

PART - A

Directions : Each of the following items in this section consists of a sentence, the parts of which have been jumbled. These parts have been labelled as P, Q, R and S. Each sentence is followed by four sequences, namely (a), (b), (c) and (d), indicating the rearrangement of the parts. You are required to select the most appropriate option and mark your response on the Answer Sheet accordingly.

1. of children they also contain deeply embedded whereas traditional fairy tales
P Q
moral lessons that are relevant even for adults were designed for the entertainment
R S
- (a) R P Q S
 (b) Q S R P
 (c) R P S Q
 (d) ~~Q S P R~~
- ~~Q S P R~~
 Q S P R

2. of school education is an ineluctable truth that sporting activities are an integral part
P Q
meaningfully towards the overall growth of a student
R
that underscores the learning process and contributes
S
- QP SR
- (a) Q P S R
(b) Q S R P
(c) R P S Q
(d) Q S P R

3. and contentment on account of a life lived the beneficial outcome of
P Q
well without retribution or rebuke a virtuous life is peace of mind
R S
- (a) S R Q P
(b) S P Q R
(c) Q S P R
(d) Q S R P

9. There are _____ thirty students inside the classroom at any time.

- ☒ (a) less than
- (b) fewer than
- (c) less then
- (d) fewer then

10. There are many _____ vehicles on the highway due to a sudden landslide.

- (a) stationery
- (b) stationed
- (c) stranded
- (d) straggle

Directions : Given below are sentences that use discourse markers/expressions to make them complete. Identify the most appropriate discourse marker and mark your answer accordingly on the Answer Sheet.

11. I can't be bothered to tell him what I think; _____ he would not listen to me.

- ☒ (a) meanwhile
- (b) in any case
- (c) in the meantime ✗
- (d) somehow

12. _____, if the referee points his fingers, this indicates that someone has done something wrong.

- (a) On the contrary
- (b) Whatever more
- ☒ (c) Briefly
- (d) As regards

13. _____, have you been to the local library yet ?

- (a) Sort of ✗
- (b) Frankly
- (c) All the same ✗
- (d) Incidentally

14. _____, women are healthier and are living longer than ever before : indeed on an average, they can expect to live five years longer than men.

- ☒ (a) To a large extent
- (b) As regards
- (c) As far as
- (d) Turning now

15. The difference is that I have been fortunate to find a career that I love and, _____, I am getting paid reasonably for it.

- ☒ (a) briefly
- (b) broadly speaking }
- ☒ (c) what is more }
- ☒ (d) in conclusion

16. _____, the Government of India has followed the policy of trying to improve relations with its neighbours.

- (a) Particular
- (b) Knowingly
- (c) Otherwise
- ☒ (d) In general

17. _____, this issue is likely to be discussed when the Council meets next.

- (a) As per reports
- ☒ (b) Accordingly
- ☒ (c) Likewise
- ☐ (d) Briefly

18. _____, you needed to consult a physician to have a clear idea of what the disease is about.

- ☐ (a) In that case
- ☒ (b) In these case
- (c) Likewise
- (d) Henceforth

19. _____, in the year-ago period the current account deficit stood at \$1.3 billion or 0.2% of the GDP.

- ☒ (a) Particularly
- (b) Notably
- (c) Seriously
- (d) Unknowingly

20. _____, the records have been completely undermined by shoddy book-keeping.

- (a) Because of
- (b) As such ✗
- (c) Forever ✗
- ☒ (d) Hence

Directions : Given below are words/expressions/jargons followed by four options. Identify the most appropriate option that defines the word/expression/jargon in each instance, and mark your response accordingly on the Answer Sheet.

21. Infelicity :

- (a) Disloyalty towards one's nation
- (b) An inappropriate remark
- (c) To kill or destroy
- (d) To touch or push gently

- (c) Situation in which no progress can be made
- (d) Situation in which a relationship becomes friendlier

22. Corollary :

- (a) Something that is too expensive
- (b) Something that looks real but does not really exist
- (c) Something that naturally follows
- (d) Something resembling a coal mine

24. Presumption :

- ☒ (a) Prediction based on past experiences
- (b) Judgement made with certainty
- (c) Decision based on facts
- (d) Opinion formed before having all the facts

23. Quandary :

- (a) Situation in which you are confused about what to do
- (b) Situation in which two people or group argue

25. Smug :

- (a) Too confident about one's own achievements
- (b) Too eager to help or obey someone important
- (c) Too emotional or dramatic
- (d) Too eager to bottle up conflicts

Directions : In the following items a sentence or a phrase is given with a word that is underlined, followed by four words or group of words. Select the option that is nearest in meaning to the underlined word and mark your response on the Answer Sheet accordingly.

26. The Professor has been able to instil confidence in her students

☒ (a) inculcate
(b) infer
☒ (c) eradicate
☒ (d) unlike

27. The members of the group expressed their allegiance to their leader

☒ (a) commitment
(b) disloyalty
(c) understanding
(d) unlikely

28. The inscrutability surrounding the incident remains unresolved until the end of the movie

(a) clearness
(b) comprehensibility

(c) seriousness

☒ (d) mystery

29. The dodgy behaviour of the leader led to her fall

(a) principled

(b) dubious

☒ (c) dishonest

(d) painful

30. People have been advised not to venture into sea as the weather is likely to be inclement

☒ (a) squally

☒ (b) calm

☒ (c) pleasant

(d) indigent

Directions : In this section each item consists of six sentences of a passage. The first and sixth sentences are given in the beginning as S1 and S6. The middle four sentences in each have been jumbled up and labelled as P, Q, R and S. You are required to find the proper sequence of the four sentences and mark your response accordingly on the Answer Sheet.

