SAMPLE PAPER

Based on Class 8 Syllabus

Time Allowed : 3 hrs

Maximum Marks : 100

Mathematics

Q1.Which of the following numbers is the additive inverse of 7/29

(a) 29/7   (b)—29/7   (c)–7/29   (d) 7/29

Answer -c

Q2.Which of the following numbers is the product of 6/13 & -- 26/3

(a) 1   (b)—4   (c)–266/133   (d) 266/133

Answer -b

Q3.What is the degree of the equation $x^2 + 2x – 3 = x^2 + 7x - 23$

(a) zero   (b) one   (c) two   (d) three

Answer -c

Q4.What is the length of the rectangle whose breadth is 10 cm & perimeter 60 cm.

(a) 15cm   (b) 16cm   (c) 20cm   (d) 25cm

Answer - c

Q5.What should be added to –3/5 to get – 7/5

(a) 4/5   (b) 1   (c) –4/5   (d) 2

Answer -c

Q6.Two numbers are in the ratio 3: 5. If their sum is 64, then the numbers are

(a) 24 & 40   (b) 15 & 24   (c) 10 & 24   (d) 20 & 24

Answer -a

Q7.The sum of the ages of three persons is 100 years. What will be the sum of their ages after 5 years?

(a) 100 yrs   (b) 115 yrs   (c) 300 yrs   (d) 305 yrs

Answer -b

Q8.The sum of three consecutive multiples of '5' is 45. Which is the smallest of the three multiples?

(a) 10   (b) 15   (c) 20   (d) 25

Answer -a

Q9.How many diagonals does a convex quadrilateral has?

(a) one   (b) two   (c) three   (d) four

Answer - b

Q10.What is the sum of all interior angles of a pentagon?

(a) 180^0 (b)360^0 (c)540^0 (d)720^0

Answer - c

Q11.What the point of intersection of the medians of a triangle called?

(a) circum centre (b) In centre   (c) centroid   (d) orthocenter

Answer -c

Q12.Which of the following is a three dimensional figure?

(a) Square   (b) Trapezium   (c) Cube   (d) Parallelogram

Answer -c

Q13.Find the number of edges of a polyhedron having 20 faces & 12 vertices?

(a) 10   (b) 20   (c) 25   (d) 30

Answer - d

Q14. If a number has '1' or '9' in the unit's place, then its square root ends in which of the following numbers.

(a) 1   (b) 4   (c) 5   (d) 6

Answer -a

Q15. There are how many non-perfect squares between 100 &121?

(a) 10   (b) 15   (c) 20   (d) 25

Answer - c

Q16.The sum of first 'n' odd natural numbers is given by

(a) 2n   (b) n^2 (c) (n + 1)   (d) $n^2 + 1$

Answer -b

Q17.Which of the following numbers is not a perfect square?

(a) 62500   (b) 57600   (c) 90000   (d) 63147

Answer -d

Q18.Which of the following numbers is a perfect cube?

(a) 343   (b) 443   (c) 543   (d) 643

Answer-a

Q19.Find which of the following represents 3: 4?

(a) 25%   (b) 40%   (c) 50%   (d) 75%

Answer -d

Q20. A man got 10% increase in his salary. If his new salary is 154000, find his original salary?

(a) Rs.160000   (b) Rs. 150000   (c) Rs.140000   (d) Rs.130000

Answer -c

Q21.What is the sum of 7xy + 5yz – 3xz & 2xy + 4yz + 2xz?

(a) 8xy +xy –xz   (b) 9xy + 9yz -- xz   (c) 9xy + 9yz + xz   (d) 9xy + 9yz + 5xz

Answer - b

Q22.What is the area of the rectangle of length 4xy & breadth 2xy?

(a) $8xy^2$ (b) $8x^2y$ (c) $4 x^3y^2z$ (d) $8 x^2y^2$

Answer -d

Q23.What is the volume of the cuboid of length 8xy, breadth 3xy& height xy?

(a) $24xy^2$ (b) $24x^2y$ (c) $24x^3y^2$ (d) $24x^3y^3$

Answer -d

Q24.What is the value of 'm 'if $(-2)^2 \times (-5)^3 = 50m$?

