Four options are given against each of the following questions. Select the best/correct option from among the four options and encode in the answer sheet by using **Black Ball Point** only as per example given below :

Example : The wheel in our National Flag has

(A) 20 spokes   (B) 24 spokes

(C) 30 spokes   (D) 25 spokes

Answer : (A)   ⬤   (C)   (D)

SECTION – I

1. The name 'Sea of Tranquality' is given to

   (A) Atlantic Ocean

   (B) An area in Mars

   (C) A water less area on Moon's surface

   (D) Pacific Ocean

2. Fill in the blanks with options given below :

   Currently, _____ has the largest reserves of oil, while _____ is the largest producer of oil.

   (A) Saudi Arabia, Venezuela   (B) Venezuela, Saudi Arabia

   (C) Nigeria, Russia   (D) Russia, Nigeria

3. Which of the following statements regarding the Nobel Peace Prize are correct ?

   (i) Switzerland-based International Committee of the Red Cross (ICRC) is the only 3-time recipient of the Nobel Prize.

   (ii) Jean Henry Dunant and Frederic Passy is joint recipient of first Nobel Peace Prize.

   (iii) Nadia Murad Basee Taha is an Iraqi Yazidi human rights activist received Nobel Peace Prize in the year 2014.

   (iv) Nobel Peace Prize 2019 was awarded to the Organisation for the Prohibition of Chemical Weapons. Select the correct answer from the codes given below :

   (A) (i), (ii) and (iii) only   (B) (i), (ii) and (iv) only

   (C) (ii) (iii) and (iv) only   (D) (i), (ii), (iii) and (iv) all are correct

4. Which of the following country does not hold veto power in the UN Security Council ?

(A) China

(B) France

(C) Germany

(D) Russia ✓

5. United Kingdom left the European Union on 31st January, 2020. How many members are there in the European Union currently ?

(A) 25

(B) 26

(C) 27

(D) 28

6. Who is the Padma Shree awardee from the State of Tripura recognised for exceptional work in the field of literature and education ?

(A) Shri Tanga Darlong

(B) Shri Benichandra Jamatia

(C) Sri Somdev Kishore DevVarman

(D) Dr. Rathindra Dutta

7. Who is the founder and current CEO of Amazon ?

(A) Bill Gates

(B) Larry Page

(C) Elon Musk

(D) Jeff Bezos ✓

8. Saudi Arabia opened borders for trading with which of the following countries after long hiatus of 3 decades ?

(A) Iraq

(B) Jordan

(C) Yeman

(D) Oman

1/TR/STCSPT/GS-I/TPSC/21/A-140 (4)

9. In our world, currently there are about ____ people.

   (A) 6.8 billion   (B) 7.8 billion

   (C) 8.8 billion   (D) 9.8 billion

10. Atma Nirbhar Bharat Abhiyan announced economic package of Rs. 20 lakh crores which is equivalent to how much of India's GDP ?

   (A) 5%   (B) 10%

   (C) 7%   (D) 9%

11. Prime Minister Narendra Modi on October 15th, 2020 released a commemorative coin of — denomination to mark the 75th anniversary of the Food and Agriculture Organisation.

   (A) Rs. 50   (B) Rs. 75

   (C) Rs. 100   (D) Rs. 200

12. 'DakPay' app is a digital payment app launched by

   (A) Information and Broadcast Ministry

   (B) National Payment Corporation of India

   (C) India Post

   (D) State Bank of India

13. Which of the following commercial banks topped EASE 2.0 Banking Reforms Index (March, 2018-2020) ?

   (A) Bank of Baroda   (B) Punjab National Bank

   (C) State Bank of India   (D) Canara Bank

14. In which of the following States, maximum Coast Guard Stations have been established in India ?

    (A) Maharashtra

    (B) Tamilnadu ✓

    (C) Gujarat

    (D) Andhra Pradesh

15. Which State's assembly passed a resolution to abolish the Legislative Council in January, 2020 ?

    (A) Telangana

    (B) West Bengal ✓

    (C) Andhra Pradesh

    (D) Maharashtra

16. The Raja Ampat Coral Reef is located in which country ?

    (A) India

    (B) Indonesia ✗

    (C) Maldives

    (D) Sri Lanka

17. How many times India wins the "Cricket World Cup Champion" title ?

    (A) One

    (B) Two

    (C) Three

    (D) Four ✓

18. India aims to achieve the 5 trillion dollar economy target by

    (A) 2022 A.D.