31. S1. Sufism is an English word coined in the Nineteenth Century

S6. It may also have been *suffa*, the platform outside a place of Islamic worship

P. Historians have understood this term in several ways

Q. According to some scholars, it is derived from *suf*, meaning wool

R. Others derive it from *safa*, meaning purity

S. The word used for Sufism in Islamic texts is *tasawwuf*

(a) Q R S P

☒ (b) S P Q R

(c) P Q S R

(d) R P S Q

32. S1. Al-Biruni was born in 973, in Khwarizm in present-day Uzbekistan

S6. He arrived in Ghazni as a hostage, but gradually developed a liking for the city

P. In 1017, when Sultan Mahmud invaded Khwarizm, he took several scholars back to his capital, Ghazni : Al-Biruni was one among them

Q. He was well versed in several languages; Syriac, Arabic, Persian, Hebrew, and Sanskrit

R. Khwarizm was an important centre of learning, and Al-Biruni received the best education available at the time

S. However he did not know Greek, although he was familiar with the works of Plato and other Greek philosophers

(a) Q S R P

~~(b) R Q S P~~

~~(c) P Q S R~~

~~(d) R P S Q~~

33. S1. Vijayanagara or 'city of victory' was the name of both a city and an empire

S6. They remembered it as Hampi, a name derived from that of the local mother goddess, Pampadevi

P. In its heyday it stretched from the river Krishna in the north to the extreme south of the Indian peninsula

Q. Although it fell into ruin in the seventeenth-eighteenth centuries, it continued to live in the memories of the people who inhabited the Krishna-Tungabhadra doab

R. In 1565 the city was sacked and subsequently deserted

S. The Empire was founded in the fourteenth century

~~(a) S P R Q~~

(b) S Q P R

(c) P Q S R

(d) P Q R S

SPRQ

34. S1. Liberalisation and globalisation freed India's economy from the low GDP trap that had impeded India's progress

S6. Today India has transformed into one of the largest economies of the world

P. India's 3 pc rate of growth and a set of emergent circumstances led to a balance of payment crisis in the early 1990s

Q. Ease of business was ensured, and the requirement for import licences, and production quotas, were removed

R. Apart from these measures India also took a loan from the IMF to tide over the crisis, but after 1993, India has not taken another loan from the IMF

S. In a landmark budget in 1991, responding to the emergent crisis, India delicensed many industries and liberalised its economic policies

~~(a) Q S R P~~

(b) S Q P R

~~(c) R Q S P~~

~~(d) P S Q R~~

SPSQ

S1PSQR S6

35. S1. In many countries, there are millions of people who are underprivileged and deprived

S6. In the past forced labour was imposed by landlords, money-lenders, and other wealthy persons

P. Both of these are prohibited under the Constitution of India

Q. One such form of exploitation in our country has been *begar* or forced labour without payment

R. The marginalised are often subjected to exploitation by their fellow human beings

S. Another closely related form of exploitation is buying and selling of human beings and using them as slaves

(a) Q S R P

☒ (b) R Q S P

(c) P Q S R

(d) Q S P R

RQSP

Directions : The following items have a sentence in direct or indirect speech, followed by four options. One of the options correctly converts the direct speech into indirect speech. Select the most appropriate option and mark your answer on the Answer Sheet.

36. Convert from direct into indirect speech.

Ayushi said to the group, "We have had enough of suffering today. It is time to march forward."

☒ (a) Ayushi told the group that they had had enough of suffering that day and it was time to march forward

☒ (b) Ayushi asked the group that they had had enough of suffering this day and it was time to march forward

☒ (c) Ayushi told the group that they had enough of suffering and that it is time to march forward

(d) Ayushi told the group that we had had enough of suffering this day and it was time to march forward

37. Convert from direct speech into indirect speech.

"Alas! We lost the match by one point," said the Captain

☒ (a) The Captain regretted that they had lost the match by one point

(b) The Captain regretted that they lost the match by one point

☒ (c) The Captain exclaimed that they had lost the match by one point

☒ (d) The Captain told the team that they had lost the match by one point

38. Convert from direct speech into indirect speech.

"Where were you last week?" Alok asked Sheela

☒ (a) Alok told Sheela where she had been the week before

☒ (b) Alok asked Sheela where she had been the week before

(c) Alok asked Sheela where she was the week before

(d) Alok asked Sheela where she had been the last week

Directions : Following items have sentences in active voice with four options. One of the options converts the active voice into passive voice correctly. Select the most appropriate option and mark your answer on the Answer Sheet.

39. The king who the people loved built the castle five centuries ago

☒ (a) The castle was built five centuries ago by the king who was loved by the people

☒ (b) The castle was built five centuries ago by the king who loved the people

☐ (c) The castle built five centuries ago by the king loved by the people

☐ (d) The castle was built five centuries ago by the people who were loved by the king

40. The company has recruited four hundred engineers who will have to complete an internship for three weeks

☒ (a) Four hundred engineers have been recruited by the company and an internship of three weeks will have to be completed by them

☐ (b) Four hundred engineers have been recruited by the company and they will have to complete an internship of three weeks

☒ (c) The company has been recruited by four hundred engineers and an internship of three week will have to be completed by them

☒ (d) Four hundred engineers have been recruited by the company. Internship of three weeks will have had to be completed by them

Directions : In the following items, a pair of words is provided. You are required to select the option that most appropriately describes the meaning of both the words and mark your response on the Answer Sheet accordingly