(a) 10   (b) - 10   (c) 100   (d)- 100

Answer -b

Q25.An electric pole, 14 metres high, casts a shadow of 10 metres. What will be the height of a tree that casts a shadow of 15 metres under similar conditions?

(a) 14 m   (b) 20 m   (c) 21 m   (d) 24 m

Answer -c

Science

Q26.The Crop which is grown in rainy season is called

(a)Rabi crop   b)Seasonal crop   (c)Monsoon crop   (d)Kharif crop

Answer - d

Q27.Diseases like polio and chicken pox are caused by a _____

(a)Bacteria   b)Fungi   (c)Virus   (d)Worm

Answer -c

Q28.Lactobacillus is commonly found in

(a)Cake   (b)Curd   (c)Bread   (d)All of the above

Answer -b

Q29.Deliberately injecting weak microbes into a healthy body and producing antibodies to fight against strong microbes is called _____

(a)Medication   (b)Antibiotics   (c)Vaccination   (d)All of the above

Answer -c

Q30.Polythene and PVC are examples of

(a)Bio degradable substance   (b)Thermosetting plastics

(c)Thermoplastics   (d)Rayon

Answer - c

Q31.Which of the following is Non-biodegradable

(a)Woollen clothes   (b)Plastic bag   (c)Cotton cloth   (d)Wood

Answer -b

Q32.The metal found in liquid state is

(a)Iron   (b)Aluminium   (c)Mercury   (d)Gold

Answer - c

Q33.When Sulphur Dioxide is dissolved in water, _____ is formed.

(a) Sulphuric acid   (b)Sulphoxy acid   (c)Sulphurous acid   (d)Sulphur trioxide

Answer -c

Q34.Naphthalene ball which is used to repel moths and insects is derived from

(a)Petroleum   (b)Sugar   (c)Coal tar   (d)LPG

Answer -c

Q35.The amount of heat energy produced on complete combustion of_____ fuel is called its calorific value.

(a)1 litre   (b)1 Kg   (c)1 milli litre   (d)1 gram

Answer -b

Q36.The part of the earth which supports life where living beings exists is called the ____

(a)Atmosphere   (b)Biosphere   (c)Biology   (d)Biodiversity

Answer –b

Q37.Species of plants and animals which are found exclusively in a particular area are called

(a)Endemic species   (b)Exotic species   (c)Local species   (d)Specific species

Answer -a

Q38.Projections of different lengths protruding out of the body of Amoeba are called

(a)Walking legs   (b)Legs   (c)Pseudopodia   (d)Needle

Answer -c

Q39.Larynx is also called the

(a)Voice box   (b)Sound box   (c)Black box   (d)All of the above

Answer - a

Q40.A ball rolling on the ground slows down and finally stops. This is because of

(a)Force   (b)Reaction   (c)Friction   (d)Resistance

Answer - c

Q41.Sound cannot travel through

(a)Vacuum   (b)Air   (c)Water   (d)Solids

Answer - a

Q42.Above _____ dB the sound becomes physically painful

(a)60   (b)40   (c)120   (d)80

Answer -d

Q43.When electrodes are immersed in water and electricity passed, the bubbles formed on the positive terminal is actually _____ gas.

(a)Hydrogen   (b)Carbon dioxide   (c)Oxygen   (d)Nitrogen

Answer -c

Q44.A coating of _____ is deposited on iron to protect it from corrosion and formation of rust.

(a)copper   (b)aluminium   (c)Zinc   (d)silver

Answer - c

Q45.A device used to test whether an object is carrying a charge or not is called _____.

(a)Electrometer   (b)Charge meter   (c)Electroscope   (d)Chargoscope

Answer -c

Q46.Seismograph is an instrument used to

(a)Record strength of wind   (b)Record vibrations of earthquake

(c)Record lightening   (d)Record temperature

Answer - b

Q47.The power of an earthquake is expressed in terms of magnitude on a scale called

(a)Righter Scale   (b)Quake scale   (c)Richter Scale   (d)Earth Scale

Answer - c

Q48.If the angle of incidence of light falling on a plane mirror is 30 degrees, what will be the angle of reflection?

