

Odisha Police

**Previous Year
Paper SI Preliminary
2017**

CPSE(Prelim) – 2017 – Set – 4
GA

Time : 1 hour

Full Marks : 100

Each question carries 1 mark

There is negative marking of 0.25 mark for each wrong answer.

Answer all questions, choosing the correct one from the alternatives suggested and darken the appropriate circle using BLUE or BLACK BALL POINT PEN.

1. Which city has been the venue of the South Asian Winter Games held in December, 2019 ?
 - (1) Dhaka
 - (2) Kabul
 - (3) Kathmandu
 - (4) Thimphu
2. With which country has India signed the 'Polar Science Cooperation Agreement' of late ?
 - (1) Denmark
 - (2) Norway
 - (3) Russia
 - (4) Sweden
3. Akkitham Achuthan Namboothiri, the recipient of the Jnanpith Award for the year 2019, is a :
 - (1) Critic and Columnist
 - (2) Novelist
 - (3) Playwright
 - (4) Poet
4. The Islamic State sponsored terrorist, Ushman Khan, was involved in which of the following incidents recently ?
 - (1) Car bombing in Syria
 - (2) London Bridge stabbing
 - (3) Shooting in Mali
 - (4) Suicide bombing in Indonesia
5. Tijjani Muhammad-Bande of Nigeria is currently the :
 - (1) Managing Director and Chairperson of the IMF
 - (2) Executive Director of the UNICEF
 - (3) President of the UN General Assembly
 - (4) Secretary General of the UNCTAD

6. Which of the following was the only Harappan city without a citadel ?

- (1) Chanhu-daro
- (2) Kalibangan
- (3) Lothal
- (4) Ropar

7. Aryans were primarily :

- (1) Horse traders
- (2) Semi-nomadic pastoralists
- (3) Settled agriculturists
- (4) Warriors

8. Which of the following Vedas is a collection of melodies ?

- (1) Atharva Veda
- (2) Rig Veda
- (3) Sama Veda
- (4) Yajur Veda

9. Which among the following concepts was added by Vardhaman Mahabira to the teachings of the Jain Tirthankar Parswanath ?

- (1) Celibacy
- (2) Non-injury
- (3) Non-possession
- (4) Non-stealing

10. Match each of the following 'Mahajanapadas' in Column - A with

their 'Capitals' in Column - B and select the correct answer set from the table given below

Column - A

Column - B

- | | |
|------------|-----------------|
| (a) Assaka | (i) Kaushambi |
| (b) Avanti | (ii) Paudanya |
| (c) Kosala | (iii) Shravasti |
| (d) Matsya | (iv) Ujjaini |
| (e) Vatsa | (v) Vaishali |
| | (vi) Viratnagar |

Answers

(1)	(a) - ii	(b) - iv	(c) - iii	(d) - vi	(e) - v
(2)	(a) - ii	(b) - iv	(c) - iii	(d) - vi	(e) - i
(3)	(a) - iii	(b) - v	(c) - ii	(d) - vi	(e) - i
(4)	(a) - ii	(b) - iv	(c) - iii	(d) - v	(e) - i

11. In the Sarnath inscription Emperor Ashoka's name appears as :

- (1) Buddhashakya
- (2) Debanampiya
- (3) Dharmashoka
- (4) Piyadassi

12. Which of the following pairs of dynasties that ruled Kalinga and their prominent Kings is correctly matched ?

- (1) Bhauma Dynasty - Sailobhava
- (2) Cheti Dynasty - Kharavela
- (3) Satavahana Dynasty - Yayati
- (4) Soma Dynasty - Pulakesi

13. Who among the following Central Asian rulers in India had started the 'Saka Era' ?
- (1) The Indo-Greeks
 - (2) The Kushans
 - (3) The Parthians
 - (4) The Scythians
14. Which of the following pair of the Gupta rulers and their adopted titles is incorrectly matched ?
- (1) Chandragupta-I – Simhaviikrama
 - (2) Chandragupta-II – Vikramaditya
 - (3) Kumaragupta-I – Mahendraditya
 - (4) Samudragupfa – Vikramanka
15. Three of the following literary works is the contribution of the famous king Harsha Vardhana, while the other one has been written by Banabhatta, who adorned his court. Identify the contribution of Banabhatta :
- (1) Kadambari
 - (2) Nagananda
 - (3) Ratnavali
 - (4) Priyadarshika
16. Who among the following Chola Kings had founded the largest dominion in South India ?
- (1) Aditya – I
 - (2) Parantaka – I
 - (3) Rajaraja – I
 - (4) Rajendra – I
17. To which of the following Rajput clans did the famous King Raja Bhoj belong ?
- (1) Chandellas
 - (2) Parmars
 - (3) Pratiharas
 - (4) Solankis
18. By virtue of his win in which of the following battles Babur got the opportunity to expand his small principality into a big empire ?
- (1) Battle of Chanderi
 - (2) Battle of Ghagra
 - (3) Battle of Khanwa
 - (4) Battle of Panipat
19. Which of the following taxes was exclusively imposed on the non-Muslims by Firoz Shah Tughlaq ?
- (1) Jajiya
 - (2) Khams
 - (3) Kharaj
 - (4) Zakat
20. The greatest musician Tansen, who adorned Akbar's court, was the follower of :
- (1) The Chisti order
 - (2) The Firdausi order
 - (3) The Shattari order
 - (4) The Suharwadi order

