## R. Gupta's ${ }^{\circledR}$

## POPULAR MASTER GUIDE



## Entrance Examination



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## Popular Master Guide



Bachelor of Education

## Entrance Examination

## Conducted by <br> Various Indian Universities \& Institutions

by
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## B.Ed. Entrance Examination-2023*

## PART-A

## Section-I : General English Comprehension

Directions (Qs. Nos. 1-10): Read the following passage carefully and choose the best answer out of the four choices given after each question that follows:

The best way to learn is to teach. This is the message emerging from experiments in several schools in which teenage pupils who have problems at school themselves are tutoring younger children-with remarkable results for both sides.

According to American research, pupil-tutoring wins 'hands down' over computerized instruction and American teachers say that no other recent innovation has proved so consistently successful.

Now the idea is spreading in Britain. Throughout this term, a group of 14 -year-olds at Trinity Comprehensive have been spending an hour a week helping children at a nearby primary school with their reading. The younger children read aloud to their tutors and then play word games with them.

All the 14 -year-olds have some of their own lessons in a special unit for children who have difficulties at
school. Though their intelligence is around average, most of them have fallen behind on reading, writing and maths and, in some cases this has led to truancy or bad behaviour in class.

Jean Bond, who is running the special unit, says that the main benefit of tutoring is that it improves the adolescents" self-esteem. "The younger children come rushing up every time and welcome them. It makes the tutors feel important whereas, in normal school lessons, they often feel inadequate. Everyone benefits. The older children need practice in reading but, if they had to do it in their own classes, they would say it was kids' stuff and be worried about losing face. The younger children get individual attention from very patient people. The tutors are struggling at school themselves so, when the younger ones can't learn, they know exactly why."

The tutors agree. "When I was little, I used to skive and say I couldn't do things when I really could," says Mark Gregor. "The boy I've been teaching does the same. He says he can't read a page of his book so I tell him that, if he does do it, we can play a game. That works."

Jean Bond, who describes pupil tutoring as an 'educational conjuring trick', has run two previous experiments. In one, six persistent truants, aged 15 upwards, tutored 12 slowlearning infants in reading and maths. None of the six played truant from any of the tutoring sessions. "The degree of concentration they showed while working with their tutees was remarkable for pupils who had previously shown little ability to concentrate on anything related to school work for any period of time," says Bond. The tutors became 'reliable, conscientious, caring individuals'.

Their own reading, previously mechanical and monotonous, became far more expressive as a result of reading stories aloud to infants. Their view of education, which they had previously dismissed as 'crap' and 'a waste of time', was transformed. They became firmly resolved to teach their own children to read before starting school because, as one of them put it, 'if they go for a job and they can't write, they're not going to employ you, are they?' The tutors also became more sympathetic to their own teacher's difficulties, because they were frustrated themselves when the infants mucked about.

1. According to the writer, the tutors wouldn't normally practice reading in class because:
A. they would find it humiliating.
B. they wouldn't be able to concentrate.
C. their teachers wouldn't consider it necessary.
D. their teachers would get impatient with them.
2. The main reason that the tutors make such successful teachers seems to be that:
A. they enjoy being the centre of attraction.
B. they can relate to their pupils' problems.
C. they are never strict with their pupils.
D. their pupils enjoy playing games with them.
3. The phrase, "it improves the adolescents' sense of self-esteem" suggests that the teenagers:
A. feel more self-confident.
B. sense of worth improves.
C. fell more welcome.
D. feel proud of their abilities.
4. Pupil tutoring is described as 'an educational conjuring trick' because:
A. no one understands why it works so well.
B. it has caught the attention of the media.
C. educational authorities are suspicious of it.
D. it is a simple idea with extraordinary results.
5. One of the important results of the Trinity experiment seems to have been that the tutors:
A. learnt to overcome their fear of reading.
B. improved their own ability to speak.
C. came to see the importance of the writing skill.
D. learnt to love their pupils.
6. The tutors "became more sympathetic to their own teacher's difficulties $\qquad$ " because:
A. they valued the efforts and patience of their teachers.
B. they realized that reading is a difficult skill to teach.
C. they understood the feelings of their teachers when their own pupils misbehaved.
D. they understood that teachinglearning is a difficult process.
7. In the sentence "Their own reading, previously mechanical and monotonous $\qquad$ ", 'mechanical' and 'monotonous' are:
A. verbs
B. adjectives
C. adverbs
D. nouns
8. The most appropriate title for this passage would be:
A. Teenage teachers
B. Truant children
C. A solution to all problems
D. How to improve reading skills
9. The passage is part of:
A. a report
B. an article
C. a narrative
D. a proposal
10. Which of the following statements is not correct according to the passage?
A. Both the tutors and pupils showed improvement in their reading skills.
B. The tutors made future plans for their pupils.
C. The tutors feel important when the younger children welcome them.
D. The tutors behaved very patiently with the pupils.