41. Seldom and Often

☒ (a) Seldom means hardly ever and often means time and again

☒ (b) Seldom means time and again and often means hardly ever

☒ (c) Seldom means never and often means not at all

☐ (d) Seldom means frequently and often means time and again

42. Overview and Review

☒ (a) Overview means assessment and review means general idea

☒ (b) Overview means general idea and review means assessment

☒ (c) Overview means general analysis and review means go through

☒ (d) Overview means summary and review means evaluation

43. Overcome and Succeed

- ☒ (a) Overcome means triumph over and succeed means to achieve something
- (b) Overcome means achieve something and succeed means to triumph over
- ☒ (c) Overcome means to be successful and succeed means to achieve something
- ☒ (d) Overcome means winning and succeed means to rise above

44. Embed and Imbue

- (a) Embed means instil and imbue means implant

(b) Embed means implant and imbue means instil

(c) Embed means accept and imbue means detest

(d) Embed means include and imbue means accept

45. Emancipate and Empower

(a) Emancipate means authorize and empower means liberate ☒

☒ (b) Emancipate means liberate and empower means authorise

(c) Emancipate means liberal and empower means authorisation ☒

(d) Emancipate means freedom and empower means encounter

Directions : Read the following passage carefully and answer the items that follow the passage. Your answers to these items should be based solely on the passage.

Can agricultural productivity meet human needs in the long run ? Since twentieth century advances, given increasing costs, do not seem sustainable, further increases in output will not be achieved easily. Global population growth, while showing signs of slowing down, has pushed farmers and herders into areas unsuited to intensive agriculture, accelerating worldwide ecological disruptions. Reserves of arable land and fresh water have diminished alarmingly. Chemical runoffs have compounded pollution problems. Invasion of natural habitats have hastened species extinction. Desertification has been severe in the last hundred years, especially in North Africa, southern portions of Africa, Australia, northern Mexico, and the American Southwest. Tropical forests have shrunk by one-half since World War II, with agricultural pressures causing three-quarters of that loss. Government intervention has produced its share of catastrophes, ranging from a terrible famine in China between 1958-1961 that may have killed 30 million people and destroyed the Aral Sea. Taking everything into consideration, we may remain hopeful about humankind's agricultural prospects, but we can scarcely look forward optimistically at the end of the first quarter of the twenty-first century.

46. Why do twentieth century advances not seem sustainable ?

(a) They do not meet the human needs

✓ (b) Due to the increased cost of agricultural production

(c) Because they are outdated for the current times

(d) They are useful, but intensive

47. What pushes farmers into places unsuited for agriculture ?

✓ (a) Population growth

(b) Industrialisation

(c) Water scarcity

(d) Desertification

48. Which one of the following is NOT true, according to the passage, for ecological degradation ?

(a) Global population growth

✓ (b) Excess use of chemicals

(c) Desertification

(d) World War II

49. What is the conclusion of the author in the passage about the prospects of agriculture in the world ?

✓ (a) The author is both hopeful and sceptical of the prospects of agriculture

(b) The author is very hopeful of the prospects of agriculture

(c) The author is sceptical of the prospects of agriculture

(d) The author is neither hopeful nor sceptical of the prospects of agriculture

50. Which one of the following words means 'incursion' ?

(a) invasion

(b) intensive

(c) severe

(d) intervention

PART – B

51. What is the nickname of the National Men's Hockey Team of Australia ?

- (a) The Kangaroos
- (b) The Boomers
- (c) The Dolphins
- (d) The Kookaburras

52. Which one of the following organisations has completed 150 years of service to the nation in the year 2025 ?

- (a) Botanical Survey of India
- (b) Survey of India
- (c) India Meteorological Department
- (d) Press Trust of India

53. Which of the following statements about 'Jalvahak' is/are correct ?

1. It is a newly commissioned naval ship inducted into Indian Navy
2. It is a major policy for cargo promotion unveiled by the Government of India

Select the answer using the code given below :

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

54. How many rural districts does Mahatma Gandhi National Rural Employment Guarantee Act cover as on 2024-25 ?

- (a) 600
- (b) 740
- (c) 700
- (d) 680

55. Under which one of the following initiatives does the NITI Aayog support interested States to establish a State Institution for Transformation (SIT) ?

- (a) NITI for States Platform
- (b) Bharat Ke Badhte Kadam
- (c) State Support Mission
- (d) Aspirational Block Programme

56. Which one of the following Indian States account for the maximum deposits of Bauxite and Chromite ?

- (a) Andhra Pradesh
- (b) Madhya Pradesh
- (c) Jharkhand
- (d) Odisha

57. Consider the following statements with regard to National Technology Day :

1. It commemorates the momentous events of 11th May 1998, when India conducted successful nuclear tests under Operation Shakti
2. The official theme for National Technology Day 2025 is 'School to Startups – Igniting Young Minds to Innovate'

Which of the statements given above is/are correct ?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

58. Which of the following were added in India as Ramsar Site in the year 2025 ?

1. Sakkarakottai Bird Sanctuary
2. Udhwa Lake
3. Rudrasagar Lake
4. Bakhira Wildlife Sanctuary

Select the answer using the code given below :

- (a) 1 and 4
- (b) 2 and 3 only
- (c) 1 and 2 only
- (d) 1, 2 and 3

59.