    (B) 2024 A.D. ✓

    (C) 2025 A.D.

    (D) 2026 A.D.

19. Indian Navy launched 'Operation Vanilla' in January 2020, in which of the following countries ?

    (A) Sri Lanka

    (B) Maldives ✗

    (C) Madagascar

    (D) Oman

20. Where is the "Hazur Sahib" Gurudwara, one of the five Takht of Sikhism located ?

(A) Amritsar

(B) Patna

(C) Nanded

(D) Bhatinda

21. Which company will launch Libra cryptocurrency in 2021 ?

(A) Instagram

(B) Google

(C) Microsoft

(D) Facebook

22. Which of the following is India's first Kisan Rail ?

(A) Devlali-Danapur Kisan Rail

(B) Anantpur-Adarsh Nagar Kisan Rail

(C) Yashwantpur-Ajmer Kisan Rail

(D) Bhatinda-Bhopal Kisan Rail

23. In which region Hemis Gompa is located in India ?

(A) Sikkim

(B) Ladakh

(C) Gwalior

(D) Nagpur

24. Which of the following cities has got top position among Indian cities in Global Smart City Index 2020 ?

(A) New Delhi

(B) Mumbai

(C) Hyderabad

(D) Bengaluru

25. Which of the following dances of Kerala was called by Jawaharlal Nehru as Poor man's Kathakali ?

(A) Chavittunatakom

(B) Kolkalli

(C) Ottamthullal

(D) Kootiyattam

26. Out of the given options, which is not an insert gas ?

(A) Freon

(B) Argon

(C) Neon

(D) Xenon

27. What is the chemical name of backing soda ?

(A) Potassium Chloride

(B) Potassium Carbonate

(C) Sodium Bicarbonate

(D) Sodium Chloride

28. Pasturization of milk is done at

(A) 100°F

(B) 71°F

(C) 110°F

(D) 161°F

29. 1 Nibble is equal to

(A) 8 Kilo Bytes

(B) 8 Bytes

(C) 4 Bytes

(D) 4 Bits

30. What is the pH of human blood ?

(A) 7

(B) 7·4

(C) 0·7

(D) 6·8

31. What is the device used to measure the diameters of stars ?

   (A) Inter-ferometer

   (B) Seismometer

   (C) Odometer

   (D) Pedometer

32. Who among the following has immense contribution in fibre-optic communication and is often termed as 'Father of Fibre Optics'?

   (A) Somender Singh Kapany

   (B) Fancois Mitterand

   (C) Charles Chako

   (D) Narinder Singh Kapany

33. Which of the following mirror is used by a dentist to examine a small cavity ?

   (A) Concave mirror

   (B) Plane mirror

   (C) Convex mirror

   (D) Combination of convex and concave mirror

34. Which of the following is part of National Health Mission of India ?

   (A) PMAY

   (B) PMSMA

   (C) PMGSY

   (D) PMUY

35. The instrument "Cryometer" is used to measure

   (A) Low pressure of objects

   (B) Low temperature of objects

   (C) Measuring the pH of tears of eyes

   (D) Measuring the pH of body sweat

36. The operating system "LINUX" stands for

    (A) Lovable Intellect Not Using XP

    (B) Loadable Intellect Not Using XP

    (C) Learning of UNIX

    (D) None of the above

37. To combat the problem of fake printing of passports and counterfeiting of currency notes, a security 'Bi-Fluorescent Golden Ink' with dual emissive luminescent pigment (red and green) was recently discovered by

