

Date: 03/11/2019

Max. Marks: 100

SOLUTIONS

Time allowed: 120 mins

1. Find the remainder when $x^4 - x^3 + 2x^2 - x - 1$ is divided by $x + 1$.

- (A) 2 (B) -2 (C) 4 (D) 0

Ans. (C)

Sol. $f(x) = x^4 - x^3 + 2x^2 - x - 1$

$g(x) = x + 1$

By remainder theorem,

$x + 1 = 0 \Rightarrow x = -1$

Remainder = $f(-1)$

$$= (-1)^4 - (-1)^3 + 2(-1)^2 - (-1) - 1$$

$$= 1 + 1 + 2 + 1 - 1 = 4$$

2. Number of zeros which are real numbers of the polynomial $p(x) = x^3 + 1$, is _____.

- (A) 1 (B) 0 (C) 3 (D) 2

Ans. (A)

Sol. $P(x) = x^3 + 1$

for zeros, $P(x) = 0$

$x^3 + 1 = 0$

$(x + 1)(x^2 - x + 1) = 0$

$x = -1$ and $x^2 - x + 1 = 0$

$x = -1$ and $x = \frac{-(-1) \pm \sqrt{(-1)^2 - 4 \times 1 \times 1}}{2 \times 1}$

$x = -1$ and $x = \frac{1 \pm \sqrt{-3}}{2}$ (not real roots)

So, only 1 real root.

3. The radius of hemisphere is _____ whose total surface area is 4158 cm^2 .

- (A) 7 cm (B) 21 cm (C) 3.5 cm (D) 42 cm

Ans. (B)

Sol. Total surface area of hemisphere = $3\pi r^2$

$3\pi r^2 = 4158$

$3 \times \frac{22}{7} \times r^2 = 4158$

$r^2 = \frac{4158 \times 7}{3 \times 22} = 441$

$r = 21 \text{ cm}$

4. Median of data 3, 4, -5, -3, 0, 7, 1, 5, 9 is _____.
 (A) 3 (B) -3 (C) 0 (D) 5

Ans. (A)

Sol. Arranged array: -5, -3, 0, 1, 3, 4, 5, 7, 9
 Total number of observations (n) = 9 (odd)

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

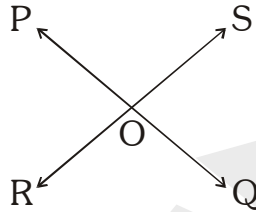
$$\left(\frac{9+1}{2}\right)^{\text{th}} \text{ term}$$

$$\left(\frac{10}{2}\right)^{\text{th}} \text{ term}$$

$$5^{\text{th}} \text{ term}$$

$$= 3$$

5. As shown in figure if $\angle PQR : \angle ROQ = 5 : 7$ then $m\angle SOQ =$ _____.
 (A) 105° (B) 75° (C) 90° (D) 110°



Ans. (NA)

Sol. Error in question

6. In the decimal expansion of a rational number $\frac{14580}{625 \times 3}$, there are _____ digits (nos) after decimal.
 (A) 2 (B) 3 (C) 4 (D) 5

Ans. (B)

Sol. Rational number $\frac{14580}{625 \times 3}$

$$\frac{4860}{5^4}$$

$$\frac{972 \times 2^3}{5^3 \times 2^3}$$

$$\frac{7776}{10^3}$$

$$7.776$$

3 digits after decimal

7. The HCF of 96 and 404 is 4 then their LCM is _____.
 (A) 16016 (B) 9616 (C) 1250 (D) 9696

Ans. (D)

Sol. $\text{HCF} \times \text{LCM} = \text{Product of Numbers}$

$$4 \times \text{LCM} = 96 \times 404$$

$$\text{LCM} = 96 \times 101$$

$$\text{LCM} = 9696$$

8. For a quadratic polynomial $-x^2 + 2x + 8$ sum of zeros is _____.
 (A) -2 (B) 2 (C) -8 (D) -4

Ans. (B)

Sol. $f(x) = -x^2 + 2x + 8$

$$\text{Sum of zeros} = \frac{-b}{a} = \frac{-2}{-1} = 2$$

9. Zeros of quadratic polynomial $p(x) = 2x^2 - 3x + (K - 1) = 0$ are inverse of each other then $K =$ _____.
 (A) 3 (B) 2 (C) $\frac{1}{2}$ (D) 1

