



## 1 Who wrote the book, Desher Katha?

- (a) Sakharam Ganesh Deuskar
- (b) Rajendra Prasad
- (c) Nivaran Chandra
- (d) Murali Mohan Prasad
- (e) None of the above/More than one of the above

## **2** Who was the Editor of *Searchlight* newspaper in Bihar?

- (a) Abdul Bari (b) Lambodar Mukherjee
- (c) Murali Mohan Prasad (d) Ramananda Chatterjee
- (e) None of the above/More than one of the above

#### **3** Who formed the 'Bihar Socialist Party' in 1931?

- (a) Phulan Prasad Varma (b) Swami Yogananda
- (c) Narhari Parikh (d) Dadabhai Naoroji
- (e) None of the above/More than one of the above

#### 4 Who was the founder of the Indian National Congress?

- (a) William Adam (b) A. O. Hume
- (c) Rash Behari Bose (d) Motilal Nehru
- (e) None of the above/More than one of the above

# 5 Who said, "Swaraj is my birthright and I shall have it"?

- (a) Bipin Chandra Pal (b) Aurobindo Ghosh
- (c) Bal Gangadhar Tilak (d) Subhash Chandra Bose
- (e) None of the above/More than one of the above

## **6** Rabindranath Tagore gave up his 'Knighthood' because of:

- (a) Brutal suppression of Civil Disobedience Movement
- (b) Execution of Bhagat Singh
- (c) Jallianwala Bagh Tragedy
- (d) Chauri Chaura Incident
- (e) None of the above/More than one of the above

## **7** Who established the 'Servants of India Society'?

- (a) Lala Lajpat Rai (b) Bipin Chandra Pal
- (c) Gopal Krishna Gokhale (d) Bhagat Singh
- (e) None of the above/More than one of the above

# **8** Which revolutionaries were hanged in the 'Kakori Train Robbery Case'?

- (a) Ram Prasad Bismil and Ashfaqulla Khan
- (b) Veer Savarkar and Vasudev Chapekar
- (c) Prafulla Chandra Chaki and Khudiram Bose
- (d) Surya Sen and Udham Singh
- (e) None of the above/More than one of the above

## **9** Who wrote the book, *India for Indians*?

- (a) C. R. Das (b) M. G. Ranade
- (c) V. D. Savarkar (d) S. N. Banerjee
- (e) None of the above/More than one of the above

# 10 'Satyashodhak Samaj' was founded by:

- (a) Dayanand Saraswati
- (b) Jyotiba Phule
- (c) Gandhiji
- (d) Dr. Baba Saheb Ambedkar
- (e) None of the above/More than one of the above
- Who was the first woman President of the Indian National Congress?
  - (a) Kasturba Gandhi (b) Mrs. Annie Besant
  - (c) Sarojini Naidu (d) Bhakti Laxmi Desai
  - (e) None of the above/More than one of the above

12 Who was the first Satyagrahi of the Individual Satyagraha Movement?

- (a) Sarojini Naidu (b) C. Rajagopalachari
- (c) Vinoba Bhave (d) Subhash Chandra Bose
- (e) None of the above/More than one of the above
- **13** Who was the founder of the 'India House' in London?
  - (a) Shyamji Krishna Varma (b) Rash Behari Bose
  - (c) Ramchandra (d) Taraknath Das
  - (e) None of the above/More than one of the above

#### 14 Who led the Salt Satyagraha in Bhagalpur?

- (a) Shri Krishna Singh (b) Mahadev Lal Sarraf
- (c) Kumar Mishra (d) Satyanarayan
- (e) None of the above/More than one of the above

# 15 Who led the 'Ambari Satyagraha' in 1939 in Bihar?

- (a) Rahul Sankrityayan (b) Yadunandan Sharma
- (c) Swami Sahajanand (d) Swami Yogananda
- (e) None of the above/More than one of the above

**16** If 
$$S = \sum_{n=1}^{10} \left( n + \frac{1}{3} \right)$$
 then the value of S is:

(a) 125 (b)  $120 + \frac{1}{3}$ 

(c) 
$$135 + \frac{2}{3}$$
 (d) 130

- (e) None of the above/More than one of the above
- Two trains, each of length 150 meters, are moving in opposite directions with equal speed of 90 km per hour. The time taken by the trains to cross each other will be:
   (a) 3 seconds
   (b) 4.5 seconds
  - (c) 6 seconds (d) 9 seconds
  - (e) None of the above/More than one of the above
- 18 The number of ways in which 12 identical pens can be distributed between two students, if each student is to get at least two pens, is:
  - (a) 8 (b) 9 (c) 10 (d) 11
  - (e) None of the above/More than one of the above

- **19** If the radii of circles A and B are in the ratio 1.5:1, then the areas of the circles A and B will be in the ratio: (a) 1.5:1 (c) 2.25:1 (d) 2.5:1 (b) 2:1 (e) None of the above/More than one of the above 20 One tap can fill a water tank in 3 hours and another tap can empty it in 4 hours. If the tank is one-third full and both the taps are opened together, then the time taken to fill the tank will be: (a) 8 hours (b) 9 hours (c) 10 hours (d) 11 hours (e) None of the above/More than one of the above **21** The next term in the sequence 1, 3, 9, 15, 25, 35, 3549, ... will be: (a) 80 **(b)** 64 (c) 81 (d) 63 (e) None of the above/More than one of the above **22**) If  $x^2 - y^2 = 7$  and x - y = 1 then the length of a diagonal of a rectangle with length and width respectively x cm and y cm will be: (a) 5 cm (b) 6 cm (c) 7 cm (d) 8 cm (e) None of the above/More than one of the above 23 In a class of 80 students, 60% students play carrom, 45% play chess and 10% students neither play carrom nor chess. The number of students who play only chess is: (a) 36 **(b)** 24 (c) 12 (d) 8 (e) None of the above/More than one of the above **24** If  $x^3 - y^3 = \frac{117}{8}$  and  $x - y = \frac{3}{2}$  then the value of  $x^2 + xy$ +  $y^2$  will be: (b)  $\frac{5}{8}$  (c)  $\frac{39}{4}$  (d)  $\frac{39}{8}$ (a) 1 (e) None of the above/More than one of the above **25** If  $(5)^{x^2+2x+7} = (125)^{2x+1}$  then the value of x is: (a) 5 **(b)** 4 (c) 3 (d) 2 (e) None of the above/More than one of the above **26** The study of bones is done under the branch of science called: (b) Serology (a) Geology (d) Osteology (c) Orology (e) None of the above/More than one of the above **27** Which of the following *does not* have any enzyme in its cells? (a) Lichen (b) Virus (c) Bacteria (d) Algae (e) None of the above/More than one of the above **28** In which organ of the human body are the lymphocytes formed? (a) Liver (b) Bone marrow (c) Spleen (d) Pancreas (e) None of the above/More than one of the above **29** Which of the following hormones contains iodine? (a) Testosterone (b) Adrenaline (c) Thyroxine (d) Insulin (e) None of the above/More than one of the above **30** AIDS is caused by: (a) Helminth (b) Bacteria (c) Fungus (d) Virus
  - (e) None of the above/More than one of the above

s solved papers	
<ul> <li>The unit of pressure is:</li> <li>(a) kg/cm<sup>2</sup></li> <li>(b) kg/cm</li> <li>(c) None of the above/More</li> </ul>	than one of the above
<b>32</b> The sunlight from the sur	n to the earth reaches in:
(a) 5 minutes	(b) 6 minutes
(c) 8 minutes	(d) 10 minutes
(e) None of the above/More	than one of the above
<b>33</b> Which one of the following	ng is a scalar quantity?
(a) Force	(b) Pressure
(c) Velocity	(d) Acceleration
(e) None of the above/More	than one of the above
34 Which one of the foll	owing quantities does not
have unit?	01
(a) Stress	(b) Force
(c) Strain	(d) Pressure
(e) None of the above/More	than one of the above
<b>35</b> Sound wave in air is:	
(a) Transverse	(b) Longitudinal
(c) Electromagnetic	(d) Polarized
(e) None of the above/More	than one of the above
<b>36</b> The value of 50 °C in Fahr	enheit scale is:
(a) 104°F	<b>(b)</b> 122°F
(c) 100°F	(d) 75°F
(e) None of the above/More	
<b>37</b> What is measured in hert	
	(b) Energy
(a) Frequency (c) Heat	(d) Quality
(e) None of the above/More	
<b>38</b> Body temperature is regu	
(a) Medulla	(b) Thalamus
(c) Hypothalamus	(d) Cerebellum
(e) None of the above/More	
<b>39</b> The device to measure ele	
(a) Voltmeter	(b) Ammeter
(c) Voltameter	(d) Potentiometer
(e) None of the above/More	
<b>40</b> The unit of electric power	r is:
(a) Ampere	(b) Volt
(c) Coulomb	(d) Watt
(e) None of the above/More	
41 Who is regarded as the Fa	ther of Modern Chemistry?
(a) Rutherford	(b) Einstein
(c) Lavoisier	(d) C. V. Raman
(e) None of the above/More	than one of the above
42 The number of electrons	and neutrons in an element
are 18 and 20 respectively.	ts mass number is:
., ., .,	) 38 (d) 20
(e) None of the above/More	than one of the above
43 Which of the following gas?	is also known as laughing
(a) Nitric oxide	(b) Nitrous oxide
(c) Nitrogen pentoxide	(d) Nitrogen

(e) None of the above/More than one of the above

44 Which of the following is *not* a type of element? (a) Metals (b) Non-metals (c) Gases (d) Metalloids (e) None of the above/More than one of the above **45** The pH value of water is: (a) 4 (c) 12 **(b)** 7 (d) 18 (e) None of the above/More than one of the above **46** The main component of greenhouse gases is: (a) Carbon dioxide (b) Methane (c) Nitrous oxide (d) Ozone (e) None of the above/More than one of the above 47 Oxygen is absent in: (a) Kerosene (b) Glass (c) Soil (d) Cement (e) None of the above/More than one of the above **48** Natural rubber is a polymer of: (a) Isoprene (b) Styrene (c) Vinyl acetate (d) Propene (e) None of the above/More than one of the above **49** What is the formula of glucose? (a)  $C_6 H_{22} O_{11}$ **(b)**  $C_6 H_{10} O_5$ (c)  $C_6 H_{12} O_6$ (d)  $C_6 H_6 O_6$ (e) None of the above/More than one of the above **50** What is the bond order of CO group? (d) 3 (a) 1 (b) 2.5 (c) 3.5 (e) None of the above/More than one of the above **51** The book, The Origin of Species was written by: (a) Linnaeus (b) Lamarck (c) Mendel (d) Darwin (e) None of the above/More than one of the above **52** The interaction between algae and fungi to form lichen is called: (a) Parasitism (b) Mutualism (c) Commensalism (d) Conversion (e) None of the above/More than one of the above **53** The actual location or place where an organism lives is called: (a) Habitat (b) Ecosystem (c) Niche (d) Biome (e) None of the above/More than one of the above **54** Solar energy is converted into ATP in: (a) Mitochondria (b) Chloroplast (c) Ribosome (d) Peroxisome (e) None of the above/More than one of the above **55** The by-product of photosynthesis is: (a) CO<sub>2</sub> (c) energy **(b)**  $O_2$ (d) sugar (e) None of the above/More than one of the above 56 Who was the Chief Justice of the Patna High Court who administered the oath of office to Mr. Fagu Chauhan as the Governor of Bihar in July 2019? (a) Hon. Mukesh Shah (b) Hon. A. P. Sahi (c) Hon. Rekha Manharlal Doshit (d) Hon. Dipak Misra (e) None of the above/More than one of the above **57** What is the significance of 'Bihar Diwas' that is celebrated on March 22 every year? (a) On this day, the State Reorganization Commission

created Bihar

- (b) Bihar was carved out of United Provinces on this day in 1873
  (c) To commemorate Bihar's separation from Bengal Presidency in 1912
  (d) To celebrate naming of Bihar in 12<sup>th</sup> century by
- (a) to celebrate naming of Bihar in 12<sup>11</sup> century by Muslim rulers
- (e) None of the above/More than one of the above
- **58** Which one of the following States was *never* granted the Special Category Status (SCS) by the Central Government?
  - (a) Bihar (b) Sikkim
  - (c) Himachal Pradesh (d) Jammu and Kashmir
  - (e) None of the above/More than one of the above
- 59 Yousuf Shah Chak, the last Muslim ruler of Kashmir valley, who was exiled to Bihar by the Mughal emperor Akbar, was buried in:
  - (a) Patliputra (b) Rajgir
  - (c) Munger (d) Nalanda
  - (e) None of the above/More than one of the above
- 60 What is the tagline of Bihar State Tourism Development Corporation?
  - (a) Bright Bihar (b) Hum Sabka Bihar
  - (c) Blissful Bihar (d) Bihar is the Best
  - (e) None of the above/More than one of the above
- 61 Prime Minister Narendra Modi recently laid the foundation of Mandal Dam Project to be built on which river?
  - (a) Koshi (b) Burhi Gandak
  - (c) Phalgu (d) North Koel
  - (e) None of the above/More than one of the above
- **62** In July 2019, experts visited for the first documentation of a Megalithic site of Bihar in which of the following districts?
  - (a) Patna (b) Kaimur
  - (c) Madhubani (d) Banka
  - (e) None of the above/More than one of the above
- **63** Which country was invited by the host UAE as the 'Guest of Honour' to attend 46<sup>th</sup> Session of the Council of Foreign Ministers of the Organization of Islamic Cooperation (OIC) held in Abu Dhabi recently?
  - (a) Pakistan (b) Oman
  - (c) India (d) Turkey
  - (e) None of the above/More than one of the above
- **64** Recently, ISRO and CNES signed an agreement to set up a joint maritime surveillance system. CNES is a space agency of which country?
  - (a) Russia (b) Germany
  - (c) France (d) Canada
  - (e) None of the above/More than one of the above
- **65** What is the capital of Paraguay to which the Vice President of India paid a visit in March 2019?
  - (a) Asunción (b) Zagreb
  - (c) San José (d) Managua
  - (e) None of the above/More than one of the above
- **66** Where was the 4<sup>th</sup> Session of the UN Environment Assembly (UNEA-4) held recently?
  - (a) Paris-France (b) Ulaanbaatar--Mongolia