    (A) CSIR-NCL, Pune   (B) CSIR-NPL, New Delhi

    (C) CSIR-NISTADS, New Delhi   (D) CSIR-IICT, Hyderabad

38. The prefix "Nano" comes from

    (A) A French word means billion   (B) A Spanish word means particle

    (C) A Latin word means invisible   (D) A Greek word means dwarf

39. In the ABO system, blood group 'O' is characterized by the

    (A) Presence of antigen O

    (B) Presence of both antigen A and antigen B

    (C) Presence of antigen A and absence of antigen B

    (D) Absence of both antigen A and antigen B

40. High protein diet is given to persons suffering from

    (A) Chirrhosis   (B) Gout

    (C) Tuberculosis   (D) Jaundice

41. Which of the following is not a micro-nutrient ?

   (A) Zinc
   (B) Calcium

   (C) Boron
   (D) Molyddenum

42. Nuclear energy is obtained by the chemical process

   (A) Fusion
   (B) Fission

   (C) Both of (A) and (B)
   (D) None of them

43. Melting temperature of DNA is the temperature at which

   (A) DNA melts completely
   (B) 50% of the DNA is denatured

   (C) 80% of the DNA is denatured (D) None of these

44. Which of the following substance predominantly found in urine ?

   (A) Blood proteins
   (B) Creatinine

   (C) Red Blood cells
   (D) White Blood cells

45. The Sun's mass mainly consists of

   (A) Hydrogen
   (B) Helium

   (C) Carbon dioxide
   (D) Silicon

46. Which of the following gas has highest contribution in Global Warming ?

   (A) Carbon dioxide
   (B) Chlorofluorocarbon

   (C) Nitrous oxide
   (D) Methane

47. The study of images of deities falls within a branch of art history called

    (A) Pictography

    (B) Lithography

    (C) Ichthyography

    (D) Iconography

48. 'We Think Digital' is a digital literacy program of which global technological company ?

    (A) Google

    (B) Facebook

    (C) Apple

    (D) Amazon

49. Ambulatory monitoring of ECG is called

    (A) Event Cardiography

    (B) Holter Cardiography

    (C) Implantable Cardiography

    (D) Real-Time Cardiography

50. Which vaccine is given soon after birth of an infant ?

    (A) Hepatitis B

    (B) Polio

    (C) Varicella

    (D) Measles, mumps and rubella (MMR)

51. The sum of the face value and place value of 7 in 343742 is

    (A) 693

    (B) 700

    (C) 770

    (D) 707

52. The speed of a train is X km/hr. Its speed in m/sec will be

    (A) 5X/18

    (B) 8X/15

    (C) X/18

    (D) X/15

53. In an auditorium, seats were arranged in rows and columns. The number of rows was equal to the number of seats in each row. When the number of rows was doubled and the number of seats in each row was reduced by 10, the total number of seats increased by 300. Find the number of seats in the auditorium after rearrangement.

(A) 600

(B) 900

(C) 1200

(D) 1500

54. If $1^2 + 2^2 + 3^2 + ... + 20^2 = 2870$, then $2^2 + 4^2 + 6^2 + ... + 40^2 = $?

(A) 11070

(B) 11480

(C) 12070

(D) 14035

55. Find the value of

$$\sqrt{12 + \sqrt{12 + \sqrt{12 + \sqrt{12 + ...\infty}}}} = ?$$

(A) 3

(B) 4

(C) 6

(D) 12

56. In a row 'A' is in the 11th position from the left and 'B' is in the 10th position from the right. If 'A' and 'B' interchange, then 'A' becomes 18th from the left. How many persons are there in the row other than 'A' and 'B'?

(A) 27

(B) 26

(C) 25

(D) 24
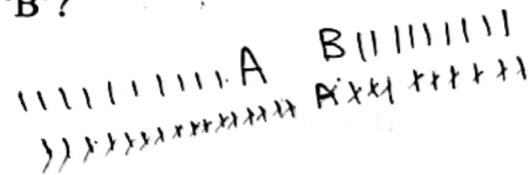
57. Excluding stoppages, the speed of a bus is 54 kmph and including stoppages, it is 45 kmph. For how many minutes does the bus stop per hour ?