Ans. (A)

Sol. $P(x) = 2x^2 - 3x + (K - 1)$

Let, one zero of polynomial is α , then other root will be $\frac{1}{\alpha}$.

$$\text{Product of zeros} = \frac{c}{a}$$

$$\alpha \times \frac{1}{\alpha} = \frac{K-1}{2}$$

$$K = 3$$

10. The pair of eq^{ns} $5x - 8y + 1 = 0$, $3x - \frac{24}{5}y + \frac{3}{5} = 0$ has _____.
 (A) Unique Solution (B) Infinitely many Solutions
 (C) Two solutions (D) No solution

Ans. (B)

Sol. $5x - 8y + 1 = 0$

$$3x - \frac{24}{5}y + \frac{3}{5} = 0$$

$$\frac{a_1}{a_2} = \frac{5}{3}; \frac{b_1}{b_2} = \frac{-8}{-24/5}; \frac{c_1}{c_2} = \frac{1}{3/5}$$

Here, $\frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2}$

So, Infinitely many Solutions

11. After five years the sum of ages of father and his son will 70. Then four years ago sum of their ages was _____.
 (A) 62 (B) 66 (C) 56 (D) 52

Ans. (D)

Sol. Let, Present age of father = x years

Present age of son = y years

According to question

$$x + 5 + y + 5 = 70$$

$$x + y = 60 \dots\dots\dots(i)$$

4 years ago,

$$x - 4 + y - 4 = x + y - 8$$

using equation (i) value of Sum of their ages $(x + y - 8) = 60 - 8 = 52$

12. HCF of smallest prime number and smallest composite number is _____.

- (A) 1 (B) 2 (C) 3 (D) 4

Ans. (B)

Sol. Smallest prime number = 2

Smallest composite number = 4

$$\text{HCF}(2, 4) = 2$$

13. 11th term of the A.P : $-3, -\frac{1}{2}, 2, \dots$ is _____.

- (A) 28 (B) 22 (C) -38 (D) $-48\frac{1}{2}$

Ans. (B)

Sol. The given AP = $-3, -\frac{1}{2}, 2, \dots$

First term (a) = -3

$$\text{Common difference (d)} = -\frac{1}{2} - (-3) = \frac{5}{2}$$

$$T_{11} = a + 10d$$

$$T_{11} = -3 + 10 \times \frac{5}{2} = -3 + 25 = 22$$

14. The sum of the first 1000 positive integers is _____.

- (A) 5050 (B) 50005 (C) 500500 (D) 50500

Ans. (C)

Sol. sum of first 1000 positive integers = $1 + 2 + 3 + \dots + 1000$

$$= \frac{1000}{2} [2 \times 1 + (1000 - 1) \times 1]$$

$$\text{Sum} = 500 \times 1001$$

$$= 500500$$

15. Perpendicular distance of point $(-2, -3)$ from y axis is _____.

- (A) 2 (B) 3 (C) $\sqrt{13}$ (D) 5

Ans. (A)

Sol. Perpendicular distance of a point from y axis is = |abscissa|

$$= |-2| = 2$$

16. The ratio in which the line segment joining the points A (1, -5) and B (3, 4) is divided by X axis from A, is _____.

- (A) -4 : 5 (B) 1 : 3 (C) 5 : 4 (D) -5 : 4

Ans. (C)

Sol. Let, Point P lies on x - axis and it divides line segment AB in k : 1.

