest freshwater lake in India.

22. Ans.(c):

Sol. Total s.p = 12×1454.64

Profit = 16%

$$\therefore \text{C.p} = \frac{12 \times 1454.64}{116} \times 100 = \text{Rs. } 15048$$

23. Ans.(d):

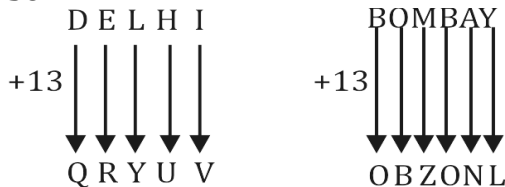
Sol. The annual fair of Rajasthan that is famous for its camel trading event is called Pushkar Mela.

24. Ans.(c):

Sol. The velocity of an object is the rate of change of its position with respect to a frame of reference and is a function of time. Velocity is equivalent to a specification of an object's speed and direction of motion.

25. Ans.(d):

Sol.



26. Ans.(d):

Sol. L $\rightarrow$ 6

O $\rightarrow$ 8

G $\rightarrow$ 3

I $\rightarrow$ 2

C $\rightarrow$ 4

A $\rightarrow$ 0

L $\rightarrow$ 6

27. Ans.(a):

Sol. Time taken by Jenny = $\frac{1}{\frac{1}{12} - \frac{1}{16}} = \frac{1}{\frac{1}{48}} = 48 \text{ days}$

28. Ans.(a):

Sol. $10^9 \times 10^2 \div 10^3$
 $= 10^{(9+2-3)} = 10^8$

29. Ans.(b):

Sol. Circumference of circle = $2 \pi r$

$$\Rightarrow 22 = 2 \times \frac{22}{7} \times r \Rightarrow r = 3.5 \text{ cm}$$

$$\therefore \text{Area of semicircle} = \frac{\pi r^2}{2} = \frac{1}{2} \times \frac{22}{7} \times 3.5 \times 3.5$$
$$= 19.25 \text{ cm}^2$$

30. Ans.(c):

Sol. Interest = $25000 \left[\left(1 + \frac{12}{100} \right)^3 - 1 \right]$
 $= 25000 \times \frac{404928}{100^3}$
 $= \text{Rs. } 10123.20$

31. Ans.(d):

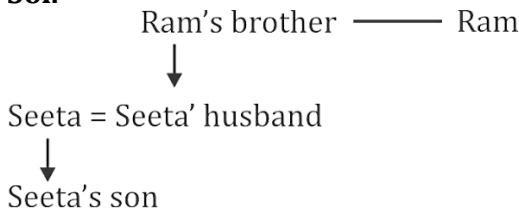
Sol. Product of two numbers = LCM $\times$ HCF

$$\Rightarrow 24 \times x = 168 \times 6$$

$$\Rightarrow x = \frac{168 \times 6}{24} = 42$$

32. Ans.(b):

Sol.



33. Ans.(a):

Sol. HCF of (78-6), (114-6) and (141-6)

i.e 72, 108 and 135 is 9.

$\therefore$ total children = 9.

34. Ans.(a):

Sol. A division of vertebrates that produce offspring that develop as embryos within the female parent and thus are born live.

35. Ans.(d):

Sol. Percentage of U = $\frac{75+80}{200} \times 100 = 77.5\%$

Percentage of V = $\frac{63+87}{200} \times 100 = 75\%$

Percentage of W = $\frac{80+70}{200} \times 100 = 75\%$

Percentage of X = $\frac{72+75}{200} \times 100 = 73.5\%$

36. Ans.(d):

Sol. Percentage of marks obtained by w=75%

37. Ans.(c):

Sol. Average percentage in History = $\frac{75+63+80+72}{4}$
 $= \frac{290}{4} = 72.5\%$

38. Ans.(d):

Sol. $x = y + 2$

$$\therefore a^{x+y} = a^6 \Rightarrow x + y = 6$$

$$\text{also, } x - y = 2 \Rightarrow y = 2$$

$$\therefore x = 4$$

39. Ans.(b):

Sol. A limerick is a humorous poem consisting of five lines. The first, second, and fifth lines must have seven to ten syllables while rhyming and having the same verbal rhythm. The third and fourth lines only have to have five to seven syllables and have to rhyme with each other and have the same rhythm.

40. Ans.(a);

41. Ans.(a):

Sol. The Andromeda Galaxy also known as Messier 31, M31, or NGC 224, is a spiral galaxy approximately 780 kiloparsecs (2.5 million light-years) from Earth, and the nearest major galaxy to the Milky Way.

42. Ans.(d):

Sol. The Dalai Lama quote is "In practice of tolerance, one's enemy is the best teacher"?

43. Ans.(a):

Sol. Shigmo or Shishirotsava is a spring festival celebrated in the Indian state of Goa, where it is one of the major festivals of the Hindu community.

44. Ans.(a):

Sol. In computers, Yosemite, Mavericks, Mountain Lion, Lion, Snow Leopard, Leopard, Tiger, Panther, Jaguar, Puma and Cheetah stand for versions of Mac OS X.

45. Ans.(c):

Sol. ENNI → NINE

NEO → ONE

EPPI → PIPE

REETH → THREE

Except pipe, rest are numbers

46. Ans.(b):

Sol. $\frac{12}{13} \times \frac{285}{96} \div \frac{171}{169}$
 $= \frac{12}{13} \times \frac{285}{96} \times \frac{169}{171} = \frac{65}{24}$

47. Ans.(c):

Sol. The Laser Interferometer Gravitational-Wave Observatory (LIGO) is detection of Gravitational waves.

48. Ans.(c):

Sol. Portuguese conquering Goa from Adil Shah of Bijapur and his Ottomon empire allies in 1510.

49. Ans.(c):

Sol. Prime Minister Nawaz Sharif appointed him head of the armed forces in October 1998. Musharraf is believed to have played a key role in the invasion of the Indian-administered portion of the disputed Kashmir region in the summer of 1999.

50. Ans.(c):

Sol. Benzene is an organic chemical compound with the chemical formula C₆H₆.

51. Ans.(b):

Sol. Oneirology is the scientific study of dreams.