(A) 9

(B) 10

(C) 12

(D) 20

1/TR/STCSPT/GS-I/TPSC/21/A-140

(13)

[Turn over

58. The difference between the interest received from the different banks on Rs. 500 for two years is Rs. 2.50 and the difference between their rates is

(A) 12%

(B) 15%

(C) 25%

(D) 27%

59. Find the number which is not lying between 1/3 and 3/4

(A) 7/16

(B) 13/24

(C) 9/32

(D) 31/48

60. If the radius of a circle is diminished by 20%, the area is diminished by

(A) 25%

(B) 30%

(C) 36%

(D) 40%

61. The difference between the simple interest and compound interest on a certain sum for 3 years at 10% per annum is Rs. 46.5. Then, which of the following is the sum ?

(A) Rs. 1,500

(B) Rs. 1,600

(C) Rs. 1,700

(D) Rs. 1,800

62. The least number to be added to 87621×87627 to become perfect square is

(A) 6

(B) 9

(C) 11

(D) 13

63. Father's age is 4 times of his son's age today. Five years hence, father will be thrice his son's age. Then their current ages be

(A) 60, 15

(B) 40, 10

(C) 20, 5

(D) 32, 8

64. The ratio of the areas of a regular hexagon and a square having the same perimeter is

(A) $2\sqrt{3}:3$

(B) $\sqrt{3}:2$

(C) $3\sqrt{3}:2$

(D) $3:2$

65. The ratio of simple interest earned by certain amount of the same rate of interest for 6 years and that of 9 years is

(A) $1:3$

(B) $1:4$

(C) $2:3$

(D) None of these

$\dfrac{P \times r \times 6}{100} : \dfrac{P \times r \times 9}{100}$

$6:9$

$2:3$

66. If the sum of 3 consecutive odd numbers is 51, the least of three is

(A) 9

(B) 15

(C) 17

(D) 21

$\begin{array}{r} 17 \\ +19 \\ +15 \\ \hline 51 \end{array}$

67. 380 mangoes are distributed among some boys and girls who are 85 in number. Each boy gets four mangoes and each girl gets five mangoes. the number of boys is

(A) 15

(B) 38

(C) 40

(D) 45

$\begin{array}{r} 45 \\ \times 4 \\ \hline 180 \end{array}$

$\dfrac{200}{5} = 40$

68. Which among the numbers $2\sqrt{31}$, $3\sqrt{5}$, $5\sqrt{29}$ and $4\sqrt{3}$ is least ?

(A) $5\sqrt{29}$ 5×5

(B) $3\sqrt{5}$ 2.2×3

(C) $2\sqrt{31}$

(D) $4\sqrt{3}$ 1.73×4

69. Two pipes can fill a tank in 20 minutes and 30 minutes respectively. If both pipes are opened simultaneously, then the tank will be filled in

    (A) 10 minutes

    (B) 12 minutes

    (C) 15 minutes

    (D) 25 minutes
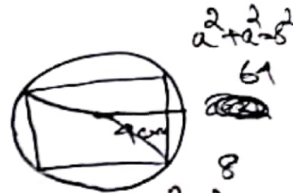
70. The area of a square inscribed in a circle of radius 4 cm is