So, its y - coordinates is 0

Using section formula,

$$0 \frac{4k - 5}{k - 1}$$

$$k \frac{5}{4}$$

Ratio is 5 : 4

17. A die is thrown twice. The probability that 5 will come up at least once is _____.

- (A) $\frac{1}{6}$ (B) $\frac{5}{36}$ (C) $\frac{10}{36}$ (D) $\frac{11}{36}$

Ans. (D)

Sol. Total possible outcomes are 36

Favourable outcomes are (5, 1), (5, 2), (5, 3), (5, 4), (5, 5), (5, 6), (1, 5), (2, 5), (3, 5), (4, 5), (6, 5)

Probability $\frac{11}{36}$

18. Which of the following cannot be the probability of an event?

- (A) $\frac{2}{3}$ (B) 15% (C) $\frac{3}{2}$ (D) 0.7

Ans. (C)

Sol. Probability of any event cannot be greater than 1

19. To draw "Less than" ogive we take _____ on X axis.

- (A) Cumulative frequency (B) Upper Limits
(C) Lower Limits (D) Midpoints

Ans. (B)

Sol. To draw "Less than" ogive we take **Upper Limits** on X - axis

20. $\sum_{i=1}^9 (x_i - \bar{x}) =$ _____.

- (A) $8\bar{x}$ (B) $9\bar{x}$ (C) 0 (D) 9

Ans. (C)

Sol. $\sum_{i=1}^9 x_i - \bar{x}$

$$= x_1 - \bar{x} + x_2 - \bar{x} + x_3 - \bar{x} \dots \dots x_9 - \bar{x}$$

$$x_1 \quad x_2 \quad x_3 \quad \dots \quad x_9 \quad - 9 \times \bar{x}$$

$$= 9\bar{x} - 9\bar{x}$$

$$0$$

21. The water kept in an earthen pot(matka) becomes cool during summer by which process?

- (A) Diffusion (B) Sublimation (C) Evaporation (D) Osmosis

Ans. (C)

Sol. The water kept in an earthen pot becomes cool during summer due to evaporation, that takes place through the tiny pores present in it.

22. Which of the following compound cannot be sublimed?

- (A) Sodium chloride (B) Ammonium chloride (C) Anthracene (D) Camphor

Ans. (A)

Sol. Sodium chloride cannot be sublimed, all the others are sublime substances.

23. What is the molar mass of nitric acid? (H=1, N= 14, O=16)

- (A) 31u (B) 36u (C) 47u (D) 63u

Ans. (D)

Sol. Formula of nitric acid is HNO_3 . Hence the mass becomes
 $1 + 14 + 3(16) = 63\text{u}$

24. An isotope of which element is used in the treatment of cancer?

- (A) Lead (B) Cobalt (C) Uranium (D) Iodine

Ans. (B)

Sol. Co - 60 is used in the treatment of cancer.

25. Who discovered the nucleus in the cell?

- (A) Robert Brown (B) Robert Hooke (C) Purkinje (D) Leeuwenhoek

Ans. (A)

Sol. Robert Brown discovered nucleus in the cell in 1831.

26. The Lining of kidney tubules and duct of Salivary glands are formed by which epithelium?

- (A) Squamous (B) Ciliated (C) Columnar (D) Cuboidal

Ans. (D)

Sol. Lining of kidney tubules and duct of salivary glands are formed by cuboidal epithelium.

27. Which of the following animal possesses jawless sucking mouth?

- (A) Lamprey (B) Chameleon (C) Sting ray (D) Salamander

Ans. (A)

Sol. Agnatha are jawless fish that possess suctorial mouth. Lampreys and hagfish are in this class.

28. A train starting from rest attains velocity of 72 kmh^{-1} in 5 min, then find the acceleration. (Assuming that the acceleration is uniform)

- (A) $\frac{1}{15} \text{ ms}^{-2}$ (B) $\frac{1}{10} \text{ ms}^{-2}$ (C) 5 ms^{-2} (D) 10 ms^{-2}

Ans. (A)

Sol. $u = 0$;

$$v = 72 \text{ kmh}^{-1} = 20 \text{ ms}^{-1};$$

$$t = 5 \text{ min} = 300 \text{ s}$$

$$\text{Acceleration } a = \frac{(v - u)}{t}$$

$$a = \frac{(20 - 0)}{300} \text{ ms}^{-2}$$

$$= \frac{1}{15} \text{ ms}^{-2}$$

29. Which is the unit of Force?

- (A) kg ms^{-1} (B) N.m (C) kg ms^{-2} (D) Pa

Ans. (C)

Sol. Force = mass \times acceleration

$$= (\text{kg})(\text{ms}^{-2})$$

$$= \text{kg ms}^{-2}$$

30. What is the mass of 6 kg object on the moon?

- (A) 1 kg (B) 36 kg (C) $1/6 \text{ kg}$ (D) 6 kg

Ans. (D)

Sol. Mass of an object remains constant everywhere.