52. Ans.(a):

Sol. On April 6, 1896, the first modern Olympic Games are held in Athens, Greece, with athletes from 14 countries participating.

53. Ans.(d):

Sol. Total days required to complete the book

$$= \frac{378}{14 \times 3} = 9 \text{ days}$$

$\therefore$ Extra days for which book to be renewed

$$= 2 \text{ days}$$

54. Ans.(a):

Sol. Carl Edward Sagan was an American astronomer, cosmologist, astrophysicist, astrobiologist, author, science popularizer, and science communicator in astronomy and other natural sciences. He is best known for his work as a science popularizer and communicator.

55. Ans.(b):

Sol. Earning on Monday = $12 \times 2.5 \times 12 = 360$

Earning on Friday = $12 \times 10 \times 2.5 = 300$

$$\therefore \text{Required difference} = 360 - 300 = \text{Rs.}60$$

56. Ans.(a):

$$\text{Sol. Combined mean} = \frac{12 \times 67.4 + 15 \times 72.3}{12 + 15}$$

$$= \frac{810 + 1084.5}{27} \approx 70.12$$

57. Ans.(b):

Sol. +1, -1, +1, -1 series

58. Ans.(b):

$$\text{Sol. speed in 1}^{\text{st}} \text{ case} = \frac{6}{\frac{5}{3}} = 3.6 \text{ kmph}$$

$$\text{Speed in 2}^{\text{nd}} \text{ case} = \frac{6}{\frac{4}{3}} = 4.5 \text{ kmph}$$

$$\therefore \text{Difference in speed} = 4.5 - 3.6 = 0.9 \text{ kmph}$$

59. Ans.(a):

Sol. Eric Stemme created the first Swedish electronic computer called the Binary Electronic Sequence Calculator, or BESK for short, which was completed in Stockholm in 1953.

60. Ans.(d):

$$\text{Sol. } \sin(90^\circ - \theta) = \cos \theta$$

61. Ans.(b):

Sol. Anant Pai was an Indian educationalist and a pioneer in India's famous comic series Amar Chitra Katha.

62. Ans.(b); $(x + y)^2 - (x - y)^2$
 $= (x + y + x - y) (x + y - x + y)$
 $= (2x) \times (2y) = 4xy$

63. Ans.(c):

Sol. Breadth = $\frac{42}{7} = 6$ cm

$\therefore$ Perimeter = $2(7+6) = 26$ cm

64. Ans.(d):

Sol. Let s.p of each cycle be Rs. X

$\therefore$ Total s.p = $20x$

Loss = $2x$

And c.p = $20x + 2x = 22x$

$\therefore$ Loss % = $\frac{2x}{22x} \times 100 = 9\frac{1}{11}\%$

65. Ans.(b):

Sol. Proteins are required by the body in adequate quantities.

66. Ans.(d):

Sol.



Between Tomato jar and Mango jar there are two jars.

67. Ans.(a):

Sol.

68. Ans.(c):

Sol.

69. Ans.(c):

Sol. Nebulae is an interstellar cloud of dust, hydrogen, helium and other ionized gases.

70. Ans.(b):

Sol. Adhai Din Ka Jhonpra is a large and imposing structure in the city of Ajmer in Rajasthan, India.

71. Ans.(c):

Sol. Dzongkha, or is a Sino-Tibetan language spoken by over half a million people in Bhutan; it is the sole official and national language of the Kingdom of Bhutan.

72. Ans.(b):

Sol. $1 \times 2 + 6 - 2 \div 7$

$= 1 \div 2 \times 6 + 2 - 7 = 5 - 7 = -2$

73. Ans.(a):

Sol. On May 16, 1975 Sikkim formally became the 22nd state of the Indian Republic. Simultaneously, Sikkim became part of India, whereas the rule of the Namgyal dynasty ended forever.

74. Ans.(b):

Sol. A passenger name record (PNR) is a record in the database of a computer reservation system (CRS)

75. Ans.(c):

Sol. Required amount = $\frac{285}{1487} = 0.191 \text{ kg}$

76. Ans.(a):

Sol. $S.I = \frac{P \times r \times t}{100}$

$$\Rightarrow \frac{1}{3} P = \frac{P \times 6 \times x}{100} \Rightarrow x = \frac{100}{18} = 5 \frac{5}{9}$$

77. Ans.(c):

Sol. The India country code 91 will allow you to call India from another country.

78. Ans.(a):

Sol. Solanum tuberosum - annual native to South America having underground stolons bearing edible starchy tubers; widely cultivated as a garden vegetable; vines are poisonous. white potato, white potato vine, potato.

79. Ans.(c):

Sol. By checking options, for option (c).

$$L.H.S = 2 - 16 \div 2 + 6 \times 1$$

$$= 2 - 8 + 6 = 0 = R.H.S$$

80. Ans.(a):

Sol. The name of that child is Akrit Jaswal, an Indian child surgeon who performed his first surgery at the age of seven. Akrit Pran Jaswal was born on April 23, 1993, at Nurpur, Himachal Pradesh.

81. Ans.(b):

$$\text{Sol. C.P per kg} = \frac{40}{90} \times 100 = \frac{400}{9}$$

$$\text{Loss per kg} = \frac{400}{9} - 40 = \frac{40}{9}$$

For loss of Rs. $\frac{40}{9}$, quantity sold = 1 kg

$\therefore$ for loss of Rs. 144, quantity sold

$$= \frac{9}{40} \times 144 = 32.4 \text{ kg}$$

82. Ans.(b):

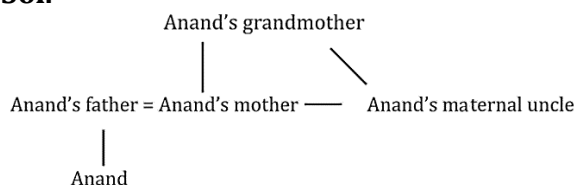
Sol. United Nation is the inter-governmental organization to promote international co-operation.

83. Ans.(c):

Sol. 1.08 tonne = $1.08 \times 1000 \text{ kg} = 1080 \text{ kg}$

84. Ans.(d):

Sol.