Consider the following statements about Cricket player Virat Kohli :

1. He is the only captain to have scored seven double centuries in Test Cricket
2. He is the only Indian cricketer with most centuries as a captain
3. He is the first Indian captain to achieve twin centuries on captaincy debut
4. He holds the record for the most double centuries by an Indian in Test Cricket

Which of the statements given above are correct ?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4

60. Ethereum, Tether, Solana and Cardano are all forms of

- (a) Crypto currency
- (b) Artificial Intelligence(AI) Startups
- (c) Humanoid Robots
- (d) Medical apps

61. The book 'The Origin of Species by Means of Natural Selection' was authored by

- (a) Charles Darwin
- (b) Carolus Linnaeus
- (c) Barbara McClintock
- (d) Copernicus

62. The headquarters of World Meteorological Organization (WMO) is located at

- (a) Switzerland
- (b) Scotland
- (c) South Africa
- (d) Italy

63. The optimum pH at which the enzymes pepsin and trypsin of the human alimentary canal works are

- ✓(a) pH 2.0 and 7.9, respectively
- (b) pH 4.5 and 3.5, respectively
- (c) pH 9.5 and 4.5, respectively
- (d) pH 7.0 and 8.0, respectively

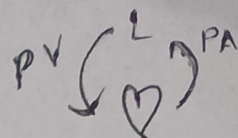
64. The amount of air breathed in and out during a normal respiration by human lungs is referred to as

(a) Vital capacity

(b) Tidal volume

(c) Inspiratory volume

✓(d) Total lung capacity



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65. Which one among the following statements about arteries and veins in humans is NOT correct ?

(a) Arteries carry blood away from heart while veins bring blood towards the heart ✗

✓(b) Pulmonary arteries always carry oxygenated blood while Pulmonary veins always carry deoxygenated blood

(c) Arteries have thicker and more elastic walls compared to veins in general ✗

(d) Arteries do not have valves but veins do have valves ✗

66. Identify the functions that are controlled by the hind brain of human being

✓(a) Involuntary actions such as blood pressure, salivation vomiting etc.

(b) Controlling the regions receiving sensory impulses from receptors

(c) Controlling the movement of voluntary muscles

(d) Sensation of hunger or being full

67. Iodized salt is a vital part of our diet as it is essential for the synthesis of

- (a) Estrogen
- ☒ (b) Thyroxin
- (c) Insulin
- (d) Adrenalin

68. The menstrual cycle in females is controlled by hormones that are secreted by

- (a) Ovary and lacrimal gland
- (b) Ovary and sebaceous gland
- ☒ (c) Ovary and pituitary gland
- (d) Prostate and pituitary gland

69. Which one of the following blood cells type secrete large number of antibodies during an immune response of the body ?

- (a) Neutrophils
- (b) Eosinophils
- ☒ (c) Lymphocytes
- (d) Monocytes

70. Which of the following organelles have their own DNA and ribosomes ?

- (a) Endoplasmic reticulum and Golgi bodies
- ☒ (b) Mitochondria and Chloroplast

(c) Endoplasmic reticulum and cytoskeleton

(d) Cell wall and nucleolus

71. Arrange the following zones in ascending order in terms of their latitudinal extent on the Earth surface :

1. Equatorial zone
2. Midlatitude zone
3. Subarctic zone
4. Tropical zone

Select the answer using the code given below :

- ☒ (a) 1 - 3 - 2 - 4
- (b) 1 - 3 - 4 - 2
- (c) 1 - 4 - 2 - 3
- (d) 3 - 1 - 2 - 4

72. Consider the following statements with reference to Feldspar mineral :

1. Half of the earth's crust is composed of feldspar
2. It has light cream to salmon pink colour
3. Magnesium is a common element in all types of feldspar

Which of the statements given above is/are correct ?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

73. Consider the following pairs with reference to sedimentary rocks and the process of their formation :

<i>Sedimentary Rock</i>		<i>Process of Formation</i>
1. Chert	—	Chemically formed
2. Geyserite	—	Organically formed
3. Shale	—	Mechanically formed

Which of the pairs given above is/are correctly matched ?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

74. Which of the following statements is/are correct ?

- 1. Oceanic trenches are very significant in the study of plate movements
- 2. Oceanic trenches are associated with active volcanoes and strong earthquakes

Select the answer using the code given below :

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

75. Which of the following statements with reference to shadow zones in an event of an earthquake is/are correct ?

- 1. Zone between 105° and 145° from epicentre was identified as the shadow zone for both P-waves and S-waves ✓
- 2. The shadow zone of P-waves is much larger than that of the S-waves ✗

Select the answer using the code given below :

- ✓ (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

76. Which one among the following volcanic island chains is NOT associated with mid-oceanic ridge ?

- (a) Azores Islands
- (b) Ascension Islands
- (c) Hawaiian Islands
- (d) Tristan da Cunha

24°C

77. Consider the following statements with reference to sea waves :

1. The height of waves is determined by wind speed, wind duration, and fetch
2. The energy of a wave is proportional to the square of its height
3. Waves retain most of their energy as they travel across the deep ocean

Which of the statements given above is/are correct ?

- (a) 1 only
(b) 1 and 2 only
(c) 2 and 3 only
(d) 1, 2 and 3

78. Which of the following statements with reference to soil forming processes is/are correct ?

1. Translocation, enrichment, removal and transformation are different classes of soil forming processes
2. In translocation, fine particles are transported downward by eluviation and accumulate in lower horizons by illuviation

Select the answer using the code given below :

- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

79. Consider the following statements with reference to structure of the Earth's atmosphere :

1. Thickness of the troposphere is greatest at the equator
2. The air temperature of the tropopause is highest above the poles
3. The temperature in troposphere decreases at the rate of 1°F for every 165 m of height

Which of the statements given above is/are correct ?