## Section-II : Logical and Analytical Reasoning

Directions (Qs. Nos. 11-14): Each of the following questions consists of two pairs of numbers/letter groups. First pair has a certain relationship. Complete the second pair by using the same relationship:
11. $12: 143:: 2$ :?
A. 1
B. 2
C. 3
D. 4
12. $225: 14:: 81:$ ?
A. 7
B. 8
C. 9
D. 10
13. $\mathrm{ABD}: \mathrm{BCE}:: \mathrm{NOQ}:$ ?
A. PRS
B. ORS
C. PRT
D. OPR
14. AZYB : CXWD :: BYXC : ?
A. DWVE
B. EXDE
C. DXVE
D. CXDE

Directions (Qs. Nos. 15-18): In each of the following questions, a number/ letter series is given with one term missing. Identify the underlying pattern and complete the series by choosing the correct option:
15. $3,13,23,43,53,73$, ?, $\qquad$
A. 33
B. 83
C. 93
D. 103
16. $5,10,20,35, ?, 80,110$, $\qquad$
A. 30
B. 45
C. 55
D. 75
17. BAC, CBD, ?, EDF, FEG, $\qquad$
A. CDE
B. ACE
C. BDC
D. DCE
18. MNAZ, LOBY, KPCX, JQDW, ?,
A. HRCW
B. IREV
C. ISDV
D. HTZX
19. If RATS is coded as STAR and TOPS is coded as SPOT, then SMART would be coded as:
A. STRMS
B. RASTM
C. TARMS
D. TRAMS
20. If BAR is coded as RAB and REAK is coded as KAER, then SPEAR would be coded as:
A. ARESP
B. PARES
C. RAEPS
D. PEARS
21. If RACE is coded as 1234 and SPARK is coded as 56217, then SPEAKER would be coded as:
A. 5642741
B. 5424417
C. 6512341
D. 6413542
22. If 1234 is coded as 10 and 3456 is coded as 18 , then 5678 would be coded as:
A. 28
B. 26
C. 32
D. 36
23. Kapil is walking North-East, then he turns right. After walking for one minute, he again turns right. In which direction is he now walking?
A. East-South
B. North-West
C. South-East
D. South-West
24. A man is facing east. He turns $45^{\circ}$ clockwise. Then he turns $180^{\circ}$ anticlockwise. Which direction does he face now?
A. North-West
B. West
C. South
D. North-East
25. Which of the following appears first in the dictionary? Select the correct answer:
A. Mountain
B. Monument
C. Momentum
D. Movement
26. The total number of rectangles hidden in the following figure is:

A. 6
B. 9
C. 12
D. 16
27. Of the two brothers elder one is 6 years elder than the younger. After 3 years, the elder one will be twice as old as the younger one then. The present age of younger one is:
A. 3 years
B. 4 years
C. 5 years
D. 6 years
28. A man is the son of the father of your daughter's mother. What is he to you?
A. Son-in-law
B. Brother-in-law
C. Father-in-law
D. Maternal Uncle
29. A, B, C, D and E are friends. B is taller than A but shorter than E. $B$ is taller than D, but shorter than C. E is the tallest. Who is at the median height?
A. A
B. C
C. D
D. B
30. Which of the following names is somehow different from the other three?
A. V.P. Singh
B. Chandrashekhar
C. Manmohan Singh
D. H.D. Deve Gowda