85. Ans.(a):

Sol.

86. Ans.(a):

Sol. Adharma is derived from combining "a" with "dharma", which literally implies "not-dharma".

87. Ans.(d):

Sol.

88. Ans.(b):

Sol. A P J Abdul Kalam has never been a Vice President of India.

89. Ans.(b):

Sol. $1 + \tan^2 \theta = \sec^2 \theta$

90. Ans.(b):

Sol.

91. Ans.(a):

Sol. Except option (a) remaining are antonyms.

92. Ans.(d):

Sol. Except option (d), others are body parts and their respective function.

93. Ans.(c):

Sol. C → #

I → @

S → *

T → \$

E → !

R → ?

S → *

94. Ans.(b):

Sol. Volume of tank = $1 \times \frac{1}{2} \times \frac{1}{2} = 0.25 \text{ m}^3$

∴ Quantity of water that tank can hold
= $0.25 \times 1000 = 250 \text{ l}$

95. Ans.(c):

Sol. Scientists have discovered three vast canyons hidden below hundreds of feet of ice in the Antarctic. What's more, the canyons could play a crucial role in the continent's shifting future.

96. Ans.(d):

Sol. Let total lottery amount be x

∴ $\frac{1}{6} \times \frac{1}{3} \times x = 6000$

⇒ x = Rs. 108000

97. Ans.(b):

Sol. Required difference = $9000 - 9 = 8991$

98. Ans.(c):

Sol. $a + b = 437$ and $ab = 21982$

On breaking 21982 in two factors and checking for their sum,
 $a = 58$ and $b = 379$.

99. Ans.(c):

Sol. The gravitational force exerted on an object near the earth's surface is called the object's weight.

100. Ans.(a):

Sol. Let total requirement for starting business be x

$\therefore 83\% \text{ of } x = 23875697$

$\Rightarrow 17\% \text{ of } x$

$= 23875697 \times \frac{17}{83}$

$= \text{Rs. } 4890203$



RRB NTPC Previous Year Paper 05

Q1. Rearrange the jumbled letters to make meaningful words and then select the one which is different.

- (a) LOWELY
- (b) IFER
- (c) THIWE
- (d) WRONB

Q2. Find the value of '?', if the mean of the Sdata set 18, 16, 22, 13, ? = 16.

- (a) 9
- (b) 11
- (c) 10
- (d) 12

Q3. Which of the following will fit in '?' place in the following series?

AN, BO, CP, DQ, ?

- (a) ES
- (b) RE
- (c) FS
- (d) ER

Q4. The planet Mars is also known as the _____.

- (a) Morning Star
- (b) Evening star
- (c) Red planet
- (d) Blue planet

Q5. What is the common name of the solution of calcium hydroxide?

- (a) Lime water
- (b) Diet soda
- (c) Salt solution
- (d) Vinegar

Q6. Nurse : Ward :: Teacher : ?

- (a) Student
- (b) Board
- (c) Class
- (d) Lesson

Q7. 'Smiling Buddha' was the code name for

- (a) The rescue and relief operations after the cloudburst in Uttarakhand in 2013.
- (b) The rescue and relief operations after an earthquake hit Nepal in 2015.
- (c) Pokhran-II nuclear test conducted by India in 1998.
- (d) Pokhran-I nuclear test conducted by India in 1974.

Direction (8-10): Consider the following information and answer questions based on it.

Six cars S, T, V, W, X and Y are parked in a parking lot, in a random order, from left to right, such that–

A. T is parked on the extreme right.

B. V is parked to the immediate right of Y and is one car away from W.

C. X is to the immediate left of T and is three cars away from S.

Q8. Which of the following statement is true?

(a) There are two cars between T and V.

(b) There is one car between X and Y.

(c) There are three cars between Y and S.

(d) There is no car between X and W.

Q9. W is to the immediate right of

(a) S

(b) Y

(c) V

(d) Cannot be determined

Q10. Which car is parked to the immediate left of X?

(a) V

(b) Y

(c) W

(d) T

Q11. Jantar Mantar in Delhi is historically important for

(a) Public meetings

(b) Hunger strikes

(c) Ancient sculptures

(d) Astronomical observatory

Q12. 'Bharat Stage Emission Standards' refers to

(a) Vehicular pollution

(b) Industrial pollution

(c) Water pollution

(d) Soil pollution

Q13. Statements followed by some conclusions are given below.

Statement:

Q1. $M > L > N$

Q2. $N = R$

Conclusions:

I. $R > L$

II. $R < M$

Find which of the given conclusions logically follows from the given statements.

(a) Only conclusion I follows.

(b) Only conclusion II follows.

(c) Both I and II follow.

(d) Neither I nor II follows.

Q14. Find the odd statement: Two lines are perpendicular to each other if they are,

(a) Adjacent sides of a rectangle.

(b) Diagonals of a rhombus.

(c) Hypotenuse and one side of a right-angle triangle.

(d) Adjacent sides of a square.

Q15. A certain number of men agreed to do a work in 20 days. 5 men did not come for work. Others completed the work in 40 days. Find the number of men who had agreed to do the work originally.

- (a) 8
- (b) 10
- (c) 12
- (d) 15

Q16. How many prime numbers are there between the positive integers 60 and 100?

- (a) 9
- (b) 6
- (c) 7
- (d) 8

Q17. A trader sells two articles for Rs 1875 each. If he gains 25% on one and losses 25% on other, then what is the value (in Rs) of the loss?

- (a) 150
- (b) 250
- (c) 400
- (d) 500

Q18. Kyoto Protocol's (an international treaty to reduce greenhouse gas emissions) first meeting was held at which country?

- (a) USA
- (b) Germany
- (c) Japan
- (d) Switzerland

Q19. Find the value of $y(y^4 - y^2 - y)$ when $y=5$.

- (a) 2900
- (b) 2975
- (c) 2925
- (d) 2995

Q20. The sum of two positive integers is 34 and their difference is 8. Find their product.