(c) Beijing-China (e) None of the above/Mc	<b>(d)</b> Nairobi-Kenya bre than one of the above	<b>78</b> Who is the Democratic Pre the first Hindu member of the
67 Which edition of the Inc	lian Sign Language Dictionary	Google for at least \$50 M for it
was released by the Gove		against his/her 2020 election ca (a) Ro Khanna (b)
(a) First (b) Second		(c) Raja Krishnamoorthi (d)
(e) None of the above/Mc		
	r Parrikar as the Chief Minister	(e) None of the above/More that
of Goa on his death recen	•	<b>79</b> Who is the author of the boo
(a) Sudin Dhavalikar	(b) Nilesh Cabral	(a) Arundhati Roy (b)
(c) Pramod Sawant	(d) Rohan Khaunte	(c) Vikram Seth (d)
(e) None of the above/Mo	ore than one of the above	(e) None of the above/More that
69 Who is the winner of the	ne International Gandhi Peace	80 The first showroom in Indi
Prize for 2018?		giant 'Ikea' was opened in whi
(a) Yōhei Sasakawa	(b) Akshaya Patra Foundation	(a) Bengaluru (b)
(c) Sulabh International	(d) Ekal Abhiyan Trust	(c) New Delhi (d)
(e) None of the above/Mc	re than one of the above	(e) None of the above/More that
<b>70</b> World's first camel hosp	ital is located in which city?	81) Where will the Summer C
	(c) Bikaner (d) Dubai	in 2020?
(e) None of the above/Mc		(a) Berlin (b) Paris (c) To
		(e) None of the above/More that
	of the Men's Singles of the	
2019?	n Badminton Championships,	82 UNESCO inaugurated the co
	<b>(b)</b> Lin Dan	International Year of the Per
(a) Viktor Axelsen		Elements to celebrate its comple
(c) Kento Momota	(d) Shi Yuqi	(a) 100 (b) 150 (c) 75
(e) None of the above/Mo		(e) None of the above/More that
	ions, who signed a declaration	<b>83</b> By passing "Triple Talaq Law
	on on Asian Rhinos, 2019', are	of India endorsed which year
India, Nepal, Malaysia, I		Court of India that had mad
(a) Vietnam	(b) Thailand	Biddat) as unconstitutional?
(c) Myanmar	(d) Bhutan	•
(e) None of the above/Mo	ore than one of the above	(a) 2011 (b) 2013 (c) 20 (e) None of the above/More that
<b>73</b> Who is the second fastes	t batsman to score 25 centuries	
in the test format after Si	r Don Bradman?	84 Where is the BRICS Summ
(a) Virat Kohli	<b>(b)</b> Mahela Jayawardene	held?
(c) Kane Williamson	(d) Steve Smith	(a) Brazil (b) India (c) C
(e) None of the above/Mo	ore than one of the above	(e) None of the above/More that
<b>74</b> In July 2019, the sp	acecraft Chandrayaan-2 was	<b>85</b> Who became the Editor of the
launched from which Ind		after Mukund Padmanabhan?
(a) Gujarat	(b) Andhra Pradesh	(a) N. Ram (b)
(c) Karnataka	(d) Maharashtra	(c) Suresh Nambath (d)
(e) None of the above/Mo	ore than one of the above	(e) None of the above/More that
<b>75</b> After Theresa May, wh	o amongst the following was	<b>86</b> Who is considered as the cre
<i>not</i> among the last sever	n in the contest after the first	(a) Sachchidananda Sinha
round of voting in the	Conservative Party to be the	(b) Kumar Kalika Prasad Sinha
Prime Minister of the UK	?	
(a) Boris Johnson	(b) Matthew Hancock	(c) Sir Ganesh Singh
(c) Rory Stewart	(d) Mark Harper	(d) Acharya Narendra Dev
(e) None of the above/Mc	re than one of the above	(e) None of the above/More that
<b>76</b> Where was the Minister	al Meeting of the Coordinating	<b>87</b> Who formed Bihar Provincia
	ovement (NAM) held in 2019?	(a) Swami Sahajanand Saraswa
(a) Venezuela	(b) Azerbaijan	(b) Ram Sundar Singh
(c) Serbia	(d) Ethiopia	(c) Ganga Sharan Sinha
(e) None of the above/Mc		(d) Ramanand Mishra
<b>77</b> Who was the Permane	nt Representative of India to	(e) None of the above/More that
the UN before Syed Akba		88 Dutch East India Company
(a) Hardeep Singh Puri	(b) Shashi Tharoor	Patna in which year?
(c) Asoke Kumar Mukerji		(a) 1601 (b) 1632 (c) 17
(e) None of the above/Mo	· · · ·	(e) None of the above/More the

(e) None of the above/More than one of the above

- residential candidate and e US Congress, who sued its 'discriminatory actions' campaign? b) Bobby Jindal
  - d) Tulsi Gabbard
  - han one of the above
- ok, A Gallery of Rascals?
  - o) Ruskin Bond
  - d) Toni Morrison
  - han one of the above
- dia of the retail furniture hich city in 2018?
  - ) Hyderabad
  - d) Mumbai
  - han one of the above
- Olympic Games be held
  - (d) Los Angeles Tokyo
  - han one of the above
- celebration of 2019 as the eriodic Table of Chemical letion of how many years? (d) 50 75 han one of the above
- w" recently, the Parliament r's ruling of the Supreme de Triple Talaq (Talaq-e-
  - 2015 (d) 2017
  - han one of the above
- mit, 2019 scheduled to be
  - China (d) Russia
  - han one of the above
- he newspaper, The Hindu,
  - o) Siddharth Varadarajan
  - d) Malini Parthasarathy
  - han one of the above
- eator of Modern Bihar?
  - а
  - han one of the above

## ial Kisan Sabha?

- 7ati
- han one of the above
- established its factory at
  - 1774 (d) 1651
  - (e) None of the above/More than one of the above

<b>89</b> Who established Swaraj		101 In 1930
	(b) Ramlal Shah	Civil Dise
	(d) Sachindra Nath Sanyal	(a) Wardl
(e) None of the above/Mor		(c) Sevag (e) None
<b>90</b> The name by which Ash	oka is generally referred to in	(e) None
his inscriptions is: (a) Chakravarti	(b) Priyadarshi	102 The Sar
(c) Dharmadeva	(d) Dharmakirti	(a) Chitta
(e) None of the above/Mor		(c) Rajeno
9) Who among the following		(e) None
medicine during the Gupt		103 Who wa
(a) Sushruta	(b) Saumilla	at the tim
(c) Shudraka	(d) Shaunaka	(a) J. B. K
(e) None of the above/Mor	e than one of the above	(b) Jawah
92 Which one of the follow	ving scripts of ancient India	(c) Maula
was written from right to 1		(d) C. Raj
(a) Brahmi	(b) Sharada	(e) None
(c) Kharosthi	( <b>d</b> ) Nandanagari	
(e) None of the above/Mor	e than one of the above	104 Who led
93 Which one of the follow	ving ports was in use for the	(a) Babu A
north Indian trade during		(c) Kunw
(a) Kalyan	(b) Tamralipti	(e) None
(c) Broach	(d) Cambay	105 Who led
(e) None of the above/Mor	e than one of the above	Movemen
<b>94</b> Mughal painting reached	d its zenith under:	(a) Swam
(a) Jahangir	(b) Humayun	(c) Shri K
(c) Shahjahan	(d) Akbar	(e) None
(e) None of the above/Mor	e than one of the above	106 Among
<b>95</b> In medieval India, why w	vas Mansabdari system intro-	area unde
duced?		(a) Paschi
(a) For revenue collection		(c) Kaimu
(b) Facilitating recruitment		(e) None
(c) To establish religious ha		107 The dis
<ul><li>(d) Ensuring clean adminis</li><li>(e) None of the above/Mor</li></ul>		Ganga riv
		(a) Bhaga
<b>96</b> Who established Ashta I		(c) Patna
(a) Chandragupta	(b) Ashoka	(e) None
(c) Harshavardhana	(d) Shivaji	108 Which d
(e) None of the above/Mor		of popula
<b>97</b> Which Delhi Sultan built		(a) Sheoh
(a) Firuz Shah Taghluq	(b) Iltutmish (d) Sikandar Lodi	(c) Patna
<ul><li>(c) Balban</li><li>(e) None of the above/Mor</li></ul>	(d) Sikandar Lodi	(e) None
		109 Which
<b>98</b> Who used Hooghly as a	base for piracy in the Bay of	country w
Bengal?	(b) The French	(a) New 2
<ul><li>(a) The Dutch</li><li>(c) The Portuguese</li></ul>	(b) The French (d) The British	(c) Japan
(e) None of the above/Mor		(e) None
		110 The co
achieved?	o was suppression of Thugs	(latitudin
(a) Lord Clive	(b) Captain Sleeman	(a) Russia
(c) Lord Minto	(d) Alexander Burnes	(c) China
(e) None of the above/Mor		(e) None
		Which o
100 The Viceroy who follow Afghanistan was:	en aggressive policy towards	number o
(a) Lord Mayo	(b) Lord Lytton	(a) Philip
(c) Lord Dufferin	(d) Lord Canning	(c) Maldi
(c) Zora Z unerni	(, 2014 Calling	(c) maiui

# **101** In 1930, from where Mahatma Gandhi started the Civil Disobedience Movement?

- (a) Wardha (b) Dandi
- (c) Sevagram (d) Sabarmati
  - (e) None of the above/More than one of the above
- **102** The Sarabandi Campaign of 1922 was led by:
  - (a) Chittaranjan Das (b) Sardar Vallabhbhai Patel
  - (c) Rajendra Prasad (d) Lala Lajpat Rai
  - (e) None of the above/More than one of the above

# **103** Who was the President of the Indian National Congress at the time of partition of India?

- (**a)** J. B. Kripalani
- (b) Jawaharlal Nehru
- (c) Maulana Abul Kalam Azad
- (d) C. Rajagopalachari
- (e) None of the above/More than one of the above
- 104) Who led the 1857 Revolt in Bihar?
  - (a) Babu Amar Singh (b) Hare Krishna Singh
  - (c) Kunwar Singh (d) Raja Shahzada Singh
  - (e) None of the above/More than one of the above
- 105 Who led cultivators in Bihar during the Non-cooperation Movement?
  - (a) Swami Vidyanand (b) Raj Kumar Shukla
  - (c) Shri Krishna Singh (d) J. B. Sen
  - (e) None of the above/More than one of the above
- 106 Among the following districts, which one has larger area under dense deciduous forest cover?
  - (a) Paschim Champaran (b) Gaya
  - (c) Kaimur (d) Nawada
  - (e) None of the above/More than one of the above
- **107** The district of Bihar which has a longer length of Ganga river is:
  - Bhagalpur (b) Katihar
  - c) Patna (d) Begusarai
  - (e) None of the above/More than one of the above

**108** Which district of Bihar has recorded the highest density of population (per sq. km) as per the 2011 Census?

- (a) Sheohar (b) Vaishali
- (c) Patna (d) Darbhanga
- (e) None of the above/More than one of the above

**109** Which one of the following countries is the largest country without borders in terms of geographical area?

- (a) New Zealand (b) Philippines
- (c) Japan (d) Cuba
- (e) None of the above/More than one of the above
- **110** The country which has the longest north-south (latitudinal) extension of its territory is:
  - (a) Russia (b) Chile
  - (c) China (d) Brazil
  - (e) None of the above/More than one of the above
- Which one of the following countries has the highest number of islands?
  - (a) Philippines (b) Indonesia
  - (c) Maldives (d) Cuba
  - (e) None of the above/More than one of the above