(a)90 degrees   (b)60 degrees   (c)30 degrees   (d)0 degrees

Answer - c

Q49.When we stand in front of our dressing table, our left hand seems to be right and right seems to be left. This is called

(a)Left-right confusion   (b)Lateral inversion (c)Up -side down phenomenon   (d)mirage

Answer - b

Q50.To make a kaleidoscope we require

(a) Three plane mirrors (b) Four plane mirrors (c) Three glass sheets   (d) Four glass sheets

Answer - a

General Knowledge

Q 51.   Who painted the famous painting – Mona Lisa?

   (a)   Michelangelo   (b)   Dan Brown   (c)   Leonardo da Vinci   (d)   Picasso

Answer: c

Q 52.   Who is H H Munro?

   (a) An Actor   (b) A Writer   (c) A Boxer   (d) A Minister

Answer: b

Q 53.   Sherlock Holmes, the famous detective character has an equally famous address. What is it?

   (a) 32, Baker Street   (b) 221B, Oxford Street   (c) 221B, Baker Street
   (d) 142, Charring Cross

Answer : c

Q 54.   Which Indian filmmaker won an Oscar for lifetime achievement ?

   (a) Subhash Ghai   (b) Satyajit Ray   (c) Ketan Mehta   (d) Bimal Roy

Answer : b

Q 55.   What is the name of the film which was the first talkie full length film of Charlie Chaplin?

   (a) Modern Times   (b) The Kid   (c) The Great Dictator   (d) The Gold Rush

Answer : c

Q 56.   Who was the first cricket player to surpass Don Bradman`s record of Maximum Test Centuries ?

   (a) Clive Llyod   (b) Sachin Tendulkar   (c) Sunil Gavaskar   (d) Zaheer Abbas

Answer : c

Q 57.   Which sporting competition is held in a Velodrome ?

   (a) Athletics (b) Motor Cycle racing   (c) Cycling   (d) Boating

Answer : c

Q 58.   Who among the following Indians is not a Noble Prize Winner ?

(a) Har Gobind Khorana (b) Subramanyam Chandrashekar (c) Amrtya Sen
(d) Mahatma Gandhi

Answer : d

Q 59. Where is the "Space Needle" located ?

(a) Seattle (b) London (c) Singapore (d) Tokyo

Answer : a

Q 60 . In which country is Penang located ?

(a) Singapore (b) Thailand (c) Indonesia (d) Malaysia

Answer : d

Q 61. Rain forests provide which of the following products ?
(a) Cashew Nuts (b) Coffee (c) Chewing Gum (d) Both b & c

Answer : d

Q 62. Who is the author of the autobiography "Wings of Fire" ?

(a) Arvind Adiga (b) Dr APJ Abdul Kalam (c) Khushwant Singh
(d) Arundhati Roy

Answer : b

Q 63. Which is the Central Bank of India ?

(a) State Bank of India (b) Reserve Bank of India (c) Union Bank of India
(d) Indian Overseas Bank

Answer : b

Q 64. Which is the first ever Indian Film nominated for the Oscars ?

(a) Lagaan (b) Mother India (c) Mughal-e-Azam (d) Pakeezah

Answer : b

Q 65. Mani Ratnam is associated with ?

(a) Books (b) Sports (c) Politics (d) Cinema

Answer : d

Q 66. Which rainforest is know as "Lungs of our Planet"

(a) The Amazon rainforest (b) The Malaysian rainforest (c) The Asian rainforest
(d) The African rainforest

Answer : a

Q 67. Which medal did Milkha Singh win in the Olympics ?

(a) Gold (b) Silver (c) Bronze (d) No Medal

Answer : d

Q 68. Which element is used in the development of photographic films and printing of images ?

(a) Silver (b) Magnesium (c) Mercury (d) Phosphorus

Answer : a

Q 69. Where is the Satellite Launching Station located in India ?

(a) Mumbai (b) Sriharikota (c) Paradeep (d) Kochi

Answer : b

Q 70. Which country ruled Goa before its liberation ?

(a) France (b) Spain (c) England (d) Portugal

Answer : d

Q 71. What is the currency of Singapore called ?

(a) Rupee (b) Dirham (c) Yen (d) Dollar

Answer : d

Q 72. Alzheimer`s disease is a disease which affects the _____?

(a) Liver (b) Lungs (c) Brain (d) Spine

Answer : c

Q 73. What is the name of the virus that causes the AIDS disease ?