- 31.** 1 kwh = _____ J.
 (A) 36×10^5 J (B) 3.6×10^5 J (C) 36×10^6 J (D) 3.6×10^4 J
Ans. (A)
Sol. 1 kwh = 3.6×10^6 J = 36×10^5 J
- 32.** Which of the following animal produce Ultrasound?
 (A) Whale (B) Dolphin (C) Elephant (D) Rhinoceroses
Ans. (B)
Sol. Dolphin produces Ultrasound.
- 33.** Which of the following is not a bacterial disease?
 (A) Anthrax (B) T.B. (C) Dengue (D) Typhoid
Ans. (C)
Sol. Dengue is a viral disease.
- 34.** Which is responsible for increase in global temperature?
 (A) Ozone layer depletion (B) Acid rain
 (C) Green house effect (D) Lightning
Ans. (C)
Sol. Increase in greenhouse gases like CO_2 and CH_4 are responsible for global warming.
- 35.** Which fish feeds in the middle zone of the pond?
 (A) Catla (B) Mrigal (C) Common carp (D) Rohu
Ans. (D)
Sol. Rohus feed in the middle-zone of the pond.
- 36.** Which of the following gases can be used for the storage of fresh samples of an oil for a long time?
 (A) Carbon dioxide or oxygen (B) Nitrogen or oxygen
 (C) Carbon dioxide or helium (D) Nitrogen or helium
Ans. (D)
Sol. Nitrogen and helium are inert gases , so they can be used to prevent rancidity.
- 37.** Which of the following are combination reactions?
 (i) $2\text{KClO}_3 \rightarrow 2\text{KCl} + 3\text{O}_2$ (ii) $\text{MgO} + \text{H}_2\text{O} \rightarrow \text{Mg}(\text{OH})_2$
 (iii) $4\text{Al} + 3\text{O}_2 \rightarrow 2\text{Al}_2\text{O}_3$ (iv) $\text{Zn} + \text{FeSO}_4 \rightarrow \text{ZnSO}_4 + \text{Fe}$
 (A) (i) and (iii) (B)(iii) and (iv) (C) (ii) and (iv) (D) (ii) and (iii)
Ans. (D)
Sol. (ii) and (iii) are combination reactions,
 (i) is a decomposition reaction , and (iv) is a displacement reaction.
- 38.** Our tooth enamel is made up of
 (A) $\text{Ca}_3(\text{PO}_4)_2$ (B) $\text{Ca}_2(\text{PO}_4)_3$ (C) $\text{Mg}(\text{OH})_2$ (D) CaPO_4
Ans. (A)
Sol. Our tooth enamel is made up of $\text{Ca}_3(\text{PO}_4)_2$
- 39.** Which acid is present in tomato?
 (A) Citric acid (B) Acetic acid (C) Oxalic acid (D) Tartaric acid
Ans. (C)
Sol. Oxalic acid is present in tomato
- 40.** What is the common name of compound CaOCl_2 ?
 (A) Quick lime (B) Bleaching powder (C) Slaked lime (D) Baking powder
Ans. (B)
Sol. Bleaching powder is the common name of compound CaOCl_2 .

41. Cinnabar is the ore of which metal?

- (A) Hg (B) Pb (C) Zn (D) Cu

Ans. (A)

Sol. Cinnabar is HgS. So, it is an ore of Hg.

42. Which is the alloy of copper and tin?

- (A) Brass (B) Steel (C) Solder (D) Bronze

Ans. (D)

Sol. Bronze is the alloy of copper and tin

43. Which of the following is an example of roasting?

- (A) $\text{ZnCO}_3 \rightarrow \text{ZnO} + \text{CO}_2$ (B) $2\text{ZnS} + 3\text{O}_2 \rightarrow 2\text{ZnO} + 2\text{SO}_2$
(C) $\text{ZnO} + \text{C} \rightarrow \text{Zn} + \text{CO}$ (D) $\text{HCl} + \text{NaOH} \rightarrow \text{NaCl} + \text{H}_2\text{O}$

Ans. (B)

Sol. Roasting is the method of heating sulphide ore in the presence of excess air to convert them into their metal oxides.