- (a) 308
- (b) 273
- (c) 209
- (d) 345

Q21. The LCM of two numbers is 66. The numbers are in the ratio 2:3. The sum of the numbers is

- (a) 60
- (b) 55
- (c) 50
- (d) 65

Q22. If P means '÷', R means '×', Q means '+' and S means '-', then $36 \text{ P } 6 \text{ Q } 7 \text{ R } 8$

$S \ 11 =$

- (a) 45
- (b) 51
- (c) 52
- (d) 62

Q23. Multitasking system specifically refers to

- (a) More than one user.
- (b) More than one process.
- (c) More than one hardware.
- (d) More than on IP address.

Q24. Union Government's School Nursery Yojana is about

- (a) Creating environmental awareness in young minds.
- (b) Streamlining admissions in nursery schools.
- (c) Bringing nursery schools under regulations.
- (d) Creating awareness about safety of children.

Q25. Ms. Chandra said that Lakshmi's husband is the only son of my grandfather. How is Ms. Chandra related to Lakshmi?

- (a) Mother
- (b) Daughter
- (c) Cousin
- (d) Niece

Q26. Chief Election Commissioner of India can be removed from the office by

- (a) Both houses of Parliament
- (b) Union council of Ministers
- (c) President of India
- (d) Chief Justice of India

Q27. $\cos^2 90^\circ + \operatorname{cosec}^2 90^\circ - \cot^2 45^\circ = ?$

- (a) 2
- (b) 0
- (c) $1/2$
- (d) $\sqrt{3/2}$

Q28. As per Census of India 2011, the population density was about

- (a) 382 people per sq.km
- (b) 353 people per sq.km
- (c) 402 people per sq.km
- (d) 428 people per sq.km

Q29. The difference between the ages of two sisters is 4 years when father's age is 54, Father is elder by 2 years to mother.

Younger sister's age is half of mother's age. Find the age of elder sister.

- (a) 26
- (b) 27
- (c) 29
- (d) 30

Q30. $2^2 - 3^3 + 4^3 - 6^2$

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

Q31. Syed Modi International Grand Prix Gold Championship is held every year at _____

- (a) Chandigarh
- (b) Lucknow
- (c) Delhi
- (d) Hyderabad

Q32. Name the first woman to head a paramilitary force.

- (a) Divya Ajith
- (b) Achana Ramasundaram
- (c) Punita Arora
- (d) Ashwini Pawar

Q33. Who was known as Badshah Khan?

- (a) Mohammed Ali Jinnah
- (b) Abul Kalam Azad
- (c) Khan Abdul Ghaffar Khan
- (d) Khan Abdul Wali Khan

Direction (34-36): The following table represents the rainfall (in mm) of five states from June to September in a year.

	June	July	August	September
JK	1100	1100	1000	1200
HP	1100	1100	1000	1300
WB	1400	1300	1200	1000
Ga	1000	1300	1500	1700
TN	1200	1050	1000	1100

Consider the information and answer questions based on it.

Q34. Which state has the lowest average rainfall?

- (a) JK
- (b) HP
- (c) WB
- (d) TN

Q35. Which state shows a gradual increase in its rainfall from June to September?

- (a) HP
- (b) WB
- (c) GA
- (d) TN

Q36. Which month received the lowest rainfall in the year?

- (a) June
- (b) July
- (c) August
- (d) September

Q37. A certain sum becomes Rs 840 in 3 years and Rs 1200 in 7 years at simple interest. What is the value (in Rs.) of principal?

- (a) 520
- (b) 570
- (c) 620
- (d) 670

Q38. During morning walk, a man covers a distance of 3 km, 4 km, 3.5 km, 5 km and 4.5 km from Monday to Friday, respectively. How much distance should he cover on two more days, so that his average per week becomes 4 km per day?

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

Q39. Find the HCF & LCM of 16, 24.

- (a) 8, 48
- (b) 4, 12
- (c) 2, 24
- (d) 4, 48

Q40. Saffron is produced in a large scale in

- (a) Himachal Pradesh
- (b) Gujarat
- (c) Jammu and Kashmir
- (d) Kerala

Q41. A man purchased a cycle for Rs. 3,000/- and agreed to pay 12% on the amount as interest. He repaid principal and interest in 12 equal monthly installments. Find the amount of each installment.

- (a) Rs. 260
- (b) Rs. 240
- (c) Rs. 280
- (d) Rs. 300

Q42. The political system in Afghanistan is known as

- (a) Islamic State of Afghanistan
- (b) Islamic Republic of Afghanistan
- (c) Islamic Emirate of Afghanistan
- (d) Islamic Government of Afghanistan

Q43. If 'are you sam' = 'ri ai ki', 'all hate you' = 'vi li ri' and 'all are fake' = 'mi ai li' then which represents 'hate'?

- (a) ri
- (b) li
- (c) vi
- (d) ai

Q44. Pointing to K, M said that she was the daughter of the only son of his grandfather. How M is related to K?

- (a) Mother
- (b) Maternal aunt
- (c) Daughter
- (d) Sister

Q45. Find the mean value of 2, 3, 3, 4, 6, 7

- (a) 4.17
- (b) 4.15
- (c) 4.13
- (d) 4.70

Q46. Who won majority of the men's singles tennis grand slam tournaments in 2015?

- (a) Andy Murray
- (b) Novak Djokovic
- (c) Roger Federer
- (d) Stanislas Wawrinka

Q47. Two cars are travelling towards each other with speeds of 45 km/hr and 63 km/hr respectively. What is the distance (in kilometres) between the two cars ten second before they collide?

- (a) 0.5
- (b) 0.2
- (c) 0.3
- (d) 0.45

Q48. If CABINET = EIACBTN, then COMPUTE = _____.

- (a) TPOMECU
- (b) TPOCMEU
- (c) PTOCMEU
- (d) CMUEOPT

Q49. The Constituent Assembly adopted Indian national flag on

- (a) 22nd July 1947
- (b) 22nd August 1947
- (c) 22nd January 1948
- (d) 22nd October 1947

Q50. When milk becomes sour, _____ is produced.

- (a) Lactose
- (b) Lactic acid
- (c) Salicylic acid
- (d) Linoleic acid

Q51. A shop keeper purchased 10 kg of rice and 20 kg of sugar at Rs. 75 and Rs. 85 per kg respectively. On selling, he gained 20% on rice and 10% on sugar. What was the total sale price?