    (A) 32 sq.cm

    (B) 18 sq.cm

    (C) 25 sq.cm

    (D) 64 sq.cm

71. Two sides of a triangle are 85 cm and 154 cm and the perimeter is 324 cm. Then the area of the triangle is

    (A) 7216 cm²

    (B) 1350 cm²

    (C) 1431 cm²

    (D) 2772 cm²

72. The greatest positive integer less than 418 and divisible by 31 is

    (A) 407

    (B) 403

    (C) 372

    (D) 341

73. The average of 4 numbers is 25 and the average of 3 of these numbers is 30. Then the 4th number is

    (A) 20

    (B) 10

    (C) 27

    (D) 22

74. If the arithmetic mean and geometric mean of two positive numbers m and n are equal, then

    (A) m = n

    (B) m > n

    (C) m = 2n

    (D) m = 4n

75. If the 20% of 30% of 40% of a number is 24, then the number is

(A) 600

(B) 1000

(C) 500

(D) 250

76. Choose one word out of the given alternatives, which can not be formed from the letters of the word 'INTERNATIONAL'.

(A) LATTER

(B) TERMINAL

(C) ORIENTAL

(D) RATIONALE

77. Select the combination of numbers, so that letters arranged accordingly will form a meaningful word

H   L   R   A   O   C   S
1   2   3   4   5   6   7

(A) 1, 2, 3, 4, 5, 6, 7

(B) 7, 6, 5, 1, 4, 2, 3

(C) 7, 6, 1, 5, 2, 4, 3

(D) 7, 6, 5, 1, 2, 4, 3

78. Which letter will be in the middle between 6th letter from the left and 13th letter from the right in the English alphabet sequence ?

(A) K

(B) L

(C) J

(D) O

79. In a certain code, 15789 is written as XTZAL and 2346 is written as NPSU. Then how 23549 is written in that code ?

(A) NPTUL

(B) PNTSL

(C) NBTSL

(D) NPTSL

80. The missing number in the sequence

2, 3, 5, 7, (?), 13, 17, is :

(A) 8

(B) 9

(C) 11

(D) 12

81. If E = 5, PEN = 35, then PAGER is equal to

(A) 47

(B) 39

(C) 58

(D) 67

82. In the following identify the correctly related word in '?' position.

Cattle : Herd :: Sheep : ?

(A) Flock

(B) Swarm

(C) Shoal

(D) Mob

83. 15 hours will be equal to

(A) 50,000 seconds

(B) 48,000 seconds

(C) 54,000 seconds

(D) 60,000 seconds

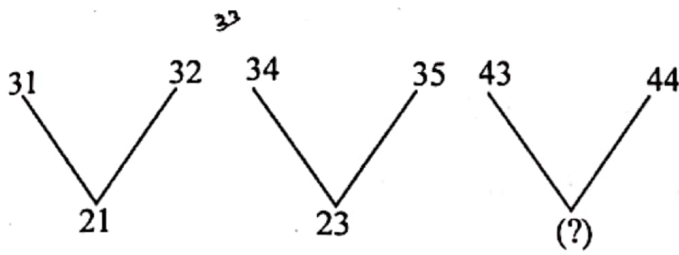84. Which of the following represent the same relationship as 'OFTEN' has with 'FOTNE'?

(A) HEART : TRAHE

(B) OPENS : SNEOP

(C) RISKY : IRSYK

(D) FIRST : IFRST

85. Find the missing number in the following figure in '?' position :

```
31      32   34        35   43        44
  \    /  \  /           \  /           \  /
   21      23              (?)
```

(A) 27

(B) 29

(C) 28

(D) 30

86. Find the missing term in the series

YEB, WFD, UHG, SKI, ?

(A) QOL

(B) QGL

(C) TOL

(D) QNL

87. If 'a' and 'b' are two non-zero numbers such that $a - b = b - a$ then

(A) $a = -b$

(B) $a = 2b$

(C) $b = 2a$

(D) $a = b$

88. Arrange the given words in a meaningful sequence and then choose the most appropriate sequence from the options

(1) Colonel   (2) Major   (3) Lieutenant General

(4) Captain   (5) Lieutenant

(A) (5), (4), (2), (1), (3)

(B) (3), (4), (5), (2), (1)

(C) (1), (2), (5), (3), (4)

(D) (5), (4), (2), (3), (1)

89. Pointing to a man in a photograph, a woman says "He is the father of my only daughter-in-law's father-in-law". How is the man related to the woman ?

(A) Father

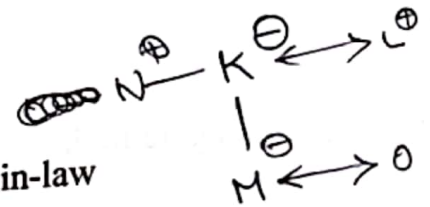(B) Brother

(C) Husband

(D) Father-in-law

90. Five persons K, L, M, N and O are sitting around dinning table. K is the mother of M, who is the wife of O. N is the brother of K and L is the husband of K. Then how is 'K' related to 'O' ?