21. Which of the following Peshwa rulers had signed the 'Treaty of Bassein' with the British ?
- (1) Baji Rao II
 - (2) Madho Rao
 - (3) Madho Rao Narayan
 - (4) Narayan Rao
22. During the tenure of which Governor General of the East India Company was the Anglo-Nepal War fought ?
- (1) Lord Amherst
 - (2) Lord Hastings
 - (3) Lord Minto - I
 - (4) Lord William Bentinck
23. During the British rule in India, the Ahmedia Movement was started by :
- (1) Mirza Ghulam Ahmed
 - (2) Muhammad Qasim Nanautavi
 - (3) Rashid Ahmed Gangohi
 - (4) Sir Syed Ahmed Khan
24. Who was the Viceroy of the British India during 1869-1872 ?
- (1) Lord Elgin
 - (2) Lord Lawrence
 - (3) Lord Mayo
 - (4) Lord Northbrook
25. Three of the following facts relates to the tenure of Lord Irwin, the Viceroy of British India. Which is the other one ?
- (1) Civil Disobedience Movement
 - (2) Dandi March
 - (3) Kakory Train Robbery
 - (4) Visit of Simon Commission to India
26. Find the wrong word in the following sentence :
Her parents insisted on me attending the marriage of their only daughter.
- (1) Attending
 - (2) Me
 - (3) On
 - (4) Only
27. Fill in the blank in the following sentence with the correct preposition :
All the members present in the meeting agreed _____ my proposal.
- (1) on
 - (2) to
 - (3) upon
 - (4) with
28. Which is the superlative form of the word 'bad' ?
- (1) Most bad
 - (2) Very bad
 - (3) Worse
 - (4) Worst

29. Which will be the first word if the sentence "Sachin broke his leg in an accident" is transformed to passive voice ?

- (1) His
- (2) Leg
- (3) Sachin
- (4) Sachin's

30. Fill in the blank with the most appropriate word in the following sentence :

Everyone is allowed to express _____ opinion.

- (1) her
- (2) his
- (3) one's
- (4) own

31. Find the right verb to fill in the blank in the following sentence :

_____ either of you seen my purse ?

- (1) Did
- (2) Has
- (3) Have
- (4) Was

32. What part of speech is the word 'lenient' ?

- (1) Adjective
- (2) Adverb
- (3) Noun
- (4) Preposition

33. Find the wrong part by its number from the sentence given below :

The husband asked his wife (1)
to wait for him near the gate (2)
until (3) he did not come back (4).

- (1) 1
- (2) 2
- (3) 3
- (4) 4

34. What is the one word substitute for the expression "the things that have no life" ?

- (1) Inactive
- (2) Inanimate
- (3) Unanimate
- (4) Unlively

35. Which is the appropriate phrasal verb for the word "postpone" in the following sentence ?

The Chairman had to postpone the meeting.

- (1) put of
- (2) put off
- (3) put out
- (4) put up

36. By reversing both the digits of the number B we get the number A. If the number A is greater than the number B by 45, find the number A :

- (1) 54
- (2) 63
- (3) 72
- (4) 81

$$[(3 \times 3 \times 3 \times 3 \times 3 \times 3)^6 \div (3 \times 3 \times 3 \times 3)^7 \times 3^4]$$

(1) 3^{15}

(2) 3^{20}

(3) 27^4

(4) 27^9

38. The sum of squares of two numbers is 225 and the difference between the two numbers is 3. Find the two numbers:

(1) 10 and 7

(2) 12 and 9

(3) 15 and 12

(4) 17 and 14

39. What is the average of the natural numbers from 1 to 95?

(1) 47.5

(2) 48

(3) 96

(4) 105

40. The ratio of the areas of two squares is 1 : 4. What is the ratio of their perimeters?

(1) 1 : 2

(2) 1 : 4

(3) 1 : 6

(4) 1 : 8

41. $4^{61} + 4^{62} + 4^{63} + 4^{64} + 4^{65}$ is divisible by:

(1) 3

(2) 5

(3) 7

(4) 11

42. Find the value of $\sqrt{\frac{125}{2}}$ by taking the value of $\sqrt{10}$ as 3.16:

(1) 6.50

(2) 7.90

(3) 10.15

(4) 10.75

43. Which among the following numbers is the least of the four?

(1) 0.2

(2) $0.\bar{2}$

(3) $(0.2)^2$

(4) $\frac{1}{0.2}$

44. Some chocolates were purchased out of which $\frac{2}{5}$ th was distributed among the students of Class - I and thereafter, $\frac{3}{4}$ th of the remainder were distributed among the students of Class - II. If still 75 chocolates were left out, then how many chocolate were purchased?

(1) 250

(2) 500

(3) 750

(4) 1000

15. Find the value of p by simplifying the following equation :

$$\frac{1293 \times 8.4}{0.03 \times p} = \frac{0.07 \times 431}{0.5}$$

- (1) 3000
(2) 3333
(3) 6000
(4) 9000

$$\frac{1293 \times 84}{100 \times p} = \frac{0.7 \times 431}{5}$$

46. The average of the ages of Dipak and Suresh is 30 years, while the average of the ages of Suresh and Sumit is 32 years. If the average of the ages of Sumit and Dipak is 34, then what is the age of Sumit ?

- (1) 34
(2) 35
(3) 36
(4) 37

47. Hari covers a distance in 6 minutes at the speed of 24 km per hour. what will be his speed if he wants to return back to his starting point in 8 minutes ?

- (1) 15 km/hour
(2) 18 km/hour
(3) 21 km/hour
(4) 24 km/hour

48. If 24 men or 32 women can do a work in 172 days, how long will 42 men and 30 women take to do the same work ?

- (1) 60

- (2) 64
(3) 75
(4) 86

49. Two trains A and B leave Howrah for Chennai at 8:00 pm and 8:30 pm respectively and run nonstop at speeds of 90 km/hr and 120 km/hr. respectively. At what distance from Howrah, will the two trains meet ?

- (1) 120 km
(2) 180 km
(3) 240 km
(4) 360 km

$$\begin{array}{r} 120 \\ 240 \\ \hline 360 \end{array}$$

50. A fixed deposit of Rs. 1,00,000 in a bank earns an interest of Rs. 14,490 @7% compounded annually. What is the time period of the deposit ?

- (1) $1\frac{1}{2}$ years
(2) 2 years
(3) $2\frac{1}{2}$ years
(4) 3 years

51. P, Q and R together invested Rs. 50,000 for a business. P subscribed Rs. 4,000 more than Q while Q subscribed Rs. 5,000 more than R. What will be P's share if the total profit is Rs. 25,000 at the end of the year ?

- (1) Rs. 6,000
(2) Rs. 8,500
(3) Rs. 10,500
(4) Rs. 13,600



$$\begin{array}{r} m \quad w \\ 24 \quad 32 \\ \hline 42 \quad 30 \\ \hline 172 \end{array}$$

$$\begin{array}{r} X^2 \text{ (Turn over)} \\ 24 \quad 32 \quad 172 \\ \hline 42 \quad 30 \quad 172 \end{array}$$

52. Shruti made a purchase of several number of three articles P, Q and R in the proportion 3 : 2 : 3 by paying a total amount of Rs. 4,800. If the unit costs of the articles P, Q and R are Rs. 200, Rs. 90 and Rs. 60 respectively, how many articles of Q must have been purchased by her?

- (1) 8
(2) 10
(3) 12
(4) 14

53. Three numbers are in the ratio of $\frac{1}{2} : \frac{2}{3} : \frac{3}{4}$. If the difference between the smallest and largest numbers is 36, find the numbers:

- (1) 60, 72, 96
(2) 72, 84, 96
(3) 72, 84, 108
(4) 72, 96, 108

54. If 'air' is called 'green', 'green' is called 'red', 'red' is called 'sea', 'sea' is called 'blue', 'blue' is called 'water' and 'water' is called 'pink', then what will be the colour of grass called?

- (1) Air
(2) Green
(3) Pink
(4) Red

55. Which number will replace the '?' mark in the following series?

28, 33, 31, 36, 34, 39, ?

- (1) 35
(2) 37
(3) 42
(4) 44

56. In the following table the digits vis-à-vis coded letters are given.

What will be the code of the number :

3060589404 ?