- (a) 1 only (mann kar raha hai kdm)
(b) 1 and 2 only
(c) 2 and 3 only
(d) 1, 2 and 3

80. Which of the following are the factors that cause variation in the amount of insolation on the Earth ?

incoming solar radiation

1. Rotation of the earth on its axis
2. Length of the day
3. Distribution of land and water on the earth

Select the answer using the code given below :

- (a) 1 only
(b) 1 and 2 only
(c) 2 and 3 only
(d) 1, 2 and 3

81. Consider the following conditions favourable for the formation and intensification of Tropical Storms :

1. Presence of the Coriolis force
2. Upper divergence above the sea level system
3. High variations in the vertical wind speed

Which of the conditions given above is/are correct ?

- (a) 1 only
- (b) 2 only
- (c) 1 and 2
- (d) 2 and 3

82. Which of the following factors influence the ocean currents ?

1. Coriolis force
2. Gravity
3. Heating by solar energy
4. Wind

Select the answer using the code given below :

- (a) 1 and 4 only
- (b) 2 and 3 only
- (c) 1, 2 and 3 only
- (d) 1, 2, 3 and 4

83. Which of the following is/are warm ocean current(s) ?

1. Alaska Current
2. Agulhas Current
3. Falkland Current
4. West Australian Current

Select the answer using the code given below :

- (a) 1 only
- (b) 1 and 2
- (c) 3 and 4
- (d) 4 only

84. State of Assam shares borders with how many other countries and Indian states respectively ?

- (a) 2 countries and 6 Indian states respectively
- (b) 2 countries and 7 Indian states respectively
- (c) 3 countries and 7 Indian states respectively
- (d) 3 countries and 6 Indian states respectively

85. Which one of the following is the northernmost river basin of the Deccan Plateau ?

- (a) Chambal
- (b) Mahi
- (c) Narmada
- (d) Tapti

86. Laterite soil in India is rich in which of the following ?

1. Calcium
2. Nitrogen
3. Phosphate
4. Potash

Select the answer using the code given below :

- (a) 1 only
- (b) 1 and 2
- (c) 3 and 4
- (d) 4 only

87. Which of the following statements with reference to crops cultivated in India is/are correct ?

1. Bajra grows well in sandy and shallow black soils, whereas red and shallow black soil is suited for Ragi
2. Bajra is predominantly grown in states like Rajasthan, Uttar Pradesh and Maharashtra, while Ragi is mainly cultivated in Karnataka, Tamil Nadu and Himachal Pradesh

Select the answer using the code given below :

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

88. Match List I with List II and select the answer using the code given below the Lists :

List I (City)	List II (Mineral)
A. Bewar	1. Manganese
B. Balaghat	2. Mica
C. Bilaspur	3. Iron-ore
D. Ballary	4. Bauxite

Code :

	A	B	C	D
(a)	3	1	4	2
(b)	3	4	1	2
(c)	2	1	4	3
(d)	2	4	1	3

89. Which one among the following is NOT a beneficiary state from the Vindhyachal Power Plant of the NTPC ?

- (a) Gujarat
- (b) Goa
- (c) Maharashtra
- (d) Uttar Pradesh

90. Consider the following pairs with reference to Thermal Power Plants and their location in respective states in India :

Thermal Power Plant	Located in State
I. Panki	– Uttar Pradesh
II. Parli	– Karnataka
III. Vijayawada	– Telangana
IV. Vanakbari	– Gujarat

How many of the pairs given above is/are correctly matched ?

- (a) 1
(b) 2
(c) 3
(d) 4

Calcium Sulphate Hemihydrate
PO = 2
(2)

91. The reaction that occurs on passing carbon dioxide gas through lime water is

- (a) $\text{CaCO}_3 + \text{H}_2\text{O} + \text{CO}_2 \rightarrow \text{Ca}(\text{HCO}_3)_2$
 ✓ (b) $\text{Ca}(\text{OH})_2 + \text{CO}_2 \rightarrow \text{CaCO}_3 + \text{H}_2\text{O}$
 (c) $\text{CaO} + \text{CO}_2 \rightarrow \text{CaCO}_3$
 (d) $\text{CaCl}_2 + \text{H}_2\text{O} + \text{CO}_2 \rightarrow \text{CaCO}_3 + 2\text{HCl}$

92. Which one of the following statements is NOT correct ?

- (a) Water of crystallization is the fixed number of water molecules present in one formula unit of a salt
 ✓ (b) The molecular formula of Plaster of Paris is $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ *$\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$*
 (c) Washing soda is used for removing the permanent hardness of water
 (d) The atmosphere of Venus is made up of thick white and yellow clouds of sulphuric acid ✗

93. Which one of the following type of medicines is used for treating indigestion ?

- (a) Analgesic
 (b) Antiseptic
 (c) Antibiotic
 ✓ (d) Antacid

94. Which one of the following is NOT present in cement ?

- (a) $2\text{CaO} \cdot \text{SiO}_2$
 (b) $3\text{CaO} \cdot \text{SiO}_2$
 (c) $4\text{CaO} \cdot \text{SiO}_2$
 (d) $3\text{CaO} \cdot \text{Al}_2\text{O}_3$

∴ C

95. Which one of the following is NOT a chemical change ?

- (a) Burning of coal
- (b) Rusting of metal
- ✓ (c) Melting of ice
- (d) Reaction of acid with base