- (a) Rs. 2,695
- (b) Rs. 2,770
- (c) Rs. 2,800
- (d) Rs. 2,750

Q52. Yellow fever is mainly transmitted among humans by

- (a) Female mosquito bite
- (b) Male mosquito bite
- (c) Water
- (d) Air

Q53. Read the given statements carefully and answer the question.

The main reasons for vehicles crawling on city roads during peak hours are increasing number of private vehicles and double parking which is a very common sight. A survey reveals that vehicles move on an average at 20 kmph during peak hours.

Which of the following is true according to the given statement?

- (a) Vehicles move at 20 kmph during 5 pm to 9 pm.
- (b) Double parking is not a violation of traffic rule in the city.
- (c) The number of private vehicles have gone up.
- (d) The number of Government vehicles remain the same.

Q54. Which of the following is in ascending order?

- (a) 0.65, 0.76, 0.67, 0.86
- (b) 0.65, 0.56, 0.67, 0.76
- (c) 0.65, 0.67, 0.76, 0.86
- (d) 0.67, 0.65, 0.76, 0.86

Q55. Which one does not belong to the group?

- (a) Zee
- (b) Screen
- (c) Colors
- (d) Sony

Q56. A path of 2.5 m width surrounds a rectangular garden of length 10 m and breadth 8 m. Area of the garden, inclusive of the path is

- (a) 130.25 sq.m
- (b) 131.25 sq.m
- (c) 195.00 sq.m
- (d) 132.50 sq.m

Q57. Find the similarity in the following:

Leopard, Tiger, Jaguar, Lion

- (a) All of them are found in India.
- (b) All of them belong to the cat family.
- (c) All of their young ones are called kittens.
- (d) There is no similarity.

Q58. The end of British rule in India came in the year

- (a) 1946
- (b) 1947
- (c) 1948
- (d) 1950

Q59. A trader bought 10 kg of tea at Rs. 400 per kg. He sold half the quantity at 20% loss and remaining at 10% profit. What was his net profit or loss in percentage?

- (a) 5% loss
- (b) 5% gain
- (c) 10% loss
- (d) 10% gain

Q60. The Victoria Falls are on the river

- (a) Niger
- (b) Congo
- (c) Zambezi
- (d) Orange

Q61. What happens in an oxidation reaction?

- (a) Protons are lost.
- (b) Electrons are lost
- (c) Neutrons are lost
- (d) Electrons are gained

Q62. Who was the first chairman of ISRO?

- (a) Kasturirangan
- (b) Vikram Sarabhai
- (c) Homi K. Bhabha
- (d) C. V. Raman

Q63. Find the odd statement out in relation to firewall

- (a) Firewall can be a software.
- (b) Firewall can be a hardware.
- (c) Firewall can be a combination of software & hardware.
- (d) Firewall protects computer from fire.

Q64. What will be the cost of leveling a circular ground of diameter 28 m, if the charger are Rs. 125 per sq.m? ($\pi = 22/7$).

- (a) Rs. 76,000
- (b) Rs. 76,400
- (c) Rs. 76,800
- (d) Rs. 77,000

Q65. The popular Yankee Stadium in USA is located at

- (a) Boston
- (b) New York
- (c) Las Vegas
- (d) Washington

Q66. $\operatorname{Cosec}(90^\circ - \theta) = ?$

- (a) $\tan \theta$
- (b) $\cot \theta$
- (c) $\sec \theta$
- (d) $\cos \theta$

Q67. An article was sold for Rs. 2100 at a profit of 25%. What is its cost price?

- (a) Rs. 1,620
- (b) Rs. 1,640
- (c) Rs. 1,660
- (d) Rs. 1,680

Q68. In a certain code, 327 means "don't cut tree", 635 means 'plant one tree', 138 means 'tree gives shade' and 4953 means 'we must plant tree'. Which digit represents 'shade'?"

- (a) 1
- (b) 4
- (c) 8
- (d) cannot be determined

Q69. Read the given statements carefully and answer the question.

Spending money should be based on logical decision and not compulsive or impulsive behavior. One should not fall prey to possible hidden agenda of the sellers who come out with 'sale', 'free offer' etc. Price is what you pay, value is what you should get.

- (a) When you pay for something, look for value.
- (b) Any discounted sale has a hidden agenda against the consumer.
- (c) People do compulsive or impulsive and not logical spending.
- (d) Sellers are cheating the public.

Q70. An electric motor converts

- (a) Mechanical energy into electrical energy.
- (b) Thermal energy into electrical energy.
- (c) Electrical energy into mechanical energy.
- (d) Radiant energy into electrical energy.

Q71. When the car takes a bend, the force that pushes us to the outside of the curve is the

- (a) Centripetal Force
- (b) Centrifugal Force
- (c) Frictional Force
- (d) Tension Force

Q72. The Prime Minister is the ex-officio President of

- (a) CLRI
- (b) CSIR
- (c) ISRO
- (d) DRDO

Q73. The name of the newest Antarctica research base commissioned in 2015 is

- (a) Dakshin Gangotri
- (b) Maitri
- (c) Bharati
- (d) Lotus

Q74. A car covers the first 30 km at a speed of 60 kmph and the next 20 km at 80 kmph. Find the average speed.

- (a) 65.67 kmph
- (b) 65.33 kmph
- (c) 66.33 kmph
- (d) 66.67 kmph

Q75. Indian sports person Gagan Narang is associated with

- (a) Archery
- (b) Air rifle shooting
- (c) Wrestling
- (d) Badminton

Q76. Which number will fit in '?' place in the following series?

12, 23, 45, 89, ?

- (a) 175
- (b) 176
- (c) 177
- (d) 178

Q77. Microsoft Corporation was founded in

- (a) 1979
- (b) 1981
- (c) 1975
- (d) 1965

Q78. If F = 6, THE = 33 then WOMAN = ?

- (a) 64
- (b) 65
- (c) 66
- (d) 67

Q79. If the mathematical operators, '×' means '+', '÷' means '×', '+' means '-', and '-' means '÷', then $22+36-12\times 6\div 4=?$

- (a) -21
- (b) 43
- (c) 68
- (d) 53

Q80. Which organ is not a gland?