The American the Callendary constraints and the same in the	
<b>112</b> Among the following countries, which one is the	
largest producer of saffron in the world?(a) Spain(b) Greece	river in Bihar State is: (a) $21$ (b) $17$ (c) $12$ (d) 6
(c) New Zealand (d) Iran	(a) 21 (b) 17 (c) 12 (d) 6 (e) None of the above/More than one of the above
(e) None of the above/More than one of the above	
113 Which one of the following countries is the large	124 Which one of the following wildlife sanctuaries is
producer of uranium in the world?	0
(a) Kazakhstan (b) Canada	<ul> <li>(a) Valmiki</li> <li>(b) Rajgir</li> <li>(c) Bhimbandh</li> <li>(d) Gautam Buddha</li> </ul>
(c) Australia (d) France	(e) None of the above/More than one of the above
(e) None of the above/More than one of the above	<b>125</b> The district of Bihar which has recorded the highest
114) The hills situated closer to Kanyakumari are:	sex ratio as per the 2011 Census is:
(a) Anaimalai Hills (b) Nilgiri Hills	(a) Siwan (b) Gopalganj
(c) Cardamom Hills (d) Shevaroy Hills	(c) Saran (d) Kishanganj
(e) None of the above/More than one of the above	(e) None of the above/More than one of the above
115 Among the following tributaries, which one is th	
part of Ganga river basin?	(a) Patwari (b) Lambardar
(a) Sankh (b) North Koel	(c) Zamindar (d) Zaildar
(c) South Koel (d) Barakar	(e) None of the above/More than one of the above
(e) None of the above/More than one of the above	127) Which one of the following characteristics is <i>not</i> true
116 Which one of the following hills does not have te	
plantations?	(a) Swift decision (b) Flexible
(a) Kanan Devan (b) Nilgiri	(c) Ideal for large countries (d) Uniformity of laws
(c) Darjeeling (d) Girnar	(e) None of the above/More than one of the above
(e) None of the above/More than one of the above	128) What is the objective of Community Development
117 In India, the State with the largest area under der	s Programmes?
deciduous forest cover is:	(a) Providing educational facilities
(a) Odisha (b) Maharashtra	(b) Improving standards of living
(c) Madhya Pradesh (d) Chhattisgarh	(c) Political training
(e) None of the above/More than one of the above	(d) Helping villages in planning
118 Coral reefs are <i>not</i> found in which one of the followin regions?	<b>g</b> (e) None of the above/More than one of the above
(a) Gulf of Cambay	129 Aam Admi party is a:
(b) Gulf of Mannar	(a) State party (b) National party
(c) Gulf of Kachchh	(c) Regional party (d) Registered party
(d) Lakshadweep and Minicoy Island	(e) None of the above/More than one of the above
	<b>130</b> Which one of the following constitutional remedies is
(e) None of the above/More than one of the above	also known as 'postmortem'?
<b>119</b> Among the following religiou groups, which one has	
recorded the highest percentage of literacy rate as pe the 2011 Census?	(-)
(a) Christians (b) Hindus	(e) None of the above/More than one of the above
(c) Sikhs (d) Jains	131 What is the version of the VVPAT machine used for
(e) None of the above/More than one of the above	voting in India? (a) $M_1^2$ (b) $M_2^2$ (d) $Z_2^2$
	(a) M1 (b) Z1 (c) M3 (d) Z3 (e) None of the above/More than one of the above
120 Which one of the following pairs of Tribe and State	
<i>not</i> correctly matched? (a) Bhils—Gujarat	<b>132</b> Which one of the following Indian States has the
(b) Gaddis—Himachal Pradesh	largest number of members in its State Legislature? (a) Arunachal Pradesh (b) Himachal Pradesh
(c) Kotas—Tamil Nadu	(c) Manipur (d) Meghalaya
(d) Todas—Kerala	(e) None of the above/More than one of the above
	133 In the Indian Order Precedence, who amongst the
(e) None of the above/More than one of the above	following comes first?
121 Which one of the following industrial/economic corridor	s (a) The Chairman of UPSC
of India is being developed in collaboration with Japan?	(b) The Chief Election Commissioner
(a) Chennai—Vizag (b) Mumbai—Bengaluru	(c) The Comptroller and Auditor General
(c) Delhi—Mumbai (d) Amritsar—Kolkata	(d) The Chief Justice of High Court
(e) None of the above/More than one of the above	(e) None of the above/More than one of the above
122 Which one of the following districts <i>does not</i> hav Dharwar geological formations?	e <b>134</b> Which one of the following statements is correct regarding parliamentary form of Government?

- Dharwar geological formations?(a) Munger (b) Rohtas (c) Jamui (d) Nawada
- (e) None of the above/More than one of the above
- (a) The Legislature is responsible to judiciary.(b) The Legislature is responsible to Executive.

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- (c) The Legislature and the Executive are independent.
- (d) The President is responsible to Judiciary.
- (e) None of the above/More than one of the above
- **135** Which of the following was constituted under the Panchayati Raj system?
  - (a) Khap Panchayat (b) Caste Panchayat
  - (c) Gram Panchayat (d) Jan Panchayat

(e) None of the above/More than one of the above

- **136** As per the Census 2011, the child sex ratio in Bihar was:
  - (a) 935 (b) 934 (c) 933 (d) 932

(e) None of the above/More than one of the above

- **137** The growth rate of the tertiary sector in Bihar during the year 2017-18 was:
  - (a) 14.2% (b) 14.6% (c) 15.6% (d) 15.2%

(e) None of the above/More than one of the above

- **138** The Gross State Domestic Product (GSDP) of Bihar at current prices in the year 2017-18 was:
  - (a) ₹ 4,87,628 crores (b) ₹ 3,61,504 crores
  - (c) ₹ 1,50,036 crores (d) ₹ 5,63,424 crores
  - (e) None of the above/More than one of the above
- **139** Which one of the following programmes was initiated during the Sixth Five-Year Plan?
  - (a) Integrated Rural Development
  - (b) Rural Literacy Development
  - (c) Rural Railways
  - (d) Advanced Communication Links for Rural People
  - (e) None of the above/More than one of the above
- 140 Antyodaya Programme was started first of all in the State of:
  - (a) Bihar (b) Tamil Nadu
  - (c) Andhra Pradesh (d) Rajasthan
  - (e) None of the above/More than one of the above
- 141 India's share in meat and meat preparation exports in the year 2017 was:
  - (a) 5% (b) 6% (c) 2% (d) 3%
  - (e) None of the above/More than one of the above
- **142** The system under which the peasant himself owns the land and was responsible for payment of land revenue to the Government was known as:
  - (a) Zamindari system (b) Ryotwari system

# **ANSWERS** WITH EXPLANATION

**1** Option (a) is correct.

**Explanation:** The book 'Desher Katha' was written by Sakharam Ganesh Deuskar. He was a close associate of Sri Aurobindo.

Desher Katha

• It was Deuskar who introduced the term "Swaraj". The Nationalists adopted this word, and it became the primary focus of the fourfold Nationalist program.

• However, the book was banned by the Bengal government in 1910, and all copies were confiscated.

## **2** Option (c) is correct.

## **Explanation: Searchlight**

• Dr. Sachidanand Sinha launched the Searchlight, a biweekly English news publication from Patna, in 1918.

- (c) Mahalwari system (d) Dahsala system
- (e) None of the above/More than one of the above
- 143 In the fiscal year 2018-19, the total foreign exchange reserves are:
  - (a) ₹ 34,55,882 crores (b) ₹ 30,55,882 crores
  - (c) ₹ 32,55,882 crores (d) ₹ 28,55,882 crores
  - (e) None of the above/More than one of the above
- 144 Which one of the following is *not* a source of direct finance?
  - (a) NABARD
- (b) Regional Rural Bank India (d) Allahabad Bank
- (c) State Bank of India(d) Allahabad Bank(e) None of the above/More than one of the above

## 145 What is the full form of EPCG?

- (a) Export Promotion Consumer Goods
- (b) Exchange Programme for Consumer Goods
- (c) Export Promotion Capital Goods
- (d) Expert Programme for Credit Generation
- (e) None of the above/More than one of the above
- 146 In Pradhan Mantri Shram Yogi Maan-Dhan Scheme, each subscriber shall receive the minimum assured pension of \_\_\_\_\_ per month after attaining the age of 60 years.
  - (a) ₹ 3,500 (b) ₹ 2,000 (c) ₹ 3,000 (d) ₹ 1,500
  - (e) None of the above/More than one of the above

# 147 Who determines the minimum support price in India?

- (a) The Commission for Agricultural Costs and Prices
- (b) The Agriculture Ministry
- (c) The Finance Commission
- (d) NABARD
- (e) None of the above/More than one of the above
- **148** Hindu growth rate is related to:
  - (a) Money (b) GDP (c) Population (d) GNP
  - (e) None of the above/More than one of the above
- 149 In Bihar, 'Krishi Kumbha Mela, 2019' was held in:
  - (a) Champaran (b) Motihari
  - (c) Rajgir (d) Gaya
  - (e) None of the above/More than one of the above

150 In NITI Aayog's Health Index, 2019, Bihar scored:

- (a) 30.12 (b) 30.13 (c) 32.11 (d) 32.12
- (e) None of the above/More than one of the above
- TH EXPLANATION

• Murli Manohar Prasad was the longest-serving editor in its early years and was jailed for his outspoken articles against the British.

• Murali Mohan Prasad was a renowned journalist known for his work as an editor of Searchlight.

#### **3** Option (a) is correct.

## **Explanation: Bihar Socialist Party**

• The Bihar Socialist Party was established by a group of individuals that included Ganga Sharan Sinha, Rambriksh Benipuri, Ramanand Mishra, Phulan Prasad Verma, and several others.

• The Bihar Socialist Party played a significant role in laying the groundwork for the Congress Socialist Party in 1934.

## **4** Option (b) is correct.

**Explanation:** Allan Octavian Hume is widely recognized as the founder of the Indian National Congress, an organization that played a pivotal role in India's struggle for independence from British colonial rule.

#### **Indian National Congress**

• The inaugural session of the Indian National Congress was held in Bombay with the approval of the Viceroy Lord Dufferin.

• Wyomesh Chandra Banerjee served as the first President of the Congress. The first session was attended by 72 delegates who represented each province of the country.

## **5** Option (c) is correct.

## **Explanation**:

• Tilak was the foremost leader of the Indian independence movement and was regarded by the British colonial authorities as "The father of the Indian unrest".

• Additionally, he was given the title of "Lokmanya", which means "accepted by the people as their leader." Mahatma Gandhi also called him as "The Maker of Modern India".

• Tilak was a prominent proponent of Swaraj, which means 'self-rule'.

• He is renowned for his statement in Marathi, which translates to: "Swaraj is my birthright and I shall have it".

• Tilak, along with Annie Besant, played a key role in the establishment of the All India Home Rule League during the years of 1916-18.

## 6 Option (c) is correct.

## **Explanation**:

• In 1915, King John V bestowed a knighthood upon Rabindranath Tagore in recognition of his contributions to Literature.

• Tagore, being the first Indian to receive this title, returned his knighthood in 1919. The reason behind his protest was the Jallianwala Bagh massacre that took place on April 13, 1919 in Amritsar, Punjab.

## **7** Option (c) is correct.

## **Explanation:**

• The Servants of India Society was founded by Gopal Krishna Gokhale in 1905 with the aim of bringing together Indians from diverse ethnic and religious backgrounds to engage in social welfare activities.

• As the first non-sectarian organization in India dedicated to serving underprivileged rural and tribal communities, the society focused on providing emergency relief, promoting literacy, and championing other social causes.

## **8** Option (a) is correct.

**Explanation:** The British government executed three revolutionary freedom fighters, namely Ram Prasad 'Bismil,' Ashfaqulla Khan, and Thakur Roshan Singh, on December 19, 1927, for their participation in the Kakori train robbery case.

#### Kakori Conspiracy

• On August 9, 1925, a group of individuals belonging to the Hindustan Republic Association (HRA) conducted a robbery on a train at Kakori station in Uttar Pradesh.

• Ram Prasad 'Bismil' was the mastermind behind this operation, with Ashfaqulla Khan, Chandrasekhar Azad, Rajendra Lahiri, and Roshan Singh playing key roles in the attack against British authorities.

# **9** Option (a) is correct.

## Explanation:

• Deshbandhu Chitranjan Das wrote the book "India for Indians".

• The book was originally published in 1917.

• Deshbandhu, a title given to him by his followers, founded the Swaraj Party, which advocated for India's complete independence from British rule.

## **10** Option (b) is correct.

Explanation:

• The Satyashodhak Samaj, meaning "Society of Seekers of Truth," was a social reform movement founded by Jyotirao Phule in Maharashtra, India, in 24 September 1873.

• The movement aimed to promote social equality and eradicate the caste-based discrimination that was prevalent in Indian society at that time.

## Satyashodhak Samaj

• The Satyashodhak Samaj also worked towards the empowerment of women and fought against oppressive practices such as child marriage, dowry, and purdah.

• Jyotirao Phule's writings, including his famous book "Gulamgiri", were instrumental in spreading the ideas of the Satyashodhak Samaj and inspiring people to join the movement.

## **11** Option (b) is correct.

**Explanation**:

• The first woman President of Indian National Congress was Annie Besant, who served as the President of the Indian National Congress in 1917.

• She was a prominent Theosophist and social reformer who supported Indian self-rule (Swaraj).

## 12 Option (c) is correct.

Explanation:

- The first Satyagrahi of the Individual Satyagraha Movement was Vinoba Bhave.
- He was a disciple of Mahatma Gandhi and a prominent social reformer in India.
- The Individual Satyagraha Movement was launched by Mahatma Gandhi in 1940 as a form of peaceful protest against the British government's decision to involve India in World War II without consulting the Indian people.

## **13** Option (a) is correct.

#### Explanation:

• The founder of the 'India House' in London was Shyamji Krishna Varma.

• He was a lawyer, scholar, and freedom fighter who founded the India House in 1905 as a center for Indian students studying in London to discuss and work towards India's independence from British rule.

• The India House was a hub of Indian revolutionary activity in London, and many notable Indian freedom fighters such as Vinayak Damodar Savarkar and Bhikaji Cama were associated with it.

• The India House also published a newspaper called 'The Indian Sociologist'.

## 14 Option (b) is correct.

#### **Explanation**:

 Mahadev Lal Sarraf was a prominent freedom fighter from Bhagalpur who played a crucial role in the Salt Satyagraha.

 In 1930, he organized the Salt Satyagraha movement in Bhagalpur, where he was inspired by the ideas of Mahatma Gandhi.

## **15** Option (a) is correct.

#### **Explanation**:

• Mahapandit Rahul Sankrityayan is a distinctive figure in Hindi literature, known for his contributions to various fields such as history, philosophy, and linguistics.

• He was born in the village of Pandha, situated in the Azamgarh district of Uttar Pradesh.

• In 1939, he played a leading role in the Ambari Satyagraha movement that took place in Bihar, which was a non-violent protest against the imposition of taxes on the use of elephants.

• Rahul Sankrityayan is widely recognized as the "Father of Indian Travelogue", owing to his significant contributions to the genre.