96. Which one of the following statements is NOT correct ?

- (a) The interconversion of states of matter is a physical change ✗
- (b) During burning of a candle, both chemical and physical changes take place
- ✓ (c) During a physical change, the chemical composition of molecules changes
- (d) Rusting of iron is a chemical change

97. Which one of the following is NOT a heterogeneous mixture ?

- $S_8 + CS_2$
- $8 + H_2O$
- (a) Sulphur in carbon disulphide
 - (b) Mixture of sugar and salt crystals
 - (c) Sandy water ✗
 - ✓ (d) Sulphur in water

98. Match List I with List II and select the answer using the code given below the Lists :

List I
(Element)

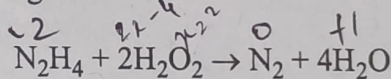
List II
(Atomicity)

- | | | |
|---------------|---|------|
| A. Phosphorus | → | 1. 2 |
| B. Nitrogen | → | 2. 1 |
| C. Neon | → | 3. 8 |
| D. Sulphur | → | 4. 4 |
- 9 2 1 3

Code :

- | | A | B | C | D |
|-------|---|---|---|---|
| (a) | 4 | 1 | 2 | 3 |
| ✓ (b) | 4 | 2 | 1 | 3 |
| (c) | 3 | 2 | 1 | 4 |
| (d) | 3 | 1 | 2 | 4 |

99. In the following redox reaction, which compound is acting as a reducing agent ?



- ✓ (a) H_2O_2
- ✓ (b) N_2H_4
- (c) N_2
- (d) H_2O

100. Which one of the following is considered to be the purest source of water ?

- (a) River water
- (b) Sea water
- (c) Well water
- ✓ (d) Rain water

101. Which one of the following salts is responsible for temporary hardness of water?

- (a) Sulphates of calcium
 (b) Chlorides of magnesium
 (c) Bicarbonates of magnesium
 (d) Sulphates of magnesium

102. Match List I with List II and select the answer using the code given below the Lists :

List I (Reaction)	List II (Type)
A. $\text{CaO (s)} + \text{H}_2\text{O (l)} \rightarrow \text{Ca(OH)}_2 \text{ (aq)}$	1. Single displacement
B. $\text{CaCO}_3 \text{ (s)} \rightarrow \text{CaO (s)} + \text{CO}_2 \text{ (g)}$	2. Double displacement
C. $\text{Pb (s)} + \text{CuCl}_2 \text{ (aq)} \rightarrow \text{PbCl}_2 \text{ (aq)} + \text{Cu (s)}$	3. Combination
D. $\text{Na}_2\text{SO}_4 \text{ (aq)} + \text{BaCl}_2 \text{ (aq)} \rightarrow \text{BaSO}_4 \text{ (s)} + 2\text{NaCl (aq)}$	4. Decomposition

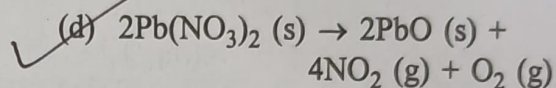
Code :

3 4 1 2

	A	B	C	D
(a)	2	1	4	3
(b)	2	4	1	3
(c)	3	4	1	2
(d)	3	1	4	2

103. Which one of the following is an endothermic reaction?

- (a) $\text{CH}_4 \text{ (g)} + 2\text{O}_2 \text{ (g)} \rightarrow \text{CO}_2 \text{ (g)} + 2\text{O}_2 \text{ (g)}$
 (b) $\text{C}_6\text{H}_{12}\text{O}_6 \text{ (aq)} + 6\text{O}_2 \text{ (g)} \rightarrow 6\text{CO}_2 \text{ (g)} + 6\text{H}_2\text{O (l)}$
 (c) $\text{N}_2 \text{ (g)} + 3\text{H}_2 \text{ (g)} \rightarrow 2\text{NH}_3 \text{ (g)}$



104. Which one of the following is known as 'water gas'?

- (a) $\text{H}_2\text{O} + \text{CO}_2$ (ig)
 (b) NH_3
 (c) $\text{H}_2 + \text{N}_2$
 (d) $\text{CO} + \text{H}_2$

105. Which one of the following statements is NOT correct?

- (a) Diamond is hard due to extended covalent bonding in it
 (b) Fullerene is composed of five and six membered rings
 (c) Diamond is a good conductor of electricity
 (d) Graphite is used as a lubricant

106. Who among the following presided over the first session of All India Kisan Sabha in Lucknow in April 1936 ?

- (a) Sahajananda Saraswati
- (b) R. G. Ranga
- (c) Ram Manohar Lohia
- (d) Jayaprakash Narayan

107. Who among the following founded the 'Self-Respect Movement' ?

- (a) Jyotiba Phule
- (b) Swami Vivekananda
- (c) E. V. Ramaswami Naicker
- (d) Dr. B. R. Ambedkar

108. Chola inscriptions mention several categories of lands. Which one of the following was meant for the maintenance of school ?