- (a) Adrenal
- (b) Liver
- (c) Pituitary
- (d) Gall bladder

Q81. Who was conferred the Arjuna Award for wrestling in 2015?

- (a) Babita Kumari
- (b) Abhilasha Shashikant
- (c) Yumnarn Sanathoi Devi
- (d) M. R. Poovamma

Q82. Every set in the dotted decimal format of IP address is called

- (a) Subnet
- (b) Octet
- (c) Subset
- (d) IP set

Q83. If $x+y=19$ and $x-y=7$, then $xy = ?$

- (a) 13
- (b) 48
- (c) 78
- (d) 72

Q84. A tap can fill a tank in 20 minutes. If a leakage is capable of emptying the tank in 60 minutes, the tank will be filled in

- (a) 1 hour
- (b) 45 minutes
- (c) 30 minutes
- (d) 50 minutes

Q85. The arithmetic mean of the marks scored by students of a class is 58.20% of them secured a mean score of 60. The mean score of another 30% of the students was 40. The mean score of the remaining students is

- (a) 65
- (b) 66
- (c) 68
- (d) 70

Q86. Parliament House in Delhi was constructed during

- (a) 1895 - 1900
- (b) 1901 - 1909
- (c) 1921 - 1927
- (d) 1931 - 1935

Q87. Anaemia condition is due to

- (a) Deficiency of platelets.
- (b) Deficiency of RBC.
- (c) Deficiency of WBC.
- (d) Deficiency of oxidants.

Direction (88-90): Consider the following information and answer the questions based on it. Out of 50 kids in a colony, 10 like only basketball, 25 like only football, 10 like both volleyball and football and 5 like only volleyball.

Q88. How many kids do not like volleyball?

- (a) 15
- (b) 25
- (c) 35
- (d) 45

Q89. The ratio of kids who like football to those who like only basketball is

- (a) $5/2$
- (b) $7/2$
- (c) 4
- (d) 5

Q90. How many kids like only one sport?

- (a) 50
- (b) 40
- (c) 35
- (d) 25

Q91. Four pairs of words are given. Find the odd one out.

- (a) White : Snow
- (b) Red : Blood
- (c) Brown : Sky
- (d) Green : Grass

Q92. The recent trial run of 'odd-even' traffic scheme for Delhi was based on.

- (a) odd-even calendar months
- (b) odd-even calendar dates
- (c) vehicle registration numbers
- (d) odd-even hours during 8 am to 8 pm

Q93. Read the given statement carefully and answer the question.

Taxes on eating out have been increased. Eating out is not an act of the luxurious. Over-worked and time-pressed poor also need to eat out.

- (a) The poor enjoy the luxury of eating out.
- (b) Eating out is luxury for the poor.
- (c) Eating out is need-based for the poor also.
- (d) Tax on eating out must be reduced.

Q94. The ratio of marks obtained by a student in 3 subjects was 1:2:3. The school decided to allow grace marks of 5% for each subject. Find the student's new ratio.

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

Q95. A bus runs at 50 kmph. If the speed is increased by 10 kmph, it will cover 20 km more in the same time. Find the actual distance covered?

- (a) 100 km
- (b) 150 km
- (c) 200 km
- (d) 250 km

Q96. The Hornbill festival is celebrated in

- (a) Arunachal Pradesh
- (b) Nagaland
- (c) Odisha
- (d) West Bengal

Q97. Four pairs of words are given. Find the odd one out.

- (a) Rhombus : Four-sided polygon
- (b) Nonagon : Seven-sided polygon
- (c) Octagon : Eight-sided polygon
- (d) Hexagon : Six-sided polygon

Q98. Find the 4th proportional to 9, 17 and 27.

- (a) 57
- (b) 48
- (c) 51
- (d) 53

Q99. Union Government Budget deficit for a particular financial year represents

- (a) Total amount of revenue receipts.
- (b) Total amount of capital receipts.
- (c) The amount of money that the Government has to borrow.
- (d) Total amount of estimated Government expenditure.

100. Which aircraft carrier was formally inducted into the Indian Navy by Prime Minister Narendra Modi in the year 2014?

- (a) INS Vikrant
- (b) INS Vikramaditya
- (c) INS Viraat
- (d) INS Chakra

RRB NTPC Previous Year Paper 05_(Solutions)

1. (b);

Sol. LOWELY → YELLOW

THIWE → WHITE

WRONB → BROWN

IFER → No word formed that resembles a colour

2. (b);

Sol. ? = $16 \times 5 - (18 + 16 + 22 + 13) = 11$

3. (d);

Sol. + 1 series

4. (c);

Sol. Mars is a cold desert world. It is half the size of Earth. Mars is sometimes called the Red Planet. It's red because of rusty iron in the ground.

5. (a);

Sol. Calcium hydroxide is an inorganic compound with the chemical formula $\text{Ca}(\text{OH})_2$. It is a colorless crystal or white powder and is obtained when calcium oxide (quicklime) is mixed, or slaked with water.

6. (c);

Sol. Nurse is related to ward and teacher is related to class.

7. (d);

Sol. Smiling Buddha was the assigned code name of India's first successful nuclear bomb test on 18 May 1974.

8. (b);

Sol. S W Y V X T

9. (a);

Sol. 10. (a);

Sol.

11. (d);

Sol. Jantar Mantar is an observatory constructed by Maharaja Jai Singh of Jaipur in 1724. The essential purpose of the Jantar Mantar was to accumulate astronomical tables which in turn would help predict the time and movement of the celestial bodies such as the sun, moon and other planets.