44. Which enzyme is present in pancreatic juice for digestion of proteins?

- (A) Lipase (B) Trypsin (C) Amylase (D) Ptyalin

Ans. (B)

Sol. Trypsin is a pancreatic enzyme that digests proteins.

45. During the process of photosynthesis which of the following event does not occur?

- (A) Absorption of light energy by chlorophyll.
(B) Conversion of light energy to chemical energy.
(C) Oxidation of carbon dioxide to carbohydrates.
(D) Reduction of carbon dioxide to carbohydrates.

Ans. (C)

Sol. Carbon dioxide does not get oxidized during photosynthesis but it gets reduced to carbohydrates.

46. Which of the following is carried by lymph which is digested and absorbed from intestine?

- (A) Fat (B) Protein (C) Minerals (D) Carbohydrates

Ans. (A)

Sol. Lymph transports absorbed fats.

47. In animals, control and co-ordination are provided by which tissues?

- (A) Skeletal and Muscular tissue (B) Nervous and Connective tissue
(C) Muscular and Epithelial tissue (D) Nervous and Muscular tissue

Ans. (D)

Sol. Nervous and muscular tissue helps in control and co-ordination of the body.

48. Which is the main thinking part of the brain?

- (A) Forebrain (B) Midbrain (C) Hind Brain (D) Pons

Ans. (A)

Sol. In Forebrain, Cerebrum is the part responsible for thinking.

49. Which hormone regulates metabolism for body growth?

- (A) Adrenaline (B) Thyroxine (C) Growth hormone (D) Insuline

Ans. (B)

Sol. Thyroxine hormone regulates metabolic rate of the body.

50. Find the power of a concave lens of focal length 2m?

- (A) -0.5 D (B) $+0.5\text{ D}$ (C) -4.0 D (D) $+4.0\text{ D}$

Ans. (A)

Sol. Focal length of concave lens $f = -2\text{ m}$

$$\text{Power of lens } P = \frac{1}{f}$$

$$P = \frac{1}{(-2)} = -0.5 \text{ D}$$

51. The central point of a lens is known as _____.

- (A) Centre of curvature (B) Principal focus (C) Optical centre (D) Pole

Ans. (C)

Sol. The central point of a lens is known as optical centre.

52. For a young adult with normal vision, what is the value of least distance?

- (A) 25 cm (B) 25 mm (C) 25 m (D) 50 mm

Ans. (A)

Sol. For a young adult with normal vision, the value of least distance is 25 cm.

53. The idea that the sunlight is made up of seven colours was given by?

- (A) Einstein (B) Newton (C) Tyndall (D) Dalton

Ans. (B)

Sol. The idea that the sunlight is made up of seven colours was given by Newton.

54. Calculate the number of electrons constituting one coulomb of charge.

- (A) 6.25×10^{19} (B) 1.6×10^{19} (C) 6.25×10^{20} (D) 6.25×10^{18}

Ans. (D)

Sol. 1.6×10^{-19} C is the charge on 1 electron.

Therefore, 1 C is the charge on $\frac{1}{(1.6 \times 10^{-19})}$ electrons or 6.25×10^{18} electrons.

55. If the value of resistance is doubled, the current gets _____.

- (A) halved (B) doubled (C) four times (D) remains same

Ans. (A)

Sol. According to Ohm's law,

$$V = IR$$

$$V = I_{\text{old}} R_{\text{old}} = I_{\text{new}} R_{\text{new}}$$

$$I_{\text{old}} R_{\text{old}} = I_{\text{new}} (2R_{\text{old}})$$

$$\therefore I_{\text{new}} = I_{\text{old}}/2$$

56. An electric bulb is connected to 220 v generator. The current is 500 mA. What is the power of the bulb?

- (A) 120 W (B) 100 W (C) 110 W (D) 500 W

Ans. (C)

Sol. $P = VI$

$$P = (220 \text{ V}) (500 \times 10^{-3} \text{ A})$$

$$P = 110 \text{ W}$$

57. What is the melting point of tungsten used for making bulb filaments?

- (A) 3350 °C (B) 3380 °C (C) 3550 °C (D) 3580 °C

Ans. (B)

Sol. The melting point of tungsten used for making bulb filaments is 3380 °C.