- (a) Tirunamattukkani
- (b) Shalabhoga
- (c) Vellanvagai
- (d) Pallichhandam

109. Which of the following statements about the Home Rule League are correct ?

1. Lokamanya Tilak set up the Home Rule League at the Bombay Provincial Conference held at Belgaum in April 1916
2. Annie Besant announced the formation of Home Rule League in September 1916
3. To avoid friction, Tilak's League was to work in Maharashtra (excluding Bombay city), Karnataka, Central Provinces and Berar and Besant's League was given charge of the rest of India

Select the answer using the code given below :

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

110. Which one of the following statements about Ishwar Chandra Vidyasagar is NOT correct ?

- (a) He was the Principal of Sanskrit College, Calcutta
- (b) He was a Government Inspector of Schools
- (c) He was a Secretary to the Bethune School
- (d) He was the founder of Widow Remarriage Association

111. Match List I with List II and select the answer using the code given below the Lists :

List I (Reformer)	List II (Social Work/Text)
A. Vishnu Shastri Pundit	1. Vedic Physics : Scientific Origin of Hinduism
B. Karsondas Mulji	2. Widow Remarriage Association
C. Debendranath Tagore	3. Satya Prakash
D. Raja Ram Mohan Roy	4. Tattvabodhini Sabha

Code :

	A	B	C	D
(a)	1	3	4	2
(b)	1	4	3	2
(c)	2	3	4	1
(d)	2	4	3	1

112. In the Harappan Civilization, traces of canals have been found at

- (a) Banawali
- (b) Lothal
- (c) Shortughai
- (d) Dholavira

113. Arrange the following foreign travellers to India in chronological order, beginning with the earliest :

- 1. Peter Mundy
- 2. Antonio Monserrate
- 3. Afanasii Nikitich Nikitin
- 4. Ibn Battuta

Select the answer using the code given below :

- (a) 2 – 1 – 4 – 3
- (b) 2 – 3 – 4 – 1
- (c) 4 – 3 – 2 – 1
- (d) 3 – 4 – 1 – 2

114. With which of the following was the Bretton Woods System NOT associated

- (a) International Monetary Fund
- (b) Economic recovery after the Second World War
- (c) International Bank for Reconstruction and Development
- (d) Establishment of a monetary system based on floating exchange rate

115. Senguttuvan is the name of

- (a) a Pandya ruler
- (b) a Chola king
- (c) a minister in Satavahana court
- (d) the capital city of the Cheras

116. The *Ramacharita*, an example of *dvyasrya-kavya*, telling two stories simultaneously, was written by

- (a) Subandhu
- (b) Bhatti
- (c) Sandhyakara
- (d) Kamban

117. Which of the following Acts established the Board of Control to guide and control the work of the Court of Directors and the Government of India ?

- (a) Regulating Act of 1773
- (b) Pitt's India Act of 1784
- (c) Charter Act of 1793
- (d) Charter Act of 1813

118. Who among the following Sikh Gurus laid the foundation of the Khalsa Panth ?

- (a) Guru Nanak
- (b) Guru Arjan
- (c) Guru Hargobind
- (d) Guru Gobind Singh

119. Which one among the following plans is also known as Mahalanobis Plan ?

- (a) First Five Year Plan
- (b) Second Five Year Plan
- (c) Third Five Year Plan
- (d) Sixth Five Year Plan

120. Which of the following were the years of Annual Plans ?

- (a) 1956-1957
- (b) 1966-1969
- (c) 1975-1976
- (d) 1992-1993

121. Consider the following statements about BRICS Summits :

1. The first BRICS Summit was held in Brazil
2. BRICS Summits were held in New Delhi on three occasions

Which of the statements given above is/are correct ?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

122. Placing the earliest first, arrange the following international events in the chronological order :

1. Introduction of www (World Wide Web)
2. Advent of Inter-Continental Ballistic Missiles
3. Launch of first communication satellite

Select the answer using the code given below :

- (a) 2 - 1 - 3
- (b) 1 - 2 - 3
- (c) 3 - 2 - 1
- (d) 2 - 3 - 1

123. Which of the following rights under the Constitution of India is/are Fundamental Right(s) ?

1. Right to work
2. Right to privacy
3. Right to free and compulsory education in the age bracket of six to eighteen years

Select the answer using the code given below :

- ☒ (a) 1 and 2
- ☒ (b) 2 and 3
- (c) 2 only
- ☒ (d) 3 only

124. Consider the following statements with regard to flags of International Organizations :

1. The flag of EU has a circle of gold stars on a white background
2. The Flag of the UN carries two pairs of olive tree branches
3. The ASEAN flag carries blue, red, white and yellow colours

How many of the above statements is/are correct ?

- (a) Nil
- (b) 1
- (c) 2
- (d) 3

125. Which one of the following committees is NOT associated with decentralization of Panchayati Raj institutions in India ?

- (a) Balwant Rai Mehta Committee
- (b) Ashok Mehta Committee
- (c) L. M. Singhvi Committee
- (d) Abhijit Sen Committee

126. The focal length of a concave lens is 0.5 m. The power of the lens is

(a) +0.5 D

(b) -0.5 D

✓ (c) +2.0 D

(d) -2.0 D

$\frac{1}{f}$

127. The rule to determine the direction of a force experienced by a straight current carrying conductor placed in a magnetic field which is perpendicular to it is

(a) Right-hand thumb rule

✓ (b) Fleming's left-hand rule

(c) Fleming's right-hand rule

(d) Hund's rule

128. One parsec in astronomical units (A.U.) is about

(a) 2×10^3 A.U.

(b) 2×10^4 A.U.

(c) 2×10^5 A.U.

(d) 2×10^6 A.U.