12. (a);

Sol. The Bharat Stage emission standards are standards instituted by the government to regulate the output of air pollutants from motor vehicles from internal combustion engine equipment, including motor vehicles

13. (b);

14. (c);

15. (b);

Sol. Let there be x no. of men originally

$\therefore$ ATQ

$$x \times 20 = (x - 5) \times 40 \Rightarrow x = 10$$

16. (d);

Sol. Prime numbers between 60-100

61, 67, 71, 73, 79, 83, 89, 97, = 8

17. (b);

Sol. Clearly,

$$1.25 C_1 = 1875$$

And,

$$0.75 C_2 = 1875$$

$$\Rightarrow C_1 = 1500 \text{ and } C_2 = 2500$$

$$\text{So, } C_1 + C_2 = 4000$$

$$\text{And } S_1 + S_2 = 3750$$

$$\text{Loss} = 250$$

18. (c);

Sol. The Kyoto Protocol is an international treaty which extends the 1992 United Nations Framework Convention on Climate Change (UNFCCC) that commits State Parties to reduce greenhouse gas emissions. It was adopted in Kyoto, Japan, on December 11, 1997 and entered into force on February 16, 2005. There are currently 192 parties (Canada withdrew effective December 2012) to the Protocol.

19. (b);

Sol. $y = 5$

$$y^4 - y^2 - 4$$

$$= 5(625 - 25 - 5) = 2975$$

20. (b);

Sol. Let two positive no. be x & y

$$x + y = 34$$

$$x - y = 8$$

$$\frac{2x}{2} = \frac{42}{2}$$

$$x = 21, y = 13$$

$$x = 21, y = 13$$

$$\therefore xy = 21 \times 13 = 273$$

21. (b);

Sol. Let the two numbers be $2x$ & $3x$

$$\therefore 2 \times x \times 3 = 66 \Rightarrow x = 11$$

$$\therefore \text{two numbers} = 22 \text{ \& } 33$$

$$\text{Their sum} = 22 + 33 = 55$$

22. (b);

Sol. 3 6 P 6 Q 7 R 8 S 11

$$36 \div 6 + 7 \times 8 - 11 = 6 + 56 - 11 = 51$$

23. (b);

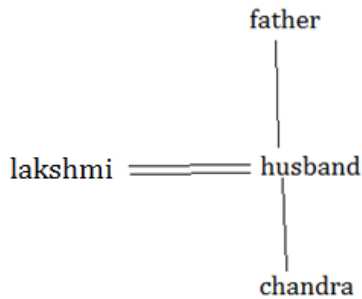
Sol. In a more general sense, multitasking refers to having multiple programs, processes, tasks, threads running at the same time.

24. (a);

Sol. Union Government has launched the School Nursery Yojana in a bid to bring school students closer to nature by involving them in raising of saplings in school nurseries.

25. (b);

Sol.



Chandra is the daughter of Lakshmi.

26. (a);

Sol. Chief Election Commissioner of India can be removed from his office by the Parliament with a two-thirds majority in both the Lok Sabha and the Rajya Sabha on the grounds of proved misbehavior or incapacity.

27. (b);

Sol. $\cos^2 90^\circ + \operatorname{cosec}^2 90^\circ - \cot^2 45^\circ$
 $= 0 + 1 - 1 = 0$

28. (a);

Sol. The population density of India has gone up to 382 persons per square kilometre in 2011 from 325 persons per square kilometre in 2001.

29. (d);

Sol. Father's age = 54
Mother's age = 52
Younger sister age = 26
Elder sister = 30

30. (d);

Sol. $2^2 - 3^3 + 4^3 - 6^2$
 $= 4 - 27 + 64 - 36 = 5$

31. (b);

Sol. This international tournament held at the Babu Banarasi Das Indoor Stadium, Lucknow, Uttar Pradesh, India.

32. (b);

Sol. Archana Ramasundaram becomes first woman to head paramilitary forces.

33. (c);

Sol. Pashtun leader and nonviolent activist Abdul Ghaffar Khan, also known as Badshah Khan or Bacha Khan.

34. (d);

Sol. TN = 4350 (lowest)
JK = 4400
HP = 4500
WB = 4900
GA = 5500

35. (c);

36. (c);

Sol. June = 5800

July = 5850

Aug = 5700 (lowest)

Sep = 6300

37. (b);

Sol. S.I for 4 years = $1200 - 840 = 360$

S.I for 3 years = 270

Principal = $840 - 270 = 570$

38. (b);

Sol. Required distance = $7 \times 4 - (3 + 4 + 3.5 + 5 + 4.5)$
= 8 km

39. (a);

Sol.

2	16,	24
2	8,	12
2	4,	6
	2,	3

LCM = $2^4 \times 3 = 48$

HCF = $2^3 = 8$

40. (c);

Sol. Saffron (*Crocus sativus*) is one of the most important foreign exchange earners crop among the spices grown entirely in the state of Jammu and Kashmir in India. Where about 49 per cent of its total produce is exported.

41. (c);

Sol. SI = $3000 \times \frac{12}{100} \times 1 = \text{Rs } 360$

$\therefore$ equal monthly installment = $\frac{3800 + 360}{12} = \text{Rs } 280$

42. (b);

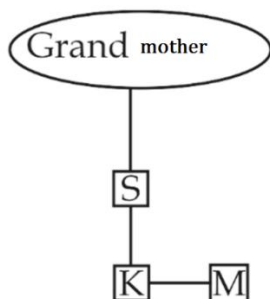
Sol. Afghanistan is an Islamic republic consisting of three branches of power (executive, legislative, and judiciary) overseen by checks and balances.

43. (c);

Sol. 'hate' = 'vi'

44. (d);

Sol.



45. (a);

Sol. $\frac{2+3+3+4+6+7}{6} = 4.17$

46. (b);

Sol. Novak Djokovic won the majority (3 of 4 grand slams) of the men's singles tennis grand slam tournaments in 2015

47. (c);

Sol. distance travelled by them in 10 sec

$$= (45 + 63) \times \frac{10}{3600}$$
$$= \frac{108}{360} = \frac{12}{40} = 0.3 \text{ km}$$

Note: This is the sum of distance travelled by them in last 10 seconds

48. (b);

Sol.

1 2 3 4 5 6 7
C A B I N E T

E I A C B T N
6 4 2 1 3 7 5
∴ 1 2 3 4 5 6 7
C O M P U T E

6 4 2 1 3 7 5
T P O C M E U

49. (a);

Sol. The National Flag was adopted in its present form during a meeting of the Constituent Assembly held on 22 July 1947.