# **16** Option (a) is correct.

# Explanation:

If  $S = \sum_{n=1}^{15} \left( n + \frac{1}{3} \right)$ 

where, Sum of 'n' natural numbers

S<sub>n</sub> = 
$$\frac{n(n+1)}{2}$$
, where *n* = number of term  
S =  $\sum_{n=1}^{15} \left( n + \frac{1}{3} \right)$   
And. S =  $\left[ n \times \frac{(n+1)}{2} \right]$   
S = 1 +  $\frac{1}{3}$  + 2 +  $\frac{1}{3}$  + 3 +  $\frac{1}{3}$  + ... + 15 +  $\frac{1}{3}$   
S =  $\frac{15 \times 16}{2}$  +  $\frac{15}{3}$   
S = 120 + 5  
∴ S = 125.

**17** Option (c) is correct.

Explanation:

Length of each train = 150 mSpeed = 90 km/h

Total distance = total length of both trains = 150 m + 150 m= 300 m

Relative speed in opposite direction = speed of second train - (-speed of first train) 90 + 90

$$=180 \times \frac{5}{18}$$
 m/s  $= 50$  m/s

:. Required time to cross each other distance/speed

$$=\frac{300 \text{ m}}{50 \text{ m/s}} = 6 \text{ s}$$

18 Option (b) is correct.
Explanation: Since all pens are identical
∴ Each student get 2 pens Remaining pens = 12 - 4 = 8 pens
then possible ways to distribute the pens would be (2, 10), (3, 9), (4, 8), (5, 7), (6, 6), (7, 5), (8, 4), (9, 3) and (10, 2)
∴ there are 9 ways
19 Option (c) is correct.
Explanation: Let, Radius of circle A = 1.5 x

Then, Radius of circle B = 1 x

: Area of circle A = 
$$\pi r^2 = \left(\frac{22}{7}\right) \times (1.5x)^2 = 2.25 \ \pi x^2$$

Area of circle  $B = \pi x^2$ 

 $\therefore$  The ratios of areas of circles A and B

$$= 2.25 \ \pi x^2 : \pi x^2 \\= 2.25 : 1$$

**20** Option (a) is correct.

#### Explanation:

Time taken to fill the tank = 3 hrs.

Time taken to empty the tank = 4 hrs.

L.C.M = 12

Efficiency of first tap  $=\frac{12}{3} = 4$ Efficiency of second tap  $=\frac{12}{4} = 3$  ( $\because$  this is outlet  $\because$  Tank is  $\frac{1}{3}$  full  $=12 \times \frac{1}{3} = 4$  $\therefore$  it will be negative)

... Remaining empty part of the tank = 12 - 4 = 8Combined efficiency of both the taps = 4 + (-3) = 1

 $\therefore$  Time taken to fill remaining empty part of the tank

$$=\frac{0}{1}=8$$
 hours

**21** Option (d) is correct. Explanation:

Observed pattern is

1, 3, 9, 15, 25, 35, 49, 63....  

$$+2 + 6 + 6 + 10 + 10 + 14 + 14$$
  
 $+4 + 0 + 4 + 0 + 4 + 0$   
 $49 + 14 = 63$   
22 Option (a) is correct.  
Explanation:  
Given,  
 $x - y = 1$   
 $x^2 - y^2 = 7$   
 $\Rightarrow (x + y) \times (x - y) = 7$   
 $(x + y) \times 1 = 7$   
 $x + y = 7$  (ii)  
Adding equation (i) and (ii)  
 $x + y + (x - y) = 7 + 1$   
 $2x = 8 \Rightarrow x = 4$  cm

putting the value of *x* in equation (ii)

$$x + y = 7$$
  

$$\Rightarrow y = 3 \text{ cm}$$
  
Diagonal =  $\sqrt{x^2 + y^2} = \sqrt{4^2 + 3^2} = \sqrt{25}$ 

= 5 cm

## **23** Option (b) is correct.

# **Explanation**:

Total Students = 80

Students who play carrom n(x) = 60%

Students who play chess n(y) = 45%

Students who neither plays carrom or the chess  $n(x \cap y)' = 10\%$ 

:. Students who plays either carrom or chess  $n(x \cup y) = 90\%$ 

Now, since, 
$$n(x \cup y) = n(x) + n(y) - n(x \cap y)$$

:. 90% = 60% + 45% -  $n(x \cap y) n(x \cap y) = 15\%$ 

... The percent of Students who play only chess

 $= n(y) - n(x \cap y)$ 

$$=45-15=30\%$$

Number of Students who play only chess

$$=\frac{30}{100} \times 80 = 24$$
 Students

**24** Option (c) is correct.

## Explanation:

Given, 
$$x^3 - y^3 = \frac{117}{8}$$
 and  $x - y = \frac{3}{2}$   
 $\therefore x^3 - y^3 = (x - y)(x^2 + xy + y^2)$   
 $\therefore (x - y)(x^2 + xy + y^2) = \frac{117}{8}$   
 $\Rightarrow \frac{3}{2}(x^2 + xy + y^2) = \frac{117}{8} \therefore x - \frac{3}{2}$   
 $\Rightarrow x^2 + xy + y^2 = \frac{\cancel{117}}{\cancel{117}} \times \frac{\cancel{117}}{\cancel{117}}$   
 $\therefore x^2 + xy + y^2 = \frac{\cancel{117}}{\cancel{117}}$ 

**25** Option (d) is correct.

## Explanation:

Given, (5)<sup> $x^2 + 2x + 7 = (125)^{2x + 1}$ </sup>  $\Rightarrow (5)^{x^2 + 2x + 7} = (5^3)^{2x + 1}$   $\Rightarrow (5)^{x^2 + 2x + 7} = (5^{6x + 3} (\because (a^m)^n = a^{m \times n}))$   $\Rightarrow x^2 + 2x + 7 = 6x + 3$  [Since base is same, power can be equated]  $\Rightarrow x^2 - 4x + 4 = 0$ (x - 2) (x - 2) = 0  $\therefore x = 2$ 

# **26** Option (d) is correct.

## **Explanation**:

• The study of bones is done under the branch of science called osteology.

- Osteology is a sub-discipline of anatomy that focuses on the structure, function, and development of bones.
- It involves the study of bones at the macroscopic level (gross anatomy) as well as at the microscopic level (histology).

• Osteology is an important field of study in medicine, biology, archaeology, paleontology, and forensic science, among others.

## **27** Option (b) is correct.

## Explanation:

• Viruses are not considered living organisms and do not have any enzymes in their cells.

• A virus is a tiny, submicroscopic agent that is incapable of living on its own and can only reproduce by infecting the cells of living organisms.

• It consists of a small amount of genetic material, which can either be DNA or RNA, enclosed in a protective protein coat.

• It should be noted that no virus contains both DNA and RNA.

• In contrast, lichens, bacteria, and algae are living organisms that have various enzymes in their cells to carry out metabolic processes.

## **28** Option (b) is correct.

## Explanation:

• Lymphocytes are a type of white blood cells that play an important role in the immune system.

• They are formed in the primary lymphoid organs of the human body, which include the bone marrow and the thymus gland.

• B lymphocytes, also known as B cells, are formed in the bone marrow, while T lymphocytes, also known as T cells, are formed in the thymus gland.

• Once formed, lymphocytes circulate through the bloodstream and lymphatic system, patrolling the body for foreign invaders and other abnormal cells.

## **29** Option (c) is correct.

## **Explanation**:

• Thyroxine, also known as T4, is a hormone that is produced by the thyroid gland and contains iodine.

• The thyroid gland absorbs iodine from the blood and uses it to produce both T4 and triiodothyronine (T3), which are both important for regulating metabolism and growth in the body.

• Testosterone is a male sex hormone that is produced by the testes, and does not contain iodine.

• Adrenaline, also known as epinephrine, is a hormone that is produced by the adrenal glands and does not contain iodine.

 Insulin is a hormone that is produced by the pancreas and does not contain iodine.

## **30** Option (d) is correct.

## Explanation:

■ AIDS, stands for Acquired Immunodeficiency Syndrome, is a disease that is caused by the Human Immunodeficiency Virus (HIV),

• HIV attacks the immune system, specifically the CD4 cells (a type of white blood cell), and weakens the body's ability to fight infections and certain cancers.

• Helminths are parasitic worms that can cause a variety of diseases, but they are not the cause of AIDS.

• Bacteria and fungi can also cause diseases, but they are not responsible for AIDS.

## **31** Option (e) is correct.

#### **Explanation**:

• The unit of pressure is the Pascal (Pa), which is defined as one Newton per square meter  $(N/m^2)$ .

• However, there are other units of pressure that are commonly used, such as pounds per square inch (psi), atmospheres (atm), and millimeters of mercury (mmHg) or torr.

• Kg/cm<sup>2</sup>, kg/cm, and kg/mm are units of pressure that are not commonly used in scientific or engineering contexts, although they may be used in some industrial applications or in certain countries.

## **32** Option (c) is correct.

**Note:** According to BPSC, answer is (e), but it should be (c).

## Explanation:

• The sunlight from the Sun takes approximately 8 minutes to reach the Earth.

• This is because light travels at a speed of about 299,792 kilometers per second (km/s), which means that it covers the distance from the Sun to the Earth, which is about 93 million miles (150 million kilometers), in about 8 minutes and 20 seconds.

#### **33** Option (b) is correct.

#### **Explanation:**

• Scalar quantities are physical quantities that have only magnitude and no direction.

• Pressure is a scalar quantity because it has only magnitude and no direction.

• It is defined as the force per unit area and is measured in units such as Pascals (Pa) or pounds per square inch (psi).

• Force, velocity, and acceleration are vector quantities because they have both magnitude and direction.

## **34** Option (c) is correct.

#### **Explanation:**

• Stress is defined as force per unit area and its unit is N/m<sup>2</sup> or Pascal (Pa).

■ Force has a unit of newton (N).

• Pressure has a unit of force per unit area (such as N/m<sup>2</sup> or Pa).

• Strain is the ratio of the change in length or shape of an object to its original length or shape, and therefore, it is dimensionless and has no units.

## **35** Option (b) is correct.

#### **Explanation:**

• Sound waves are mechanical waves that travel through a medium such as air, water, or solids.

• The particles of the medium vibrate in the same direction as the wave travels, creating regions of compression and rarefaction. This type of wave is known as a longitudinal wave.

• Transverse waves vibrate perpendicular to the direction of wave travel, while electromagnetic waves do not require a medium to propagate and consist of oscillating electric and magnetic fields that are perpendicular to each other and to the direction of wave travel.

• Polarization refers to the orientation of the oscillation direction of the wave, which is not applicable to sound waves.

## **36** Option (b) is correct.

## Explanation:

To convert Celsius to Fahrenheit, we use the following formula:

$$\mathbf{F} = \left(^{\circ}\mathbf{C} \times \frac{9}{5}\right) + 32$$

Substituting 50°C for °C, we get:

$${}^{\circ}F = \left(50 \times \frac{9}{5}\right) + 32$$
$${}^{\circ}F = (90) + 32$$

Therefore, 50°C is equal to 122°F in Fahrenheit scale.

#### **37** Option (a) is correct.

Explanation:

• Hertz (Hz) is a unit of measurement for frequency, which is the number of cycles per second of a periodic phenomenon, such as a wave or oscillation.

• One hertz is defined as one cycle per second.

## **38** Option (c) is correct.

## Explanation:

• The hypothalamus is a part of the brain that plays a crucial role in regulating body temperature.

• It acts as the body's thermostat, maintaining a core temperature of around 37°C (98.6°F) by coordinating various physiological responses.

• When the body's temperature rises, such as during exercise or exposure to hot weather, the hypothalamus initiates cooling mechanisms such as sweating and dilation of blood vessels in the skin.

• When the body's temperature falls, such as during exposure to cold weather, the hypothalamus initiates warming mechanisms such as shivering and constriction of blood vessels in the skin.

## **39** Option (b) is correct.

#### Explanation:

• An ammeter is a device used to measure the flow of electric current in a circuit.

• It is typically connected in series with the circuit element or device whose current is to be measured.

• A voltmeter, on the other hand, is used to measure the voltage difference between two points in a circuit.

• A voltameter is a device used to measure the amount of electrical charge transferred during an electrolysis reaction.

• A potentiometer is a device used to measure and compare the electromotive force (emf) of two cells or to measure the internal resistance of a cell.

## 40 Option (d) is correct.

#### **Explanation:**

• The watt is the standard unit of power in the International System of Units (SI), named after the Scottish inventor James Watt.

• One watt is defined as the rate at which work is done when one ampere (A) of current flows through an electrical potential difference of one volt (V).

In other words, one watt is equivalent to one joule
 (J) of energy per second (s), which can be written as: 1
 W = 1 J/s

## **41** Option (c) is correct.

#### **Explanation:**

• The person who is regarded as the 'Father of Modern Chemistry' is Lavoisier, also known as Antoine-Laurent Lavoisier.

• He is credited with transforming chemistry from a qualitative science into a quantitative one by introducing rigorous methods of measurement, developing a new system of chemical nomenclature, and conducting a series of experiments that helped to establish the law of conservation of mass and the basis of the modern theory of chemical reactions.

# 42 Option (c) is correct.

#### **Explanation**:

• The mass number of an atom is the total number of protons and neutrons in its nucleus.

Hence,

mass number = number of protons + number of neutrons

number of protons = atomic number = number of electrons = 18

So the mass number is:

mass number = 18 + 20 = 38

Therefore, the answer is 38.

## **43** Option (b) is correct.

## **Explanation**:

• Nitrous oxide (N<sub>2</sub>O) is the laughing gas as it produces hysterical laughter.

 It is diamagnetic (due to absence of unpaired electrons) and linear molecule.

#### **44** Option (c) is correct.

## **Explanation**:

• Gases are not a type of element. They are a state of matter.

• Elements can exist in any of the three states of matter: solid, liquid, or gas.

#### **45** Option (b) is correct.

## **Explanation:**

The pH value of water is 7, which is neutral.