(A) Sister

(B) Mother

(C) Mother-in-law

(D) Brother-in-law

91. If $x^2 + y^2 + z^2 = 0$ with x, y, z as real numbers, then

(A) Two numbers are negative and one is positive

(B) Two numbers are positive and one is negative

(C) All the three numbers are positive

(D) $x = y = z = 0$

92. Total number of days in the year 2024 will be

(A) 365 days

(B) 366 days

(C) 367 days

(D) 364 days

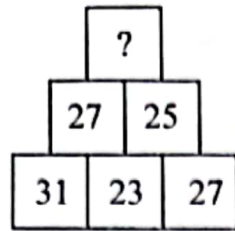93. A 'light year' is the measurement of

(A) Time

(B) Distance

(C) Temperature

(D) Intensity of light

94. Insert the missing value in '?' position in the figure

```
        +---+
        | ? |
    +---+---+
    | 27| 25|
+---+---+---+
| 31| 23| 27|
+---+---+---+
```

(handwritten: 52, 81)

(A) 26

(B) 25

(C) 27

(D) 24

95. If a bucket contains apples, oranges and bananas in the ratio $3:5:7$ and the total number of these three fruits is 45, then the total number of oranges is

(A) 30

(B) 25

(C) 15

(D) 20

(handwritten: $\frac{5}{15}$)

96. If a clock strikes once at 1 O'clock, twice of 2 O'clock etc., How many times will it strike in 24 hours?

(A) 300

(B) 156

(C) 78

(D) 136

(handwritten: $2(1+2+3+\cdots 12)$, $\frac{33}{45}$, $\frac{78}{156}$)

97. If p, q, r, s and t are positive numbers and it is given that

$p+q=r+s,$ $q+s=2t$

$s+t>p+q$ and $r+s>p+t$

then which of the following statement is true?

(A) $s>p>q>t>r$

(B) $s>q>t>p>r$

(C) $p>q>r>s>t$

(D) $p>s>q>t>r$

98. If X is to the south of Y and Z is to the East of Y, in what direction is X with respect to Z?

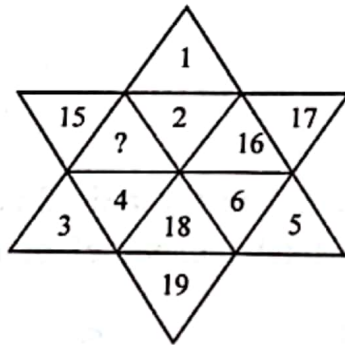   (A) North - East   (B) North - West

    (C) South - East   (D) South - West

99. Insert the missing number in '?' mark in the given figure

    (A) 13   (B) 14

    (C) 20   (D) 21

100. How many different letters are there in the word "MATHEMATICS"?

    (A) 7   (B) 8

    (C) 9   (D) 10

SECTION – II

101. Answer any *five* (5) questions out of the six questions given below. Select the correct answer and write in answer script from the options given below :   1×5=5

Example : The Independence Day in India is celebrated on

    (a)   the 15th August, every year ,

    (b)   the 26th January, every year

    (c)   the 14th August every year

    (d)   the 20th August every year

Answer : (a) the 15th August of every year.

(i)   How much amount of sulphur is permissible in Bharat Stage (BS) IV petrol and diesel ?

    (A) 40 ppm   (B) 50 ppm

    (C) 45 ppm   (D) 60 ppm

(ii) Where the National Coral Reef Research Centre is located ?

    (A) Andaman and Nicobar Islands

    (B) Kachchh

    (C) Thoothukudi (Tuticorin)

    (D) Lakshadweep

(iii) Out of the following countries which country has the highest population density ?