50. (b);

Sol. Milk sours due to the action of microorganisms which convert the sugar lactose to lactic acid. Acidic substances have a sour taste and the development of a sour taste in milk is caused by the breakdown of lactose by bacteria such as lactobacilli.

51. (b);

Sol. CP = $10 \times 75 + 85 \times 20$
= Rs 750 + Rs 1700
SP = Rs $(750 \times 1.2 + 1700 \times 1.1)$
= 900 + 1870 = Rs 2770

52. (a);

Sol. The disease is caused by yellow fever virus and is spread by the bite of an infected female mosquito. It infects only humans, other primates, and several species of mosquitoes. In cities, it is spread primarily by Aedes aegypti, a type of mosquito found throughout the tropics and subtropics

53. (c);

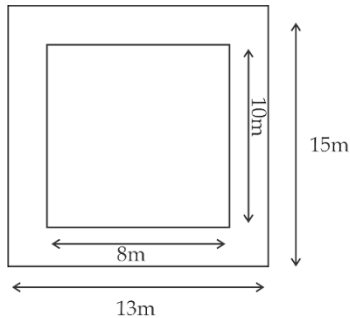
54. (c);

55. (b);

Sol. Screen is not a tv channel.

56. (c);

Sol.



$$\therefore \text{Area} = 13 \times 15 \text{ m}^2 = 195 \text{ m}^2$$

57. (b);

Sol. Leopard, Tiger, Jaguar and Lion, all of them belong to the cat family.

58. (b);

Sol. The end of British rule in India came in the year 1947 with the Independence Of India on 15th August 1947.

59. (a);

Sol. CP = Rs 4000

$$\text{SP} = \text{Rs } (400 \times 0.8 \times 5 + 400 \times 1.1 \times 5) = \text{Rs } 3800$$

$$\text{Loss\%} = \frac{200}{4000} \times 100 = 5\%$$

60. (c);

Sol. Victoria Falls, or Mosi-oa-Tunya is a waterfall in southern Africa on the Zambezi River at the border between Zambia and Zimbabwe.

61. (b);

Sol. Oxidation is the loss of electrons or an increase in oxidation state by a molecule, atom, or ion.

62. (b);

Sol. The first chairman of the ISRO was Dr. Vikram Sarabhai.

63. (d);

Sol. Firewall can be both software and hardware. Firewalls enforced can be either hardware or software, but the perfect configuration will contain both.

64. (d);

Sol. Area = πr^2

$$= \frac{22}{7} \times 14 \times 14 = 616 \text{ m}^2$$

$$\text{Cost} = 616 \times 125 = \text{Rs } 77000$$

65. (b);

Sol. Yankee Stadium is a baseball park located in Concourse, Bronx, New York City.

66. (c);

Sol.

67. (d);

$$\text{Sol. CP} = \text{Rs } \frac{2100}{1.25} = \text{Rs } 1680$$

68. (d);

69. (a);

70. (c);

Sol. A generator converts mechanical energy into electrical energy, while a motor does the opposite - it converts electrical energy into mechanical energy.

71. (b);

Sol. The force that pulls out from the center on a body in circular motion is called centrifugal force and it increases with acceleration. Centrifugal force results in strong outward pull on your vehicle.

72. (b);

Sol. Prime Minister of India is the president of the Council of Scientific and Industrial Research.

73. (c);

Sol. The newest base commissioned in 2015 is Bharati, constructed out of 134 shipping containers.

74. (d);

Sol. Average speed = $\frac{30 + 20}{\frac{1}{2} + \frac{1}{4}} = \frac{50 \times 4}{3} = 66.67 \text{ km/s}$

75. (b);

Sol. Gagan Narang is an Indian shooter, supported by the Olympic Gold Quest. He was the first Indian to qualify for the London Olympics.

76. (c);

Sol. $23 = 12 \times 2 - 1$

$45 = 23 \times 2 - 1$

$89 = 45 \times 2 - 1$

$177 = 89 \times 2 - 1$

77. (c);

Sol. Microsoft was founded by Bill Gates and Paul Allen on April 4, 1975, to develop and sell BASIC interpreters for the Altair 8800.

78. (c);

Sol. $F = 6$
T H E
 $20 + 8 + 5 = 33$

W O M A N
 $23 + 15 + 13 + 1 + 14 = 66$

79. (b);

Sol. $22 + 36 - 12 \times 6 \div 4$

↓
 $22 - 36 \div 12 + 6 \times 4$
 $= 22 - 3 + 24 = 43$

80. (d);

Sol. Among the following, Gall bladder is not a gland.

81. (a);

Sol. M.R. Poovamma and Babita Kumari have been conferred with prestigious Arjuna Award 2015 for their individual achievements in sports. M.R. Poovamma has been conferred with this award for her contributions in Athletics and Babita Kumari in the field of Wrestling.

Sol. The 32-bit IP address is grouped in four 8-bit octets, separated by dots and represented in dotted-decimal notation. Each bit in the octet has a binary weight (128, 64, 32, 16, 8, 4, 2, 1) with a minimum value of zero and a maximum value for an octet of 255.

92. (c);

Sol. The trial run of 'odd-even' traffic scheme for Delhi was based on vehicle registration numbers.

93. (c);

94. (a);

Sol. Ratio remains unchanged

95. (a);

Sol. Time is same. Let it be 't'

$$60 \times t - 50 \times t = 20$$

$$10t = 20 \Rightarrow t = 20$$

$$\therefore \text{Distance} = 50 \times 2 = 100 \text{ km}$$

96. (b);

Sol. The Hornbill Festival is a celebration held every year from 1 - 10 December, in Nagaland, Northeast India. It is also called the 'Festival of Festivals'.

97. (b);

Sol. Nonagon have nine sides.

98. (c);

$$\text{Sol. } \frac{9}{17} = \frac{27}{x} \Rightarrow x = \frac{17 \times 27}{9} = 51$$

99. (c);

Sol. Union Government Budget deficit for a particular financial year represents the amount of money that the Government has to borrow.

100. (b);

Sol. On 14 June 2014, the Prime Minister of India formally inducted INS Vikramaditya into the Indian Navy and dedicated her to the nation.