• A pH value of less than 7 indicates acidity, while a pH value greater than 7 indicates alkalinity.

• The pH scale is used to measure the acidity or basicity of a solution.

It is a number scale from 0 to 14, with 7 being neutral.

• The pH scale is logarithmic, meaning that a change of 1 pH unit corresponds to a ten-fold change in H<sup>+</sup> ion concentration.

#### **46** Option (e) is correct.

#### Explanation:

• The main components of greenhouse gases are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.

• Water vapor is the most abundant greenhouse gas, but its concentration in the atmosphere is highly variable and depends on temperature and other factors.

• Carbon dioxide is the second most abundant greenhouse gas.

- Methane is the third most abundant greenhouse gas.
- Nitrous oxide and ozone are also greenhouse gases, but they are less abundant than water vapor, carbon dioxide, and methane.

#### 47 Option (a) is correct.

#### Explanation:

Oxygen is absent in kerosene.

• Kerosene is a hydrocarbon, which means it is made up of carbon and hydrogen atoms.

• It does not contain any oxygen in its chemical structure. The chemical formula for kerosene is typically  $C_{12}H_{26}$  or  $C_{14}H_{30}$ , which indicates that it is composed of only carbon and hydrogen atoms.

## **48** Option (a) is correct.

## Explanation:

- Natural rubber is a polymer of isoprene, which is a 5-carbon molecule with the chemical formula  $C_{s}H_{e}$ .
- Isoprene is a building block or monomer that is polymerized to form natural rubber, which is a high molecular weight polymer with a repeating unit of isoprene.

## 49 Option (c) is correct.

#### Explanation:

• Glucose is a simple sugar or monosaccharide, which is an important source of energy for living organisms. It has a chemical formula of  $C_6H_{12}O_6$ , which indicates that it is composed of 6 carbon atoms, 12 hydrogen atoms, and 6 oxygen atoms.

• The structure of glucose consists of a six-membered ring of carbon atoms with hydroxyl (–OH) groups attached to each carbon atom.

•  $C_6H_{22}O_{11}$  represents the formula of the disaccharide sucrose.

•  $C_6H_{10}O_5$  represents the formula of a different type of monosaccharide called deoxyribose, which is a component of DNA.

•  $C_6H_6O_6$  is not a valid chemical formula.

## **50** Option (d) is correct.

## Explanation:

• The CO molecule has a triple bond between the carbon (C) and oxygen (O) atoms.

• The bond order of a molecule is defined as the number of chemical bonds between a pair of atoms.

• In the case of CO, there are three bonds between the C and O atoms: one sigma ( $\sigma$ ) bond and two pi ( $\pi$ ) bonds.

• The bond order is calculated by subtracting the number of anti-bonding electrons from the number of bonding electrons, and then dividing the result by 2. Here, the answer in this case is 3.

## **51** Option (d) is correct.

#### **Explanation:**

• 'The Origin of Species' is a book that was first published in 1859 and written by the British naturalist Charles Darwin.

• The book presents Darwin's theory of evolution, which proposes that species evolve over time through the process of natural selection.

## **52** Option (b) is correct.

## **Explanation**:

• The interaction between algae and fungi to form lichen is called mutualism.

• Lichens are composite organisms that result from a symbiotic association between a photosynthetic partner, usually a green alga or a cyanobacterium, and a fungal partner.

• The algae or cyanobacteria provide the fungal partner with organic carbon, while the fungal partner provides the algae or cyanobacteria with a protected environment and access to essential minerals and water.

• This relationship is considered mutualistic because both partners benefit from the association.

## **53** Option (a) is correct.

## **Explanation**:

• The actual location or place where an organism lives is called a habitat.

• A habitat refers to the physical environment in which an organism lives and includes factors such as temperature, moisture, light, soil type, and other abiotic and biotic factors that influence the survival and reproduction of the organism.

• An ecosystem, on the other hand, is a complex community of living organisms (biotic) and their physical (abiotic) environment that interact with each other to form a functional unit.

• A niche refers to the role or function of an organism within its habitat.

• A biome is a large area on the Earth's surface characterized by a distinct climate, flora, and fauna.

#### **54** Option (b) is correct.

#### **Explanation**:

• Solar energy is converted into chemical energy in the process of photosynthesis, which takes place in chloroplasts of plant cells.

• During photosynthesis, light energy is absorbed by pigments called chlorophyll, which are present in the thylakoid membranes of chloroplasts.

• This energy is then used to power the conversion of carbon dioxide and water into glucose, a process that generates ATP (adenosine triphosphate) as a byproduct.

• ATP is the energy currency of cells, and it is used to power various cellular processes, including metabolism and cell division.

## **55** Option (b) is correct.

**Explanation:** According to BPSC correct answer is (b) But factually option (e) will be the right answer.

• The by-products of photosynthesis are both oxygen (O<sub>2</sub>) and sugar (glucose).

• During photosynthesis, plants use energy from sunlight to convert carbon dioxide (CO<sub>2</sub>) and water (H<sub>2</sub>O) into glucose (C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>) and oxygen gas (O<sub>2</sub>).

• This process occurs in the chloroplasts of plant cells and involves two main stages: the light-dependent reactions and the light-independent reactions (also known as the Calvin cycle).

• As a result of photosynthesis, oxygen gas is produced and released into the atmosphere as a byproduct.

## **56** Option (b) is correct.

## **Explanation**:

• The Chief Justice of the Patna High Court who administered the oath of office to Mr Fagu Chauhan as the Governor of Bihar in July 2019 was Hon. A. P. Sahi.

• Hon. A. P. Sahi was appointed as the Chief Justice of the Patna High Court in November 2018, and he served in this role until his retirement in November 2019.

• Current acting Chief Justice of the Patna High Court is Chakrdhari Sharan Singh.

• The Patna High Court was established on February 3, 1916.

## **57** Option (c) is correct.

#### **Explanation**:

• The significance of 'Bihar Diwas' that is celebrated on 22 March every year is to commemorate the formation of the state of Bihar.

• It is celebrated every year to commemorate Bihar's separation from Bengal Presidency in 1912.

• Bihar was a part of the Bengal Presidency during the British rule in India.

• However, due to the growing demand for a separate administrative unit, Bihar and Orissa were carved out as a separate province on 22 March 1912.

# **58** Option (a) is correct.

#### Explanation:

• Special status was not given to Bihar as a state.

• However, the Government of India has introduced certain schemes and initiatives for the development of Bihar. One such initiative is the Backward Regions Grant Fund (BRGF), which provides financial assistance to the identified backward regions of the state for their overall development.

• Additionally, Bihar is also a part of the Eastern India Development Scheme (EIDS), which aims to boost the economic development of the eastern region of India, including Bihar.

#### **Special Category Status**

• Special Category Status is a classification given by the Government of India to certain states that have distinct socio-economic features like difficult terrain, low population density, strategic location, and non-viable state finances.

## **59** Option (d) is correct.

## Explanation:

• Yousuf Shah Chak was the last Muslim ruler of the Kashmir Valley. He ruled Kashmir from 1579 to 1586 AD.

• Following his defeat by the Mughal emperor Akbar, he was exiled to Bihar.

• Yousuf Shah Chak settled in Biswak village in Nalanda, where he and his family maintained a cavalry force of 500 horses.

This area came to be known as Kashmiri Chak.

#### **60** Option (c) is correct.

#### **Explanation:**

• The tagline of Bihar State Tourism Development Corporation is Blissful Bihar.

• Bihar State Tourism Development Corporation (BSTDC) is a state government agency that is responsible for promoting tourism in Bihar.

• The tagline "Blissful Bihar" highlights the natural beauty, cultural heritage, and spiritual significance of Bihar as a tourist destination.

#### **61** Option (d) is correct.

**Explanation:** On January 5, 2018, Prime Minister Narendra Modi, laid the foundation of Mandal Dam Project to be built on North Koel river.

• The Mandal Dam Project is a joint venture between the Bihar and Jharkhand state governments.

• The project aims to provide irrigation facilities to the farmers in both the states and also generate hydropower.

■ North Koel river, is a tributary of the Sone river.

## 62 Option (b) is correct.

## Explanation:

• In July 2019, experts visited for the first documentation of a Megalithic site of Bihar in Kaimur district.

• The megalithic site in Kaimur district is located in a remote area of the district and is believed to be more than 2,000 years old.

• The site contains numerous burial mounds made of stone, which are believed to be the resting places of ancient warriors and chieftains.

#### **63** Option (c) is correct.

#### **Explanation**:

• The country invited by the host UAE as the 'Guest of Honour' to attend 46<sup>th</sup> Session of the Council of Foreign Ministers of the Organisation of Islamic Cooperation (OIC) held on 1-2 March, 2019 in Abu Dhabi was India.

• This was the first time that India was invited as the 'Guest of Honour' to attend the OIC meeting, which is the second largest intergovernmental organization after the United Nations with a membership of 57 countries.

#### **64** Option (c) is correct.

**Explanation:** 

 CNES stands for Centre National d'Études Spatiales which is the French National Centre for Space Studies.

• The Indian Space Research Organisation (ISRO) and Centre National d'Études Spatiales (CNES) have signed an agreement to jointly establish a maritime surveillance system.

• CNES is headquartered in Paris, and Philippe Baptiste is the current Chairman.

 Indian Space Research Organisation (ISRO) is India's space agency founded in 1969 with the aim of promoting an indigenous Indian space program.

## **65** Option (a) is correct.

#### **Explanation**:

• Paraguay is a country located in South America and is surrounded by Argentina to the south and southwest, Brazil to the east and northeast, and Bolivia to the northwest. Its capital and largest city is Asunción.

• The Vice President of India, M. Venkaiah Naidu paid a visit in March 2019 in Asunción.

• Asunción is the capital and largest city of Paraguay, located in the western part of the country on the Paraguay River.

## **66** Option (d) is correct.

## Explanation:

■ The 4<sup>th</sup> Session of the UN Environment Assembly (UNEA-4) was held in Nairobi, Kenya.

• The conference was held from 11<sup>th</sup> to 15<sup>th</sup> March 2019 and was attended by over 4,700 heads of state, ministers, business leaders, UN officials and civil society representatives.

• The theme of the conference was "Innovative Solutions for Environmental Challenges and Sustainable Consumption and Production".

• The UN Environment Assembly (UNEA) is the world's highest-level decision-making body on the environment.

• It was established in 2012 by the United Nations General Assembly as a result of the outcome document of the United Nations Conference on Sustainable Development (Rio+20).

#### 67 Option (b) is correct.

#### **Explanation:**

• The Indian Sign Language Dictionary was released by the Government of India's Ministry of Social Justice and Empowerment in collaboration with the Indian Sign Language Research and Training Centre (ISLRTC).

• The first edition of the Indian Sign Language Dictionary was launched on March 23, 2018, and contained around 3,000 words in sign language.

• The second edition of the Indian Sign Language Dictionary was released on March 23, 2019, which added another 1,000 new words to the dictionary.

• Indian Sign Language Research and Training Centre (ISLRTC) is an autonomous organization under Department of Empowerment of Persons with Disabilities (DEPwD), Ministry of Social Justice and Empowerment, Govt. of India dedicated to the promotion of Indian Sign Language (ISL).

## **68** Option (c) is correct.

**Explanation:** Manohar Parrikar, the former Chief Minister of Goa, passed away on March 17, 2019. After his death, Pramod Sawant succeeded him as the Chief Minister of Goa.

## **69** Option (a) is correct.

#### **Explanation**:

• The winner of the International Gandhi Peace Prize for 2018 is Yohei Sasakawa, a Japanese philanthropist and social worker.

## The International Gandhi Peace Prize

• It is an annual award given by the Government of India to individuals and organizations for their contributions towards social, economic, and political transformation through non-violence and other Gandhian methods.

• It was started in 1995.

■ The award carries a cash prize of ₹1 crore (approximately USD 135,000), a citation, and a plaque.

## **70** Option (d) is correct.

## **Explanation:**

• The world's first camel hospital is located in Dubai, United Arab Emirates.

• The hospital is known as the Dubai Camel Hospital and was opened in 2017.

• It is a specialized veterinary hospital that provides medical care and treatment for camels.

## **71** Option (c) is correct.

## **Explanation**:

• The winner of the Men's Singles of the YONEX All England Open Badminton Championships, 2019 was Kento Momota of Japan.

• In the 2019 All England Open Badminton Championships, Kento Momota defeated Viktor Axelsen of Denmark in the final to win the Men's Singles title.

• It was his first All England Open title and his second major international title of the year, following his victory at the Indonesia Masters earlier in the year.

## YONEX All England Open Badminton Championships

• One of the oldest and most prestigious badminton tournaments in the world.

• It is held annually in Birmingham, England and attracts the top players from around the world.

## **72** Option (d) is correct.

#### **Explanation:**

• The five Rhino range nations that signed 'The New Delhi Declaration on Asian Rhinos, 2019' are India, Nepal, Malaysia, Indonesia, and Bhutan.

• The declaration was signed at the 2<sup>nd</sup> Asian Rhino Range Countries meeting held in New Delhi, India in 2019.

• The purpose of the declaration was to reaffirm the commitment of the signatories towards the conservation of the three Asian rhino species - the Indian rhinoceros, the Javan rhinoceros, and the Sumatran rhinoceros - and their habitats.

#### **73** Option (d) is correct.

## **Explanation**:

• The second fastest batsman to score 25 centuries in the test format after Sir Don Bradman is Steve Smith of Australia.

• Steve Smith achieved this feat in his 119<sup>th</sup> innings, during the 2019 Ashes series against England. He surpassed Indian cricketing legend Sachin Tendulkar, who took 130 innings to score 25 test centuries.

• Sir Don Bradman holds the record for being the fastest batsman to score 25 test centuries, achieving the feat in just 68 innings.