Number	9	8	7	6	5	4	3	2	1	0
Letter	Q	U	I	C	K	L	Y	R	O	D

- (1) YDCDKUQLDL
(2) YDCDKQULDL
(3) YDCDKULQDL
(4) YDCDKUDLQL

YDCDKU7L
YDCDKUAL

57. In a class five students – P, Q, R, S and T are sitting in a row facing to the south in the following formation.

Which two are at the extreme ends?

Formation : R is immediate right of T and S is immediate left of P, while Q is in between P and T.

- (1) Q and P
(2) Q and T
(3) R and S
(4) S and T

R T P S



58. Sameer walks 50 meters facing north and then turns anticlockwise by 270° and walks further for 50 meters. Then he turns clockwise by 45° and walks another 50 meters. Which direction is he facing now?

- (1) North-East
- (2) North-West
- (3) South-East
- (4) South-West



59. How many times the hands of a clock are at right angles to each other in 24 hours?

- (1) 22
- (2) 24
- (3) 44
- (4) 48

60. Pointing to a photograph the man said, "The lady in the photograph is my nephew's maternal grandmother". How is the lady in the photograph related to the man's sister who has no other sister?

- (1) Cousin
- (2) Mother
- (3) Mother-in-law
- (4) Sister-in-law

61. Potassium graphite and calcium graphite can be mostly used as:

- (1) Lubricants
- (2) Moderators
- (3) Semi-conductors
- (4) Superconductors

270
45
225

62. Which among the following is the world's first fully synthetic plastic?

- (1) Bakelite
- (2) Nylon
- (3) Polyester
- (4) Polyethylene

63. Which among the following does provide colours to fine-cut diamond?

- (1) Existence of definite planar layers
- (2) Presence of impurities
- (3) Variance in refractive index
- (4) Variance in transparency of diamond

64. Now-a-days aluminium has become popular as a 'green metal'. Which of the following properties of aluminium makes it the so called green metal?

- (1) It is a light metal resistant to corrosion.
- (2) It is a replacement for wood that saves the forest and environment.
- (3) It has a high rate of recycling and can be re-used many times.
- (4) The land can be restored very quickly after the mining of bauxite.

65. For the production of which of the following is the 'Haber Process' used ?
- (1) Ammonia
 - (2) Nitrates
 - (3) Potash
 - (4) Urea
66. Which type of chemical reaction is responsible for turning the rocks red or yellowish ?
- (1) Carbonation
 - (2) Exfoliation
 - (3) Hydration
 - (4) Oxidation
67. Which among the following is called the 'Fool's Gold' ?
- (1) Brass
 - (2) Copper sulphate
 - (3) Iron sulphide
 - (4) Silver bromide
68. Which among the following is used in making windows for the X-ray tubes ?
- (1) Barium
 - (2) Beryllium
 - (3) Calcium
 - (4) Magnesium
69. Which of the following had not been discovered by the time when Mendeleev published his periodic table ?
- (1) Actinides
 - (2) Halogens
 - (3) Lanthanides
 - (4) Noble gases
70. Which among the following pairs is not correctly matched ?
- (1) Arsenic – Stibium
 - (2) Mercury – Hydrargyrum
 - (3) Potassium – Kallium
 - (4) Sodium – Natrium
71. On which of the following scientific principles is an electric generator based ?
- (1) Faraday's Law of electromagnetic induction
 - (2) Law of thermodynamics
 - (3) Newton's law of motion
 - (4) Superconductivity
72. Who among the following is credited for the discovery of the 'Expanding Universe' ?
- (1) Alexander Friedman
 - (2) Edwin Hubble
 - (3) Georges Lemaitre
 - (4) Willem de Sitter
73. Knot is the unit of :
- (1) Acceleration
 - (2) Depth
 - (3) Distance
 - (4) Speed

74. The Atomic Clock is based on the periodic variations produced in the atom of which of the following elements ?
- (1) Barium
 - (2) Caesium
 - (3) Magnesium
 - (4) Sodium
75. The work done to move a unit charge from a point to another is called :
- (1) Conductance
 - (2) Current
 - (3) Potential difference
 - (4) Resistance
76. Which among the following is a non-conservative force ?
- (1) Electrostatic force
 - (2) Frictional force
 - (3) Magnetic force
 - (4) Spring force
77. The inability of a body to change its state of rest or uniform motion by itself is known as :
- (1) Displacement
 - (2) Force
 - (3) Inertia
 - (4) Momentum
78. In which of the following cases the apparent weight of a body in an elevator becomes zero ?
- (1) During free fall of a body under gravity
 - (2) When the elevator is accelerating downwards
 - (3) When the elevator is accelerating upwards
 - (4) When the elevator is at rest
79. When a body is immersed in a liquid the upward force experienced by it is known as :
- (1) Buoyant force
 - (2) Centrifugal force
 - (3) Hydraulic force
 - (4) Tangential force
80. Which of the following is responsible for the production of an echo ?
- (1) Absorption of sound waves
 - (2) Reflection of sound waves
 - (3) Refraction of sound waves
 - (4) Transmission of sound waves
81. Which of the following is not a component of chlorophyll ?
- (1) Calcium
 - (2) Carbon
 - (3) Hydrogen
 - (4) Magnesium
82. Which of the following plants reproduces itself by means of spores ?
- (1) Coriander
 - (2) Fern
 - (3) Mustard
 - (4) Petunia