58. A solar typical cell can produce about _____ watt of electricity.

- (A) 0.4 W (B) 0.5 W (C) 0.6 W (D) 0.7 W

Ans. (D)

Sol. A solar typical cell can produce about 0.7 W of electricity.

59. In which place of Gujarat, the nuclear power reactor is situated?

- (A) Kakrapar (B) Ukai (C) Wanak bori (D) Gandhinagar

Ans. (A)

Sol. The nuclear power reactor is situated in Kakrapar, Gujarat.

60. Primary consumers form _____ trophic level.

- (A) First (B) Second (C) Third (D) Fourth

Ans. (B)

Sol. Primary consumers e.g. herbivores forms the second trophic level in the food chain.

61. Who were the first to arrive in India for trade ?

- (A) English (B) Dutch (C) Portuguese (D) Danish

Ans. (C)

62. In which treaty had the seed of World War -II been sown ?

- (A) Frankfurt Treaty
(B) Treaty of Versailles
(C) Treaty of France and Britain
(D) Treaty of Germany and Hungary

Ans. (B)

63. Where is the head quarter of 'International Court of Justice' situated ?

- (A) Washington (America) (B) Moscow (Russia)
(C) London (Britain) (D) Hague (Netherlahd)

Ans. (D)

64. Who sorted out the issue of merging the Princely States in the Union of India ?

- (A) Sardar Vallabhbhai Patel (B) Jawaharlal Nehru
(C) Mount Batten (D) Chakravarti C. Rajagopalachari

Ans. (A)

65. Where have the goals of the United Nations been explained

- (A) In the manifesto of the United Nations
(B) In the human rights of the United Nations
(C) In the constitution of United Nations' Security Council
(D) In the preamble of the United Nations' Charter

Ans. (D)

66. What is the capital of Goa ?

- (A) Puducherry (B) Mahe (C) Panaji (D) Karaikal

Ans. (C)

67. Who was the chairman of the Constituent Assembly ?

- (A) Dr. Bhimrao Ambedkar (B) Dr- Rajendra Prasad
(C) Kanaiyalal Munshi (D) Jawaharlal Nehru

Ans. (B)

68. Who chairs the joint sitting of both the houses of the parliament ? .

- (A) Chairman of Lok Sabha (Speaker) (B) Chairman of Rajyasabha
(C) Vice - President (D) Prime Minister

Ans. (A)

69. Who appoints the Chief Justice of the Supreme Court ?

- (A) Vice President (B) President (C) Prime Minister (D) Governor

Ans. (B)

70. What is India's rank in terms of area in the world?

- (A) Seventh (B) Fifth (C) Third (D) Second

Ans. (A)

- 71.** Which type of soil is mostly found in Gujarat?
 (A) Red Soil (B) Laterite Soil (C) Black Soil (D) Mountain Soil
Ans. (C)
- 72.** How many kilometers' distance is there between two successive latitudes?
 (A) 111 km (B) 120 km (C) 130 km (D) 100 km
Ans. (A)
- 73.** Where are Asiatic Lions found?
 (A) Gir (Gujarat) (B) Kanha (Madhya Pradesh)
 (C) Velavadar (Gujarat) (D) Kaziranga (Assam)
Ans. (A)
- 74.** What is the well - known dance of Tamil Nadu?
 (A) Lavni Dance (B) Kuchipudi (C) Bhangda (D) Bharat Natyam
Ans. (D)
- 75.** From where does the monsoon begin in India ?
 (A) Mumbai (B) Karnataka (C) Kerala (D) Andhra Pradesh
Ans. (C)
- 76.** Where is the Kartik Poornima Fair held ?
 (A) Modhera (B) Somnath (C) Girnar (D) Bahucharaji
Ans. (B)
- 77.** Which Gujarati poet wrote colourful and emotional Garbis of Lord Krishna's love ?
 (A) Narsinh Mehta (B) Narmad (C) Premanand (D) Dayaram
Ans. (A)
- 78.** Which ancient book of India has mentioned the value of π (Pie)?
 (A) Aryabhattiyam (B) Aryasiddhanta (C) Algebra (D) Lilawati Ganit
Ans. (A)
- 79.** Between which two rivers is Lothal situated ?
 (A) Narmada and Tapi (B) Shetrunji and Bhadar
 (C) Bhogavo and Sabarmati (D) Aji and Nari
Ans. (C)
- 80.** How many lions are there in the pillar of Sarnath ?
 (A) Two (B) Three (C) Five (D) Four
Ans. (D)
- 81.** Where is the famous ancient sun temple of Gujarat situated ?
 (A) Siddhpur (B) Modhera (C) Vadnagar (D) Patan
Ans. (B)
- 82.** Which is the most ancient book of Indian literature ?
 (A) Samveda (B) Yajurveda (C) Rigveda (D) Atharvaveda
Ans. (C)
- 83.** The ruler of which dynasty patronized Vallabhi vidhyapith ?
 (A) Maitrak Dynasty (B) Maurya Dynasty
 (C) Shrung Dynasty (D) Gupta Dynasty
Ans. (A)
- 84.** Who is known as the 'Father of Mathematics' of India ?
 (A) Acharya Nagarjun (B) Maharshi Charak (C) Aryabhatt (D) Maharshi Patanjali
Ans. (C)