(a) HINI (b) HZNI (c) HBV (d) HIV

Answer : d

Q 74. Who discovered the famous equation $E = MC^2$ in the theory of Relativity ?

(a) Thomas Edison (b) Albert Einstein (c) Issac Newton (d) Marie Curie

Answer : b

Q 75. What is euthanasia ?

(a) Loss of Memory (b) Loss of Hearing (c) Mercy Killing (d) Loss of sleep

Answer : c

Mental Ability

Q 76. Karan is walking towards South. He walks for 15 meters and then turns towards North.   After walking 20 meters, he turns towards East and walks 10 meters.   He then turns towards South and walks 5 meters.   How far is he from his original position and in which direction ?

(a) 15M, West (b) 10M, East (c) 10M, South (d) 15M, North

Answer : b

```
        10M                                          N
      ———————>                                       ↑
  5M ↑        ↓5M                          W  ←   → E
    A×        B                                      ↓
  15M↓                                               S
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Starting Point – A, Ending Point – B,   Hence 10M towards East.

Q77. Vijay goes towards North, then turns right, then right again. He them goes to the left. In which direction is Vijay now ?

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

Answere : c – East

```
      ———>                                     N
    ↑        ↓                                 ↑
    A        ———> B                     W ←   → E
                                               ↓
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Starting Point – A, Ending Point – B

Q78. Sunita started to walk towards the south. She walked for 15 meters and turned left and walked 15 meters. She again turned to her left and walked 15 meters. How far is she from her original position and in which direction ?

(a) 15 M, South (b) 10 M, East (c) 15M, North (d) 15 M, East

Answer : d

```
        A        B                              N
        ↓        ↑                              ↑
15M     ↓        ↑15M              W ←      → E
        ↓        ↑                              ↓
        →→→→                              S
          15M
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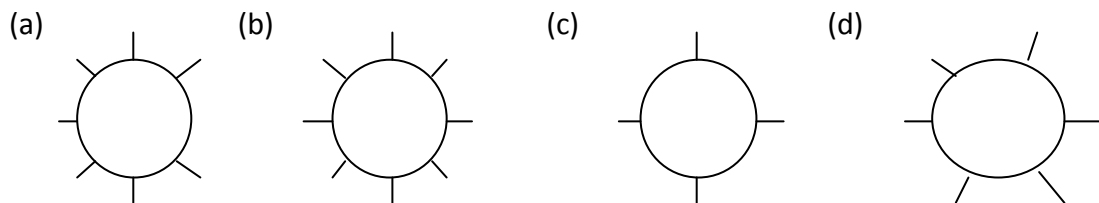
Starring Point – A, Ending Point – B
B is 15M towards East

Q79. Which figure out of the four is different from the other three ?

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

Answer : d
d has 6 lines, an even number.   All the others have odd number of lines. (a has 3, b has 5, c has 7)

Q80. Which is the odd one out.

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

Answer : a
a has odd number of lines across the circle. Others have even number of lines.

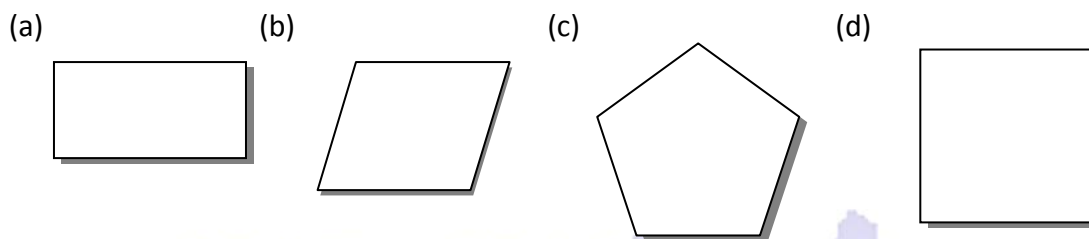Q81. Choose the odd one out.

(a) : (b) ; (c) ! (d) %

Answer : d - All the rest are punctuation marks

Q82. Choose the odd one out.

(a)
O	
+	X

(b)
	X
+	O

(c)
X	O
X	

(d)
X	O
+	

Answer : c – All have one 'X', C has 2' X'

Q83. Choose the odd one out.

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

Answer – c – All the others are made by connecting 4 lines, c has 5 lines

Identify the words in the following questions from jumbled letters based on the clues given.

Q84. The Earth is a _____.

(a) KLMCT   (b)   EANTLP   (c) TAZMK   (d)   FANTP

Answer – b – PLANET

Q85. Which Company is known for making mobile phones.

(a) NUSSNTK (b) MOTLSN (c) IOANK (d) TALFIN

Answer : c – NOKIA

Q86. An airline of India which no longer exists.

(a) AIR AANCD (b) RIA MATNZA (c) RAI DENCTR (d) RAI EDNCAC

Answer : d – AIR DECCAN

Q87. A place for higher studies.

(a) TIYRVSENUI (b) TERTANONILAIN (c) CMTRAZTFI
(d) KPTMENRTFM

Answer : a – UNIVERISTY

Q88. A stone of value used in jewellery.

(a) DRALERT (b) CMCRNOT (c) ADDIONM (d) RAMTZK

Answer : c – DIAMOND

Q89. What will be the day on 31st December, 2015 ?

(a) Monday (b) Wednesday (c) Saturday (d) Thursday

Answer : d – Thursday

Q90. If 22nd August is a Sunday, what day was 22 days before ?

(a) Sunday (b) Friday (c) Saturday (d) Monday

Answer : c – Saturday

Q91. Today is a Friday, what day will it be after 62 days.

(a) Thursday (b) Saturday (c) Friday (d) Tuesday

Answer : a – Thursday
Each day of the week is repeated after 7 days.   Hence 7 x 9 weeks = 63rd day which will be a Friday.   Therefore, 62nd day will be Thursday

Q92. What comes next in the following series –

2, 5, 9, 14, 20, ?

(a) 24 (b) 27 (c) 28 (d) 29

Answer : b – 27
The next number in the series increases by plus one of the difference (5-2 = 3, 9-5 = 4, 14-9 = 5, 20-14 = 6) Therefore 2 (+3), 5 (+4), 9 (+5), 14 (+6), 20 (+7), 27

Q93. Which is the next letter in the series given below ?

D, F, H, J, L, ?

(a) M (b) K (c) N (d) O

Answer : c – N
One letter between two successive letters has been skipped. For example, after D it is F, skipping E & so on.

Q94. What comes next ?

  ABD, DGK, HMS, MTB, SBL, ?

  (a) XKW (b) ZAB (c) ZKV (d) ZKW

Answer : d - ZKW