• Steve Smith is the second fastest, followed by Indian captain Virat Kohli who reached the milestone in his 127<sup>th</sup> innings.

## **74** Option (b) is correct.

#### Explanation:

• The spacecraft Chandrayaan-2 was launched from the Satish Dhawan Space Centre in Sriharikota, Andhra Pradesh, India, in July 2019.

• Chandrayaan-2 was India's second mission to the Moon, after the successful Chandrayaan-1 mission in 2008.

## **75** Option (d) is correct.

**Explanation**:

• In the contest to be the leader of the Conservative Party and hence the Prime Minister of the UK, Theresa May announced her resignation in May 2019.

• After her resignation, there were several rounds of voting among Conservative MPs to select the new leader.

• Mark Harper was not one of the candidates who progressed to the next round of voting after the first round. He received only 10 votes and was eliminated from the contest.

## **76** Option (a) is correct.

**Explanation:** The Ministerial meeting of the Coordinating Bureau of the Non-Aligned Movement (NAM) was held in Caracas, Venezuela in 2019.

#### Non-Aligned Movement (NAM)

• A group of states that are not formally aligned with or against any major power bloc in the world.

• It was formed during the Cold War era, when the world was divided into two main power blocs led by the United States and the Soviet Union.

• The movement was founded in 1961 by a group of countries, including India, Yugoslavia, and Egypt, who sought to promote peace, independence, and development in the face of the two superpowers' rivalry.

# **77** Option (c) is correct.

# Explanation:

• Asoke Kumar Mukerji was the permanent representative of India to the United Nations before Syed Akbaruddin.

• Mukherji held the position of Permanent Representative of India to the United Nations between the months of April 2013 and December 2015, and also held several other important positions in the Indian Foreign Service during his career.

• Syed Akbaruddin served as India's permanent representative to the UN from 2016 to 2019.

## **78** Option (d) is correct.

#### **Explanation**:

• The Democratic Presidential candidate and the first Hindu member of the US Congress who sued Google for at least \$50 million for its 'discriminatory actions' against 2020 election campaign is Tulsi Gabbard. • In July 2020, she filed a lawsuit against Google for allegedly suspending her campaign's advertising account during a crucial period, affecting her ability to reach potential voters.

#### **79** Option (b) is correct.

#### **Explanation**:

• The author of the book 'A Gallery of Rascals' is Ruskin Bond.

• Ruskin Bond is an Indian author of British descent, known for his contributions to the Indian literature in English.

• 'A Gallery of Rascals' is one of his popular works, which was published in the year 2014.

#### 80 Option (b) is correct.

#### **Explanation**:

• The first showroom in India of the retail furniture giant 'Ikea' was opened in Hyderabad in 2018.

• Ikea is a multinational furniture retail company based in Sweden.

• It is known for its modern and affordable home furnishings and has stores in several countries around the world.

• The company announced its entry into the Indian market in 2013 and opened its first showroom in Hyderabad in August 2018.

## **81** Option (c) is correct.

## **Explanation**:

• The Summer Olympic Games, which were originally scheduled for 2020, were held in Tokyo.

• The 2020 Summer Olympics, officially known as the Games of the XXXII Olympiad, were originally scheduled to be held in Tokyo, Japan, from July 24 to August 9, 2020.

 However, due to the COVID-19 pandemic, the games were postponed by a year and eventually held from July 23 to August 8, 2021.

• The next Summer Olympic Games are scheduled to take place in Paris, France in 2024.

## 82 Option (b) is correct.

#### Explanation:

• UNESCO inaugurated the celebration of 2019 as the International Year of the Periodic Table of Chemical Elements to celebrate its completion of 150 years.

• To commemorate the 150<sup>th</sup> anniversary of the periodic table, UNESCO declared 2019 as the International Year of the Periodic Table of Chemical Elements.

• The periodic table of chemical elements is a tabular representation of the chemical elements, arranged in order of their atomic number, electron configurations, and chemical properties.

• It was first published by the Russian chemist Dmitri Mendeleev in 1869.

#### **83** Option (d) is correct.

**Explanation:** The Parliament of India passed the 'Triple Talaq Law', endorsing the 2017 ruling of the Supreme Court of India that had made Triple Talaq (Talaq-e-Biddat) as unconstitutional.

• Triple Talaq is a practice under Islamic law, which allows a Muslim man to divorce his wife by uttering the word 'talaq' three times in quick succession.

• The practice had been in existence for centuries in India, but in 2017, the Supreme Court of India declared it as unconstitutional and struck it down.

• Following the court's ruling, the government introduced the Muslim Women (Protection of Rights on Marriage) Bill in the Parliament, which criminalizes the practice of Triple Talaq and makes it a punishable offense.

• The law aims to protect the rights of Muslim women and prevent the misuse of the practice of Triple Talaq.

## 84 Option (a) is correct.

Explanation:

• The BRICS Summit is an annual meeting of the leaders of the five BRICS countries - Brazil, Russia, India, China, and South Africa.

• The venue of the summit rotates among the member countries every year.

• The 2019 BRICS Summit was held in Brazil. It was the second time Brazil hosted the summit, the first being in 2014.

• The summit was held in Brasilia, the capital city of Brazil, on 13-14 November 2019.

## BRICS

■ It is an association of five major emerging economies - Brazil, Russia, India, China, and South Africa, that together represent about 42% of the world's population, 23% of the world's GDP, and 30% of the world's territory.

• BRICS was formed in 2006, and the first BRIC Summit was held in Yekaterinburg, Russia in 2009.

• South Africa joined the group in 2010, and the group was renamed BRICS.

• In August 2023, at the 15<sup>th</sup> BRICS Summit, South African President Cyril Ramaphosa announced that Argentina, Egypt, Ethiopia, Iran, Saudi Arabia and the United Arab Emirates had been invited to join the bloc. Full membership will take effect on 1 January 2024.

#### **85** Option (c) is correct.

#### Explanation:

• After Mukund Padmanabhan, the Editor-in-Chief of the newspaper 'The Hindu' was Suresh Nambath.

• He took over as the Editor-in-Chief of The Hindu in 2019, succeeding Mukund Padmanabhan.

#### The Hindu

• Established in 1878 as a weekly publication, The Hindu transformed into a daily newspaper in 1889.

 During the period when India was under British rule, the newspaper advocated for independence, albeit in a moderate tone.

## **86** Option (a) is correct.

## Explanation:

• Sachchidananda Sinha is widely regarded as the creator of Modern Bihar.

• He was an eminent lawyer and an active member of the Indian National Congress, who actively participated in the Home Rule League Movement.

• Besides being a prominent journalist and educationist, he also served as the first President of the constituent assembly (Interim).

• Sinha played a crucial role in the partition of Bihar from Bengal and Orissa from Bihar.

## **BPSC** Solved Paper (October 2019)

## **87** Option (a) is correct.

## Explanation:

• Swami Sahajanand Saraswati was the founder of Bihar Provincial Kisan Sabha.

• He was born in 1889 in a village in Bihar and was educated in Varanasi. He was deeply influenced by the teachings of Mahatma Gandhi and became actively involved in the Indian freedom struggle.

#### Bihar Provincial Kisan Sabha

• In 1929, Swami Sahajanand Saraswati formed the Bihar Provincial Kisan Sabha with the objective of promoting the interests of farmers and peasants in Bihar.

## 88 Option (b) is correct.

**Explanation:** The Dutch East India Company established its factory at Patna in the year 1632.

#### The Dutch East India Company

 Also known as the Vereenigde Oostindische Compagnie (VOC), was a major trading company in the 17<sup>th</sup> and 18<sup>th</sup> centuries.

• It was established in 1602 and had a significant presence in India, particularly in the coastal regions.

• In 1632, the Dutch East India Company set up a factory in Patna, which was an important center for trade and commerce in Bihar.

• The factory was primarily established to trade in textiles and opium, which were in high demand in Europe.

## **89** Option (a) is correct.

#### **Explanation**:

• Shri Krishna Singh was a prominent Indian nationalist leader and the first Chief Minister of Bihar.

• He established the Swaraj Dal in Bihar in 1923, which was a political party that aimed to promote Indian independence and fight against British colonial rule.

#### Swaraj Dal

• Established in 1923, and founded by Motilal Nehru and Chittranjan Das.

During the Gaya session of the Congress in 1922, C.

R. Das, who was presiding over the session, proposed a resolution to participate in the legislatures, but the resolution was not passed.

• Following this, C. R. Das and other leaders left the Congress and established the Swarajya Party, with C. R. Das serving as the party's President and Nehru as one of the Secretaries.

## **90** Option (b) is correct.

#### **Explanation:**

• The name by which Ashoka is generally referred to in his inscriptions is "Priyadarshi".

• The word "Priyadarshi" means "the one who looks with kindness".

• Most of the Ashoka's inscriptions were written in Prakrit language, which was the common language of his time.

• In these inscriptions, Ashoka referred to himself as "Devanampiya Priyadarshi", which means "Beloved of the Gods, Priyadarshi".

#### **91** Option (a) is correct.

#### **Explanation**:

• Sushruta is known for his work on medicine during the Gupta period.

• He is regarded as one of the founding fathers of surgery and is famous for his book "Sushruta Samhita", which is one of the earliest works on medicine in the world.

## **92** Option (c) is correct.

#### Explanation:

• The script of ancient India that was written from right to left is the Kharosthi script.

• The Kharosthi script was used in the northwestern regions of ancient India, including modern-day Afghanistan and Pakistan, during the period of the Mauryan Empire (322-185 BCE) and the Indo-Greek Kingdom (180 BCE – 10 CE).

• It was also used to write some of the Gandhara texts, including Buddhist scriptures.

• The Brahmi script on the other hand, was written from left to right and was used in various parts of ancient India, including the Mauryan Empire.

• The Sharada script is a script that was developed in Kashmir. It is written from left to right.

• The Nandnagari script is an old script that was used in northern India, especially in the Awadh region. It is also written from left to right.

#### **93** Option (b) is correct.

#### Explanation:

• The port that was in use for North Indian trade during the Gupta period was Tamralipti.

• Tamralipti, also known as Tamluk, was a port city located on the Bay of Bengal in present-day West Bengal, India.

It was an important center for trade and commerce during the Gupta period (320-550 CE), as it was a major port for the export of goods like textiles, spices, and perfumes, as well as the import of goods like gold, silver, and precious stones.

• Tamralipti was also an important center for Buddhism and had several monasteries and stupas.

• Kalyan was an important port during the Chalukya dynasty (6<sup>th</sup>-12<sup>th</sup> century CE), Broach during the Mauryan and Gupta periods, and Cambay during the medieval period.

#### **94** Option (a) is correct.

#### Explanation:

• Jahangir, the fourth Mughal Emperor, was a great patron of the arts and played a significant role in the development of Mughal painting.

• He was deeply interested in painting, and his reign (1605-1627 CE) saw a tremendous growth in the Mughal painting style.

• Under Jahangir's patronage, Mughal painting evolved into a distinctive style characterized by its rich colors, intricate details, and a combination of Persian and Indian elements.

• Humayun was the second Mughal Emperor and spent much of his reign in exile, while his son Akbar was known for his love of books and his patronage of calligraphy and miniature painting. Shahjahan was a great builder and patronized the arts, but his reign is more associated with architecture than painting.

## **95** Option (b) is correct.

**Explanation:** The Mansabdari system was introduced in Medieval India for facilitating recruitment to the army.

• The Mansabdari system was introduced by Emperor Akbar during the Mughal era in Medieval India. The word "Mansab" means "rank" or "position," and the Mansabdari system was a system of ranking and grading the nobles in the Mughal administration. The system was primarily introduced to facilitate recruitment to the army, which was crucial to the expansion and maintenance of the Mughal Empire.

• Under the Mansabdari system, every noble was assigned a rank or Mansab, which determined his status, salary, and the number of soldiers he was expected to maintain. The system also enabled the Mughal administration to keep track of the strength of the army and the loyalty of the nobles.

#### **96** Option (d) is correct.

## **Explanation**:

Ashta Pradhan was established by Shivaji.

• Ashta Pradhan, which means "Council of Eight Ministers", was a council of ministers established by Shivaji, the founder of the Maratha Empire, in the 17<sup>th</sup> century.

• The Ashta Pradhan was established by Shivaji to provide a centralized administration for the Maratha Empire, which had been expanding rapidly under his leadership.

## **97** Option (a) is correct.

#### **Explanation**:

• Firuz Shah Tughlaq built the maximum number of canals among the Delhi Sultans.

• Firuz Shah Tughlaq was a ruler of the Tughlaq dynasty in Delhi, who reigned from 1351 to 1388 CE.

• During his reign, he built several canals, including the Western Yamuna Canal, which brought water from the Yamuna River to the city of Delhi.

#### **98** Option (c) is correct.

#### Explanation:

• The Portuguese used Hooghly as a base for piracy in the Bay of Bengal.

• The Dutch and British were primarily interested in trade, while the French were more focused on establishing a political presence in the region.

## **99** Option (b) is correct.

#### **Explanation**:

• The suppression of Thugs, a notorious criminal group in India, was achieved under the leadership of Captain William Henry Sleeman.

• He was appointed as the superintendent of the newly formed Thuggee and Dacoity Department in 1835 and spent several years studying the methods and activities of the Thugs.

• He documented his experiences in a book titled "Ramaseeana", which provided detailed descriptions of the Thugs' methods and practices.

## **100** Option (b) is correct.

#### **Explanation**:

• Lord Lytton was the Viceroy of India from 1876 to 1880, during which he pursued an aggressive foreign policy towards Afghanistan.

• His policy was aimed at countering the growing influence of Russia in Central Asia and establishing British control over the region.

• To achieve this, he initiated the Second Anglo-Afghan War in 1878, which resulted in the British victory and the signing of the Treaty of Gandamak in 1879.