83. Which floral part in the plants produces the pollen grains ?

- (1) Anther
- (2) Ovary
- (3) Petal
- (4) Sepal

84. Animals : Haemoglobin :: Plants :

- (1) Carotene
- (2) Cellulose
- (3) Chlorophyll
- (4) Cytochrome

85. Which among the following are the non-green heterotrophic plants ?

- (1) Algae
- (2) Ferns
- (3) Fungi
- (4) Mosses

86. Which among the following is a large spectrum antibiotic ?

- (1) Ampicillin
- (2) Chloramphenicol
- (3) Paracetamol
- (4) Penicillin

87. From which of the following animals is 'Angora Wool' obtained ?

- (1) Fox
- (2) Goat
- (3) Rabbit
- (4) Sheep

88. Match each of the following factors in Column - A with the corresponding

diseases in Column - B and select the correct answer set from the table given below.

Column - A

Column - B

- | | |
|----------------|--------------------|
| (a) Bacteria | (i) Amoebiasis |
| (b) Fungi | (ii) Elephantiasis |
| (c) Helminthes | (iii) Hydrophobia |
| (d) Protozoa | (iv) Osteomalacia |
| (e) Virus | (v) Pertussis |
| | (vi) Ring worm |

Answers

(1)	(a) - v	(b) - vi	(c) - ii	(d) - i	(e) - iii
(2)	(a) - iv	(b) - vi	(c) - ii	(d) - i	(e) - v
(3)	(a) - v	(b) - iv	(c) - ii	(d) - vi	(e) - iii
(4)	(a) - v	(b) - vi	(c) - iv	(d) - i	(e) - iii

89. In which part of the human body is the pituitary gland located ?

- (1) Brain
- (2) Intestine
- (3) Kidney
- (4) Liver

90. Which of the following is a female sex hormone ?

- (1) Androgen
- (2) Estrogen
- (3) Insulin
- (4) Oxytocin

91. Who is the Chairman-cum-Managing Director of the National Aluminium Company at present ?

- (1) Dr. Tapan Kumar Chand
- (2) Shri Anshuman Das
- (3) Shri Sridhar Patra
- (4) Shri V. Balsubrahmanyam

92. What is the current GDP growth rate in India ?

- (1) 4.5%
- (2) 5.0%
- (3) 5.5%
- (4) 6.6%

93. Which country has been imposed a ban by the World Anti Doping Agency ?

- (1) Spain
- (2) Russia
- (3) USA
- (4) India

94. India has signed an MoU with which country to prevent human trafficking ?

- (1) China
- (2) Sri Lanka
- (3) Myanmar
- (4) Japan

95. Who has become the winner of the Femina Miss India beauty pageant, 2019 ?

- (1) Sanjana Vij
- (2) Shivani Jadav
- (3) Shreya Shankar
- (4) Suman Rao

96. Who is the newly elected President of Sri Lanka ?

- (1) Mr. Chamal Rajapaksa
- (2) Mr. Gotabaya Rajapaksa
- (3) Mr. Maithripala Sirisena
- (4) Mr. Sajith Premadasa

97. Who has bagged the maximum number of wickets in the recently played 2nd Test match between India and Bangladesh ?

- (1) Ebadat Hossain
- (2) Ishant Sharma
- (3) Mohammed Shami
- (4) Umesh Yadav

98. To which of the following countries our Prime Minister Mr. Narendra Modi has paid a visit in December, 2019 ?

- (1) Brazil
- (2) Saudi Arabia
- (3) Spain
- (4) Thailand

99. Which film has won the Golden Peacock Award at the 50th International Film Festival of India ?

- (1) Jallikattu
- (2) Mai Ghatt
- (3) Marighella
- (4) Particles

100. Which missile has been successfully test-fired by the Indian Army from Mhow in Madhya Pradesh recently ?

- (1) Agni - V
- (2) Astra
- (3) K - 4
- (4) Spike LR