```
  +3     +4      +5     +6     +7
A →   D →   H →   M →  S →   Z

  +5     +6      +7     +8     +9
B →   G →   M →   T →  B →   K

  +7     +8      +9    +10    +11
D →   K →   S →  B →  L →   W
```

Q95. What is next in the following series ?

  3, 7, 23, 163, ?

  (a)   264 (b) 3751 (c) 2351 (d) 1079

Answer : b – 3751
7×3+2 = 23, 7×23+2 = 163, 23×163+2 =3751

Q96. What comes next ?

  3, 10, 19, 30, 43, 58, ?

  (a) 78 (b) 67 (c) 76 (d) 75
Answer : d – 75

```
 3      10    19    30    43    58    75
 |___| |___| |___| |___| |___| |___|
  +7     +9    +11   +13   +15   +17
```

Based on the information given below, answer the next four questions.

Information.

1. A, B, C, D, E & F are six boys in a class.
2. B & C are shorter than F but heavier than A.
3. D is heavier that B and taller than C.
4. E is shorter than D but taller than F.
5. F is heavier than D.

6. A is shorter than E but taller than F.

Q97. Who among them is the tallest ?

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

Answer : c – D is the tallest.

Q98. Who is third from the top when they are all arranged in descending order of height ?

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

Answer : a – A

The descending order of height ,based on the information given is :-

```
D            D
E            E
A     or     A
F            F
B            C
C            B
```
Therefore, A is the third from Top

Q99. Which of the following group is shorter than A ?

(a) B,C only (b) D,B,C only (c) E,B,C only (d) F,B,C only

Answer : d – F,B & C are shorter than A

Q100. Who among them is the lightest ?

(a) A (b) C (c) D (d) Data insufficient

Answer : d

The data is insufficient since no clue about E`s weight has been given.