• The treaty allowed the British to control Afghanistan's foreign affairs, and the country became a British protectorate.

#### **101** Option (d) is correct.

**Explanation:** In 1930, Gandhi inaugurated the Civil Disobedience Movement by conducting the historic Dandi Salt March starting from Sabarmati Ashram to Dandi where he went on to break the Salt Law imposed by the British Government.

#### **Civil Disobedience Movement**

• A non-violent protest against British colonial rule in India.

• On March 12, 1930, Gandhi began his famous Salt March with his 78 followers. This also known as the Dandi March. The march was a 240-mile journey to the coastal town of Dandi in Gujarat, where Gandhi made salt by evaporating seawater in violation of the salt laws.

## **102** Option (b) is correct.

#### **Explanation:**

• The Sarabandi (no tax) movement of 1922 was spearheaded by Sardar Vallabhbhai Patel, a prominent Indian lawyer, political activist, and leader of the Indian National Congress who went on to become India's first Deputy Prime Minister.

• During this campaign, the peasants made a collective decision to refuse payment of taxes.

• Sardar Vallabhbhai Patel earned the nickname "Iron Man of India" due to his unwavering resolve and firm leadership.

#### **103** Option (a) is correct.

#### Explanation:

• The President of the Indian National Congress at the time of partition of India was J. B. Kripalani.

• He was the President of the Indian National Congress from 1946 to 1947.

• Kripalani was a follower of Mahatma Gandhi and actively participated in the Indian independence movement.

• He was known for his advocacy of socialism and his opposition to the partition of India.

## **104** Option (c) is correct.

#### Explanation:

• The 1857 Revolt, was a significant event in India's struggle for independence from British colonial rule.

• The revolt was led by a number of leaders across different regions of India, including Bihar. The leader who led the 1857 Revolt in Bihar was Kunwar Singh.

• Kunwar Singh was a zamindar from the Jagdishpur in Bihar.

• He was a prominent leader who played a significant role in the revolt against British rule in Bihar and other parts of the country.

#### **105** Option (a) is correct.

## Explanation:

• During the Non-Cooperation Movement in Bihar, the cultivators were led by Swami Vidyanand.

• Swami Vidyanand was a disciple of Swami Vivekananda and was deeply influenced by his teachings.

• He was actively involved in the Indian National Congress and played a key role in mobilizing the masses during the Non-Cooperation Movement in Bihar.

#### **Non-Cooperation Movement**

• The movement was led by Mahatma Gandhi, who believed that non-violent civil disobedience could be a powerful weapon against the British.

• The movement aimed to boycott British goods, institutions, and symbols of power, and to promote the use of Indian-made products.

#### **106** Option (a) is correct.

## **Explanation:**

• The state's forest cover occupies 7.75% of its total geographical area, covering an area of 7,299 sq km.

• The distribution of forest canopy density in the state is as follows: 332 sq km under very dense forest, 3,260 sq km under moderately dense forest, and 3,707 sq km under open forest.

• West Champaran (Paschim Champaran) has a larger area covered by dense deciduous forests, specifically in the Sub Himalayan foothills of the Someshwar and Dun mountain ranges where moist deciduous forests thrive.

• Kaimur (Bhabua), Jamui, and Nawada rank as the top three districts in terms of forest cover as a percentage of their geographical area.

## **107** Option (c) is correct.

#### **Explanation**:

• Patna district in Bihar has the Ganga River's longest stretch. The Ganga River in Patna district have a total length of 99 kilometres.

 Bhagalpur has the second longest stretch of approax 90 km.

## **108** Option (a) is correct.

#### **Explanation:**

• The population density per square kilometer area in Bihar increased significantly from 881 in 2001 to 1102 in 2011.

• Sheohar district has the highest population density, which was recorded at 1882 persons per square kilometer.

• Kaimur district has the lowest population density, recorded at 488 persons per square kilometer.

• The population density is relatively higher than the national average, which is 382 per sq km.

#### **109** Option (c) is correct.

#### Explanation:

• Japan is an island nation located in East Asia and has a group of islands in the Pacific Ocean, east of the Korean Peninsula.

• These islands stretch from the East China Sea in the south to the Sea of Okhotsk in the north.

• Japan shares maritime borders with PR China, North Korea, South Korea, the Philippines, Russia, Northern Mariana Islands (United States), and the Republic of China (Taiwan).

• Russia and South Korea are the two countries that lie close to Japan. The main islands of Japan are Kyushu, Shikoku, Hokkaido, and Honshu.

# 110 Option (b) is correct.

## Explanation:

• The country with the longest North-South (latitudinal) extension of its territory is Chile.

• Chile is the world's longest country from north to south with 2,647 miles long and spreads through 38 degrees of latitude.

## **111** Option (b) is correct.

**Explanation**:

• The country with the highest number of islands is Indonesia.

• Indonesia is an archipelago nation located in Southeast Asia and Oceania.

• It is composed of more than 17,000 islands, making it the country with the highest number of islands in the world.

• While the Philippines is also an archipelago nation with more than 7,000 islands, it has significantly fewer islands than Indonesia.

• The Maldives, on the other hand, is a small island nation composed of 26 atolls and over 1,000 coral islands.

• Cuba is an island nation in the Caribbean, but it has significantly fewer islands than Indonesia as well.

## **112** Option (d) is correct.

## **Explanation**:

• The largest producer of Saffron in the world is Iran, which produces around 90% of the world's saffron.

• Iran's saffron production is concentrated in the northeastern regions of the country, particularly in the Khorasan province.

• Spain is also a significant producer of saffron, but it produces only a fraction of what Iran produces.

• Greece is another country that produces saffron, but its production is even smaller than Spain's.

• New Zealand is not known to produce saffron on a large scale.

## **113** Option (a) is correct.

#### Explanation:

• The largest producer of Uranium in the world is Kazakhstan.

• Kazakhstan is the world's leading producer of Uranium, accounting for approximately 43% of global production.

• Canada is the second-largest producer, accounting for around 13%, followed by Australia at around 12%.

• France, on the other hand, is not a significant producer of Uranium.

• Kazakhstan, Canada, and Australia accounting for more than two-thirds of global production.

#### 114 Option (c) is correct.

## **Explanation**:

• The Cardamom Hills are situated closer to Kanyakumari and are to the south of the Annamalai Hills, separated from them by the Shenkottai pass.

• They are also known as Sahyadri in Maharashtra, Nilgiri hills in Karnataka and Tamil Nadu, Anaimalai hills (Highest Peak-2695 m), and Cardamom hills in Kerala.

#### **115** Option (b) is correct.

## **Explanation:**

• North Koel is the tributary that is a part of the Ganga river basin.

• The North Koel river originates on the Chhota Nagpur plateau and flows into Latehar district in the Indian state of Jharkhand.

• The Son River is a tributary of the Ganges River, is the longest river in India and holds significant religious and cultural importance for Hindus.

• As the Son River is a tributary of the Ganges River, the North Koel river is also a part of the Ganga River Basin.

#### **116** Option (d) is correct.

#### **Explanation**:

• Girnar is the hill that does not have tea plantations. Girnar is an ancient hill in Junagadh, Gujarat, India.

• Kanan Devan, Nilgiri, and Darjeeling hills are all known for their tea plantations.

• Kanan Devan is a hill station located in the Idukki district of Kerala, and it is known for its tea plantations that produce high-quality tea.

• Nilgiri hills, located in the Western Ghats of Tamil Nadu, is also a famous tea-producing region.

 Darjeeling, situated in West Bengal, is renowned for its tea plantations that produce some of the world's best teas, including Darjeeling tea.

## **117** Option (c) is correct.

#### Explanation:

 Madhya Pradesh is the state in India with the largest area under dense deciduous forest cover.

• As per the India State of Forest Report 2021, the largest area under dense deciduous forest cover in India is in the state of Madhya Pradesh.

#### **118** Option (a) is correct.

#### **Explanation:**

Coral reefs are not found in the Gulf of Cambay.

• Corals are a type of marine invertebrate that provide a complex habitat and shelter for many marine species.

• These organisms form reefs by grouping together in colonies held together by calcium carbonate.

• In India, coral reefs can be found in the Gulf of Mannar, Gulf of Kachchh, Lakshadweep, and Minion Island.

• Coral reefs require specific conditions to thrive, including warm, shallow, clear, and agitated water with plenty of sunlight.

#### **119** Option (d) is correct.

#### **Explanation:**

• As per the 2011 Census, Jains have recorded the highest percentage of literacy rate among the above religious groups.

• The literacy rate of Jains is 94.9%, which is significantly higher than the national average literacy rate of 74%.

• Jains have the highest literacy rates for both males (97.4 per cent) and females (90.6 per cent). In the second place Christians have 84.4 per cent for males and 76.2 per cent for females. While for males, Buddhists (83.1 per cent) occupy the third position, for females the position has gone to Sikhs (63.1 per cent).

## 120 Option (d) is correct.

#### Explanation:

• Todas are a tribe indigenous to the Nilgiri hills in Tamil Nadu, and not from Kerala.

• The Toda tribe is mainly found in the Nilgiri district of Tamil Nadu, where they are known for their unique culture and customs, such as their distinctive houses and shawls.

 Bhils - Gujarat : Bhils are mainly found in the states of Gujarat, Rajasthan, and Madhya Pradesh. They are one of the largest tribes in India.

• Gaddis - Himachal Pradesh : Gaddis are a semi-nomadic tribe that mainly inhabit the higher regions of the Himalayas, particularly in the state of Himachal Pradesh.

• Kotas - Tamil Nadu : Kotas are an indigenous tribe found in the Nilgiri hills of Tamil Nadu, where they are known for their traditional farming practices and handicrafts.

## 121 Option (c) is correct.

#### Explanation:

 The industrial/economic corridor of India that is being developed in collaboration with Japan is Delhi – Mumbai.

• The Delhi-Mumbai Industrial Corridor (DMIC) is a mega-infrastructure project aimed at developing a high-tech industrial zone spanning across six states in India, namely Uttar Pradesh, Haryana, Rajasthan, Madhya Pradesh, Gujarat, and Maharashtra.

#### **122** Option (b) is correct.

#### Explanation:

• Rohtas district does not have Dharwar geological formations. Kaimur pathar that is the eastern extension of the Vindhyan Rocks are found in the Rohtas and Kaimur ditricts.

• The development period of Dharwar geological formations ranges from 4 billion years ago to approximately 1 billion years ago.

• These formations are highly metamorphosed sedimentary rock systems that were formed due to the metamorphosis of sediments of Archaean gneisses and schists.

• They are considered the oldest metamorphosed rocks and are economically significant due to their valuable mineral content such as high-grade iron-ore, manganese, copper, lead, gold, etc.

• Dharwar geological formations are found in abundance in the Dharwar district of Karnataka.

# **123** Option (c) is correct.

## Explanation:

• The number of districts situated on the bank of the Ganga river in Bihar State is 12.

■ These districts are: Buxar, Bhojpur, Saran, Patna, Vaishali, Samastipur, Begusarai, Munger, Khagaria, Katihar, Bhagalpur, Lakhisarai.

• Left Tributaries: Karnali, Mahakali, Gandak, Kosi Ramganga, Ghagra, Mahananda, etc.

**Right Tributaries:** Yamuna, Son, Chambal, etc.

## **124** Option (c) is correct.

#### **Explanation:**

• Bhimbandh Wildlife Sanctuary is located in the Munger district of Bihar, India. It is situated at the border of Munger and Jamui districts and covers an area of approximately 682.96 sq km. The sanctuary is surrounded by the Kharagpur Hills, which are a part of the Eastern Ghats.

• Valmiki Wildlife Sanctuary is located in West Champaran district, Rajgir Wildlife Sanctuary is located in Nalanda district, and Gautam Buddha Wildlife Sanctuary is located in Gaya district.

## **125** Option (b) is correct.

## **Explanation:**

• According to the 2011 Census, Gopalganj district recorded the highest sex ratio in Bihar, with 1015 females per 1000 males.

• Conversely, Bhagalpur and Munger districts had the lowest sex ratio, with 879 females per 1000 males.

• The population of Bihar was 103,804,637, with a growth rate of 25.07%.

■ The literacy rate in Bihar was 63.82%, with male literacy at 73.39% and female literacy at 53.33%.

• The district with the highest literacy rate was Rohtas with 75.59%, and Purnia had the lowest literacy rate at 52.49%.

## **126** Option (a) is correct.

## **Explanation**:

• A Patwari is a village-level government official responsible for maintaining and updating land ownership records, which include information such as the area of land, ownership details, and cultivation details.

• They are also responsible for collecting revenue and taxes on behalf of the government and settling disputes related to land.

• Lambardar is a revenue officer who acts as an intermediary between the villagers and the government.

• Zamindar is a historical term used for a landowner who held a large estate or zamindari.

 Zaildar is a historical term used for a revenue collector or a military leader in the Mughal Empire.

## 127 Option (c) is correct.

## **Explanation**:

• Unitary Form of Government is not ideal for large countries.

• Unitary form of Government is a type of government in which the power is concentrated in the hands of a central government, and the local or regional governments derive their powers from the central government.

• The central government has the authority to make laws, impose taxes, and make policies for the entire country or state.

• It is not ideal for large countries because the central government may not have the ability to effectively manage and govern every region of the country. This can result in a lack of responsiveness to local needs and a feeling of alienation among citizens living in remote regions.

## **128** Option (e) is correct.

## Explanation:

• The objective of Community Development Programmes (CDPs) is to improve the social, economic, and environmental conditions of communities. The primary focus of CDPs is to empower individuals and communities to take collective action to identify and address their needs and aspirations.

• The specific goals of CDPs can vary depending on the needs of the community being served, but generally include the following:

Improving standards of living

• Helping villages in planning

• Political training

• In summary, the objective of CDPs is to support communities in achieving sustainable development, improving their standard of living, and enhancing their participation in decision-making processes.