- 85.** Which sculpture of Elephanta is considered as one of the best sculptures which sculpture of Elephanta is considered as one of the best sculptures in the world ?
 (A) Smiling Lord Vishnu
 (B) Trimurti (Brahma, Vishnu and Mahesh)
 (C) Goddess Durga slaying Mahisasura
 (D) Kailash Temple
Ans. (B)
- 86.** Who built the step - well of Patan ?
 (A) Queen Udaymati (B) Mayanalladevi
 (C) Siddhraj Jaysingh (D) Bhimdev-I
Ans. (A)
- 87.** Which department is responsible to look after the preservation of national monuments ?
 (A) Revenue Department (B) Police Department
 (C) Public Works Department (PWD) (D) Department of Archaeology
Ans. (D)
- 88.** About how much area is covered by black soil out of total area of India ?
 (A) 43% (B) 29% (C) 15% (D) 35%
Ans. (C)
- 89.** Which wild animal has totally extincted from Gujarat ?
 (A) Tiger (B) Bear (C) Deer (D) Panther
Ans. (A)
- 90.** In which area of Gujarat is dry farming carried out ?
 (A) North Gujarat (B) South Gujarat (C) Kutch (D) Bhal Region
Ans. (D)
- 91.** What is the name of the crop grown during summer ?
 (A) Rabi Crops (B) Zaid Crops (C) Kharif Crops (D) Horticultural Crops
Ans. (B)
- 92.** Which of the following oil seeds has the highest content of oil ?
 (A) Soyabean (B) Groundnut (C) Sesam/Til (D) Castor
Ans. (C)
- 93.** From which state of India is the maximum iron obtained ?
 (A) Karnataka (B) Orissa (C) Jharkhand (D) Chhattisgarh
Ans. (A)
- 94.** What is the average rate of population growth in India ?
 (A) 2.1 % (B) 2.3 % (C) 2.4 % (D) 1.9 %
Ans. (D)
- 95.** The price of which products are fixed by the government ?
 (A) Cotton (B) Petroleum Product (C) Edible oil (D) Tea
Ans. (B)
- 96.** Who propounded the concept of Human Development Index ?
 (A) Amartya Sen (B) Boyd Orr (C) Arun Jaitley (D) Dr.Hansaben Mehta
Ans. (A)
- 97.** How many percentages reservation provision has Gujarat government made for women in government job ?
 (A) 30% (B) 35% (C) 38 % (D) 33%
Ans. (D)

98. Who built the Red Fort of Delhi ?

- (A) Babar (B) Akbar (C) Shahjahan (D) Jahangir

Ans. (C)

99. The index of which article of the constitution includes scheduled tribes ?

- (A) Article-340 (B) Article - 342 (C) Article-330 (D) Article-335

Ans. (B)

100. Who wrote 'Sangeet Makrand'?

- (A) Pt. Narad (B) Pt. Saarang Dev (C) Pt. Ahobale (D) Taansen

Ans. (A)

ALLEN