129. Which one of the following statements for second law of motion is NOT correct?

$\vec{F} = m\vec{a}$
(a) The net force on a body is proportional to that body's acceleration

(b) The net force on a body is in the same direction as the acceleration

(c) The time rate of change of momentum is equal to force ✓

✓ (d) The net force on a body is proportional to that body's momentum

130. The temperature of a body increases from 310 K to 340 K. The temperature increase in degree Celsius is

(a) 20°C

✓ (b) 30°C

(c) 37°C

(d) 67°C

131. Which one of the following statements for the work done by gravity on a body is NOT correct?

✓ (a) Work done is independent of the path followed by the body

(b) Work done depends only on the vertical distance separating the initial and the final position of the body

(c) Work done depends on the path followed by the body

(d) Work done is zero if the body is displaced horizontally to the force of gravity ✓

Hein?

$$P = \frac{F}{A}$$

$P = \rho gh$

75

132. Which one among the following statements is correct?

- (a) Pressure has magnitude as well as direction
- (b) As we go deeper in a liquid, the pressure decreases
- (c) Action and reaction forces act on the same object
- (d) Pascal and N/m^2 represent the same unit

133. Which one of the following wavelength radiations may correspond to an X-ray?

- (a) 1 nm
- (b) 10 nm
- (c) 100 nm
- (d) 300 nm

134. In a Telescope, compared to the eyepiece lens the objective lens has

- (a) larger focal length and larger aperture
- (b) larger focal length and smaller aperture
- (c) smaller focal length and larger aperture
- (d) smaller focal length and smaller aperture

135. The energy, E , of a photon can be expressed as $E = hf$ where f is the frequency and h is Planck's constant. The dimensions of h are the same as that of

- (a) linear momentum MLT^{-1}
- (b) angular momentum ML^2T^{-1}

(c) displacement

(d) torque ML^2T^{-2}

136. The work done by the force acting on an object is zero if the displacement of the object

- (a) is in the opposite direction of the direction of force
- (b) is in the same direction of the direction of force

(c) is in perpendicular direction of the direction of force

(d) none of above

137. The magnetic field inside a current carrying very long solenoid is

- (a) Uniform
- (b) Non-uniform
- (c) Zero
- (d) Highest at mid-point

$$K = C + 273$$

$$= -250 + 273$$

$$= 23 K$$

138. Which one of the following instruments can be used to measure $-250^\circ C$ temperature?

- (a) By using a mercury based thermometer
- (b) By using an alcohol based thermometer
- (c) By using a clinical thermometer
- (d) By using thermocouple based thermometer

GJB!

$E = \omega$

45

B - TODC-T-GAT

$f s t$
 ML^2T^{-2}

$\rightarrow f s \Rightarrow ML^2T^{-2} = h[T^{-1}]$

ω

139. The quantity of heat needed to change unit mass of a substance from liquid to vapour without changing the temperature, is called

- (a) specific heat
- ☒ (b) specific latent heat

(c) thermal capacity

(d) heat energy

140. The temperature at which "vapour pressure of the liquid in an open vessel becomes equal to the atmospheric pressure" is called

- (a) Melting point
- ☒ (b) Boiling point
- (c) Liquid point
- (d) None of the above

141. Which one of the following statements about surface tension is correct ?

- (a) It increases when temperature increases
- ☒ (b) It decreases when temperature increases
- (c) It will remain same with increase or decrease of temperature
- (d) It will always decrease with increase or decrease of temperature

142. A body sinks in water when

- (a) density of water is greater than density of body
- ☒ (b) density of water is less than density of body
- (c) density of water is equal to density of body
- (d) the body is heavy

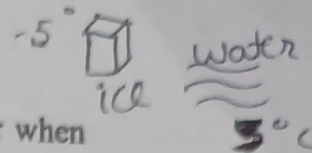
143. Why a fielder in the ground gradually pulls his hands backward while catching a fast moving cricket ball ?

- ☒ (a) To reduce the acceleration of the ball
- (b) To increase the acceleration of the ball
- (c) To increase the velocity of the ball

☒ (d) None of above

144. Bottom of a tank containing water appears to be raised. It is due to

- (a) Reflection of light
- ☒ (b) Refraction of light
- (c) Interference of light
- (d) Diffraction of light



$$F \propto \frac{\Delta p}{\Delta t} \uparrow$$

$$m \Delta v$$

145. SONAR stands for

- (a) Sonographic Natural Ranging
- (b) Simple Operational Navigation Ranging
- ☒ (c) Sound Navigation and Ranging
- (d) Simple Operational Natural Ranging

146. Which one of the following radiations has longer wavelength ?

- (a) X-rays
- (b) Ultraviolet
- ☒ (c) Micro Wave
- (d) Infra-red

~~EMI~~
RMI
7x1
6

147. For a material under static conditions, which one among the following statements is correct ?

- (a) An insulator can be charged
- (b) A perfect conductor can be charged
- ☒ (c) Both perfect conductor and insulator can be charged
- (d) Both perfect conductor and insulator cannot be charged

148. A person can see nearby objects clearly but cannot see distant object distinctly, the person is suffering with

- (a) Hypermetropia
- (b) Presbyopia
- ☒ (c) Myopia
- (d) None of above

149. The energy is always conserved for a system which is

- ☒ (a) isolated only
- (b) non-isolated only
- (c) both isolated and non-isolated
- (d) none of above

150. Suppose, a ball of mass M is thrown upwards from a point A and it reaches up to the highest point B and returns back to point A , which one among the following is correct ?

- (a) Kinetic Energy at A = Potential Energy at B
- ☒ (b) Kinetic Energy at A = Potential Energy at A
- ☒ (c) Kinetic Energy at B = Potential Energy at B
- ☒ (d) Kinetic Energy at B = Kinetic Energy at A

$\uparrow KE=0$
 $\bullet B$
 $\bullet A$ $PE=0$

160
120
B - TODC-T-GAT
280
40
4
160