#### **129** Option (a) is correct.

#### Explanation:

• It was founded in November 2012 by Arvind Kejriwal and his then-companions, following the 2011 Indian anticorruption movement. AAP is currently the governing party in the Indian state of Punjab and the union territory of Delhi. On 10 April 2023, AAP was officially granted the status of National party by ECI.

• **State party:** A state party is a political party that is recognized and registered by the Election Commission of India (ECI) as a state-level party.

• National party: A national party is a political party that is recognized and registered by the ECI as a nationallevel party. These parties have a presence in multiple states or Union Territories and have received at least 6% of the valid votes polled in any four or more states at a general election to the Lok Sabha or to the Legislative Assembly of a state.

• **Regional Party:** A regional party is a political party that is recognized and registered by the ECI as a state-level or a multi-state level party.

• **Registered Party:** A registered party is a political party that is registered with the ECI. These parties can be state-level or national-level parties, but they may not have the same recognition as state or national parties.

## 130 Option (d) is correct.

## **Explanation**:

• The constitutional remedy known as 'postmortem' is Quo Warranto.

• **Prohibition:** This writ is issued by a higher court to a lower court or tribunal, prohibiting it from exceeding its jurisdiction or acting contrary to the rules of natural justice.

• **Mandamus:** This writ is issued by a higher court to a lower court, public authority, or any person, requiring them to perform a public or statutory duty that they have failed to perform.

• **Certiorari:** This writ is issued by a higher court to a lower court, tribunal, or any public authority, quashing its decision or order that is either erroneous, ultra vires or illegal.

• **Quo Warranto:** This writ is issued by a court or a person with a legal interest in a public office, questioning the legality of the person holding the office, and seeking their removal from the position, hence it is know as the postmortem remedy.

#### **131** Option (c) is correct.

#### **Explanation:**

• The VVPAT machines used in India were the upgraded version of M1 VVPAT, known as M3 VVPAT.

• M3 VVPAT stands for "Model 3 Voter Verifiable Paper Audit Trail". It is a type of Voter Verifiable Paper Audit Trail (VVPAT) system used in India during elections.

## **132** Option (b) is correct.

#### **Explanation:**

• The number of members in the State Legislature of an Indian state is determined by its population size and is specified in the Constitution of India.

• Out of the given options, Himachal Pradesh has the largest number of members in its Legislative Assembly with a total of 68 seats.

 Arunachal Pradesh has 60 seats, Manipur has 60 seats, and Meghalaya has 60 seats in their respective Legislative Assemblies.

• The state with the highest number of seats in its Legislative Assembly is Uttar Pradesh with 403 seats.

• The state with the lowest number of seats in its Legislative Assembly is Sikkim with 32 seats.

• As per Article 170 of the Indian Constitution, the Legislative Assembly is composed of a minimum of 60 members and a maximum of 500 members.

#### **133** Option (e) is correct.

#### **Explanation**:

• The Indian Order of Precedence is a protocol list used to determine the ranking of officials in the Indian government and diplomatic hierarchy.

• The order of precedence is primarily based on the rank of the office, with seniority being given to the higher office.

Priority	Posts
1.	President
2.	Vice President
3.	Prime Minister
4.	Governor of States
5.	Former Presidents

All the given options have same precedence.

## **134** Option (e) is correct.

**Explanation:** In a Parliamentary Form of Government, the legislature and the executive are not independent, but are rather interdependent.

• The executive is responsible to the legislature, and the legislature holds the executive accountable for its actions. The executive branch, which is responsible for implementing laws and policies, is formed by the majority party or coalition in the legislature. The head of the executive is usually the Prime Minister, who is also a member of the legislature. • The Judiciary, on the other hand, is an independent branch of government, responsible for interpreting the laws and adjudicating disputes. It is not responsible to the Legislature or the Executive, and its decisions cannot be overruled by them.

• The President, in India Parliamentary Form of Government, is usually a ceremonial head of state and does not hold significant political power. The President is not responsible to the Judiciary.

## **135** Option (c) is correct.

#### **Explanation:**

• Under the Panchayati Raj System, the Gram Panchayat is the basic unit of local self-government.

• Khap Panchayats and Caste Panchayats, on the other hand, are traditional institutions that have existed in rural India for centuries.

• They are not constituted under the Panchayati Raj System and are not recognized by the Indian Constitution.

#### Panchayati Raj System

• It was established in 1992 with the passing of the 73<sup>rd</sup> Amendment to the Indian Constitution.

• It is a village-level democratic institution that is responsible for the administration of rural areas.

• The members of the Gram Panchayat are elected by the people of the village through a democratic process.

• The Gram Panchayat is responsible for a range of functions, including sanitation, primary education, health care, and minor irrigation.

#### **136** Option (a) is correct.

#### **Explanation**:

• As per the Census 2011, the child sex ratio in Bihar is 935. As per the fifth round of the National Family Health Survey (2019-21), the sex ratio of Bihar is 916.

• The child sex ratio is defined as the number of girls per 1000 boys in the age group of 0-6 years.

• The child sex ratio in Bihar was 935, which means there were 935 girls for every 1000 boys in the age group of 0-6 years. This was a decline from the child sex ratio of 947 recorded in the Census 2001.

■ National Child sex ratio is 927 as per the 2011 Census.

• The National sex ratio is 943 while sex ratio of bihar is 918.

## **137** Option (b) is correct.

#### **Explanation**:

• The economy of the state witnessed varying growth rates across its sectors in 2017-18.

• The primary sector, consisting of agriculture and allied activities such as forestry and fishery, recorded a growth rate of 1.4%.

• The secondary sector, which includes mining, quarrying, manufacturing, and construction, grew at a rate of 2.5%.

■ Meanwhile, the tertiary sector, comprising trade, hotels, railways, and roads, among others, saw a substantial growth rate of 14.6%.

## **138** Option (a) is correct.

## **Explanation**:

■ In the year 2017-18, the Gross State Domestic Product (GSDP) of Bihar at current prices was recorded at ₹4,87,628 crores.

• According to the economic survey report of 2018-19, Bihar had the highest GSDP growth rate of 11.3% in the country.

## **139** Option (a) is correct.

## **Explanation:**

• The Integrated Rural Development (IRD) programme was initiated during the Sixth Five-Year Plan in India.

• The plan period for the Sixth Five-Year Plan was from 1980-81 to 1984-85.

• The objective of the IRD programme was to provide a comprehensive package of rural development services to villages and small towns, with the goal of improving the quality of life of rural people and reducing poverty.

• The programme aimed to integrate various components of rural development, such as agriculture, animal husbandry, forestry, and rural industries, to create a sustainable development model.

## Five Year Plan

• A series of national economic development plans in India that have been implemented since 1951.

• The main objective of these plans is to promote rapid economic growth and development across the country by providing a roadmap for the allocation of resources and investment in various sectors of the economy.

• India has had twelve Five-Year Plans so far. The first Five-Year Plan was launched in 1951 under the leadership of India's first Prime Minister, Jawaharlal Nehru.

## 140 Option (d) is correct.

## **Explanation:**

• The Antyodaya Programme was first launched in the state of Rajasthan. The program was launched by the Ministry of Rural Development in 2000 with the aim of providing food security to the poorest of the poor families in the country.

• Under the Antyodaya Programme, households that are identified as the poorest of the poor are provided with highly subsidized food grains. The program primarily targets families below the poverty line who are not covered by any other government-sponsored food security program.

• Tamil Nadu was the first state to universalize the Public Distribution System (PDS) by introducing the concept of fair price shops in the 1960s, which later became a model for other states to follow.

## **141** Option (e) is correct.

## Explanation:

• India exported around \$3.3 billion worth of meat products in 2017.

• It's worth noting that India's share in the global meat trade is relatively small compared to countries like the United States, Brazil, and Australia, which are major players in the industry.

• However, India is still a significant exporter of meat products, particularly in the areas of buffalo meat and goat meat.

## 142 Option (b) is correct.

## Explanation:

• The system under which the peasant himself owns the land and was responsible for payment of land revenue to the Government was known as Ryotwari System.

• In the Ryotwari System, the peasant is the owner of the land and is directly responsible for payment of land revenue to the Government.

• The Ryotwari System was introduced by Thomas Munro, a British administrator who served as the Governor of Madras Presidency from 1820 to 1827. The Ryotwari System was later extended to other regions in India under British rule.

• The Zamindari System was prevalent in North India, particularly in Bengal, Bihar, and Uttar Pradesh. Under this system, the landowner or zamindar was the owner of the land, and the peasants were tenants who paid rent to the zamindar.

• The Mahalwari System was prevalent in Central India and parts of North India, particularly in Punjab and Rajasthan. Under this system, the village community collectively owned the land, and the revenue was collected from the community as a whole. The Mahalwari System was introduced by Holt Mackenzie, who was the Governor of the North-Western Provinces from 1831 to 1836.

• The Dahsala System was a land revenue system that prevailed in the Mughal Empire and was continued by the British East India Company.

## 143 Option (d) is correct.

## Explanation:

■ As per the state year 2018-19 report, India's foreign exchange reserves was US \$ 422.2 billion in June 2019.

■ If we convert US \$ 422.2 billion in INR at that time, It will be around approximately 29.4 trillion Indian rupees, which is close to ₹28, 55, 882 crores.

## 144 Option (e) is correct.

## Explanation:

• NABARD (National Bank for Agriculture and Rural Development), Regional Rural Banks, State Bank of India and Allahabad bank all provide direct finance to various sectors of the economy.

• NABARD primarily provides finance for agriculture and rural development, while Regional Rural Banks provide credit and other financial services to rural areas.

• State Bank of India is a commercial bank that provides a wide range of financial services, including direct finance.

• Allahabad Bank was merged with Indian Bank in 2020 and no longer operates as a separate entity.

## 145 Option (c) is correct.

# Explanation:

• The full form of EPCG is Export Promotion Capital Goods.

• EPCG is a scheme introduced by the Government of India to promote exports by enabling Indian manufacturers to import capital goods at a concessional customs duty rate, subject to an export obligation. • The scheme was introduced by the Government of India in the year 1990-91 as part of the Export-Import Policy (EXIM policy) of India.

• The scheme aims to make Indian manufacturers globally competitive by providing them with state-of-the-art technology and equipment.

• The EPCG scheme is administered by the Directorate General of Foreign Trade (DGFT), which is part of the Ministry of Commerce and Industry.

#### **146** Option (c) is correct.

**Explanation:** 

Pradhan Mantri Shram Yogi Maan-dhan (PM-SYM) Scheme:

• The PM-SYM scheme is a voluntary and contributory pension scheme for unorganized workers in India, which was launched in February 2019.

• It is administered by the Ministry of Labour and Employment, Government of India.

• Under this scheme, eligible unorganized workers between the age group of 18 to 40 years can enroll themselves and make a monthly contribution towards their pension fund till they attain the age of 60 years. The monthly contribution ranges from  $\overline{\mathbf{x}}$  55 to  $\overline{\mathbf{x}}$  200, depending on the age of the subscriber at the time of enrollment.

■ Once the subscriber reaches the age of 60 years, they become eligible to receive a minimum monthly pension of ₹3,000.

## **147** Option (a) is correct.

**Explanation:** The Minimum Support Price (MSP) in India is determined by the Commission for Agricultural Costs and Prices (CACP), which is a statutory body under the Ministry of Agriculture and Farmer's Welfare.

## The Minimum Support Price (MSP)

• The minimum price at which the government purchases crops from farmers, to protect them from any sharp fall in farm prices due to overproduction or any other factors. The MSP provides a safety net to farmers and ensures that they get a remunerative price for their crops.

• The CACP recommends the MSP for 23 crops, which includes 7 cereals, 5 pulses, 7 oilseeds, and 4 commercial crops, based on factors such as the cost of production, domestic and international prices, demand and supply, market trends, and other factors deemed relevant. The MSP is announced by the Government of India based on the recommendations of the CACP.

#### 148 Option (b) is correct.

#### **Explanation:**

• The term "Hindu Growth Rate" was coined in the 1970s to describe the sluggish economic growth rates that were prevalent in India during that time.

• GDP is the total value of goods and services produced in a country, and economic growth rate measures the change in GDP over time.

Therefore it is closely related to GDP.

• It was coined by Professor Rajkrishna, an Indian economist, in 1978.

• This term was based on the perception that the Indian economy was not growing at the same pace as other Asian economies, such as Japan, South Korea, and Taiwan.

• The term "Hindu Growth Rate" has nothing to do with Hinduism or religion.

#### 149 Option (b) is correct.

#### Explanation:

• The three-day Krishi Kumbh Mela 2019 was inaugurated in Motihari by Governor Lalji Tandon and Union Agriculture Minister Radha Mohan Singh jointly.

• Over fifteen thousand farmers from different states and about two hundred agricultural scientists have participated.

• The main objective of Krishi Kumbh is to introduce modern techniques and diversification in agriculture that could help in doubling farmers income.

• The government is working towards building a strong infrastructure from "Beej to Bazar" to enhance the income of farmers.

#### **150** Option (c) is correct.

## Explanation:

• In NITI Aayog's Health Index, 2019, The state of Uttar Pradesh has maintained its position at the lowest rank on the list, with its score decreasing to 28.61.

• Additionally, Bihar (32.11), Odisha (35.97), and Madhya Pradesh (38.39) are among the other states with lower scores on the list.

#### Health Index

• The NITI Aayog's Health Index is a tool to measure and evaluate the performance of states and union territories in the health sector in India.

The index was first launched in 2018.

• The Health Index evaluates the states and union territories based on various health indicators such as infant mortality rate, maternal mortality rate, neonatal mortality rate, total fertility rate, vaccination coverage, and the availability of healthcare infrastructure.