    (A) Barbados   (B) Malta

    (C) Bahrain   (D) Mauritius

(iv) Arrange the following gases in descending order of their Global Warming Potential (GWP) :

    (i) Sulfur Hexafluoride   (ii) Nitrous Oxide

    (iii) CFC   (iv) Methane

    (A) (i), (iii), (ii), (iv)   (B) (iv), (ii), (iii), (i)

    (C) (i), (ii), (iii), (iv)   (D) (iv), (iii), (ii), (i)

(v) Which of the following pairs is correctly matched ?

(A) Cartagena Protocol – Biosafety to the convention on Biological Diversity

(B) Ramsar Convention – Procedure for certain hazardous chemicals

(C) Vienna Convention – Wetlands

(D) Bonn Convention – Protection of ozone layer

(vi) Aerobic degradation of organic matters by bacteria releases

(A) chlorine   (B) hydrogen

(C) hydrogen sulphide   (D) carbon dioxide

Very short answer type questions :

102. Answer any *five* (5) questions out of six (6) questions (Each question carries 2 marks) :

2×5=10

(i) Mention the main objective of Montreal Protocol.

(ii) What is the full form of SEIAA and SEAC as per Environment (Protection) Rules, 1986 ?

(iii) Write full form of BOD and define it.

(iv) Why is the energy pyramid always erect ?

(v) Why does increase in atmospheric CO_2 concentration causes global warming?

(vi) Define 'Biomagnification'.

Short answer type questions :

103. Answer any *two* (2) questions out of three (3) questions. (Each question carries 5 marks) :

5×2=10

(i) Write a short note on E-waste management rules enacted in 2016.

(ii) What is biogas ? How is it produced ? What are the barriers to increase the production and use ?

(iii) Explain with examples the Mitigation and Adaption measures relating to climate change.

SECTION – III

104. Answer any *five* (5) questions out of six (6) questions (Each question carries 1 mark)
Select the correct answer and write in answer script from the options given below :

$1 \times 5 = 5$

Example : The Independence Day in India is celebrated on

    (a) the 15th August, every year ,

    (b) the 26th January, every year

    (c) the 14th August every year

    (d) the 20th August every year

Answer : (a) the 15th August of every year.

(i) State of Tripura is most vulnerable to

    (A) Flood   (B) Earthquake

    (C) Cyclone   (D) Landslide

(ii) In which year the Disaster Management Act was promulgated in India ?

    (A) 2004   (B) 2005

    (C) 2006   (D) 2007

(iii) India has a Coast line of _____ .

    (A) 6256 km   (B) 6516 km

    (C) 7516 km   (D) 7250 km

(iv) In which year the Bhopal Gas disaster occurred ?

    (A) 1984   (B) 1983

    (C) 1985   (D) 1986

(v) What is the wind speed of Super Cyclone as classified by IMD ?

    (A) >220 km/hr   (B) >250 km/hr

    (C) >200 km/hr   (D) 119-220 km/hr

(vi) Who is the Chairperson of NDMA ?

    (A) President of India   (B) Prime Minister of India

    (C) Union Home Minister   (D) Union Defence Minister

105. Answer any *five* (5) questions out of six (6) questions (Each question carries 2 marks) :
                                                                       2×5=10

(i) Define magnitude and intensity of earthquake disaster.

(ii) What are four phases of disaster management cycle ?

(iii) What is Rainwater Harvesting and Artificial Recharge to Groundwater ? Name any two types of Groundwater Recharging structures.

(iv) Name any four structural and non-structural measures of Cyclone Risk Mitigation.

(v) What is vulnerability, in connection with climate change ?

(vi) Explain Community Based Disaster Management.

106. Answer any *two* (2) questions out of three (3) questions (Each question carries 5 marks) :
                                                                       5×2=10

(i) Name the measures taken/to be taken in India to reduce the impact of Earthquake ? What is seismic (Earthquake) retrofitting and how will it be useful ?

(ii) What is Disaster Risk Reduction (DRR) and explain the Institutional Structure of Disaster Management in India.

(iii) Discuss the recent development in forecasting, warning and monitoring system during flood in India.