## Section-III : Educational and General Awareness

31. The term 'Epicentre' is associated with:
A. Earthquakes
B. Volcanoes
C. Cyclones
D. Landslides
32. A review of NPE, 1986, Programme of Action (POA) was done by:
A. National Commission for Teachers
B. Yashpal Committee
C. Ramamurti Committee
D. Hansa Mehta Committee
33. The first open university in India was established in the year:
A. 1961
B. 1982
C. 1985
D. 2001
34. Sarnath Pillar was built by:
A. Harshvardhan
B. Ashoka
C. Gautam Buddha
D. Kanishka
35. The total number of schedules in the Indian constitution is:
A. 6
B. 14
C. 12
D. 10
36. Which ruler founded the city of Agra?
A. Sikandar Lodi
B. Akbar
C. Firoz Tughlaq
D. Shahjahan
37. 'A Farewell to Arms' was written by:
A. Ernest Hemingway
B. George Orwell
C. J.K. Galbraith
D. Gunnar Myrdal
38. Who was the first Vice-Chairman of NITI Aayog?
A. Arvind Panagariya
B. Raghuram Rajan
C. Chandrashekhar Subramaniam
D. Rajiv Kumar
39. Which river crosses the tropic of cancer twice?
A. Narmada
B. Tapti
C. Chambal
D. Mahi
40. Direct Tax Code in India is related to which of the following?
A. Sales Tax
B. Income Tax
C. Excise Duty
D. Service Tax
41. Which of the following is not included in the assets of a commercial bank in India?
A. Advances
B. Deposits
C. Investment
D. Money at call and short notice
42. In which Article of the constitution the adult suffrage is recognised?
A. 324
B. 325
C. 326
D. 327
43. The Attorney General of India is appointed by:
A. The Law Minister
B. The President of India
C. The Speaker of the Lok Sabha
D. The Prime Minister
44. The Battle of Buxar was fought in:
A. 1764
B. 1757
C. 1526
D. 1761
45. 'Jaziya' was reimposed during the reign of:
A. Akbar
B. Aurangzeb
C. Jahangir
D. Humayun
46. India's first ATM was installed by which bank?
A. Citi Bank
B. HSBC
C. PNB
D. SBI
47. Adhai Din-Ka-Jhonpra at Ajmer was constructed by:
A. Shershah
B. Qutbuddin Aibak
C. Jalaludin Firoz Khilji
D. Balban
48. In which year Tsunami occurred in India?
A. 2005
B. 2004
C. 2006
D. 2007
49. Which of the following is a Kharif crop?
A. Wheat
B. Barley
C. Millet
D. Mustard
50. Which of the following states of India has the longest coastline?
A. Maharashtra
B. Andhra Pradesh
C. Kerala
D. Gujarat
51. Who built the Jama Mosque of Delhi?
A. Akbar
B. Qutbuddin Aibak
C. Jahangir
D. Shahjahan
52. Which of the following temple is not situated at Khajuraho?
A. Parshvanath
B. Vishwanath
C. Kandaria Mahadev
D. Lingraj
53. Selection test for admission to teacher training programme was suggested by:
A. NCTE
B. NAAC
C. NPERL
D. NCERT
54. International Day of Persons with Disabilities is observed on:
A. 5 December
B. 3 December
C. 11 December
D. 18 December
55. Which state first adopted the Panchayati Raj System in 1959?
A. Rajasthan
B. Karnataka
C. Gujarat
D. Punjab

## Section-IV : Teaching-Learning and The School

56. According to National Education Policy, 2020, structure of school education will be:
A. $10+2+3$
B. $11+2+2$
C. $5+3+3+4$
D. $3+3+5+4$
57. In the context of the school, what does CCE stand for?
A. Centres for Continuing Education
B. Continuous and Comprehensive Evaluation
C. Core Committee on Education
D. Committee on Curriculum Evaluation
58. "Students will be able to enumerate the functions of a commercial bank." This objective pertains to:
A. Cognitive domain
B. Affective domain
C. Psychomotor domain
D. Both Cognitive and Affective domain
59. The method which expects students to learn on their own is:
A. Lecture Method
B. Demonstration Method
C. Heuristic Method
D. Lecture-cum-Demonstration Method
60. Which one of the following characteristics does not describe the scientific attitude?
A. Curiosity of knowing things
B. Critical thinking
C. Exploring 'what', 'why' and 'how' of the phenomena
D. Not being openminded
61. Which one of the following statements best indicates the difference between the syllabus and curriculum?
A. Syllabus includes academic subjects only whereas the curriculum deals with the totality of learning experiences.
B. Curriculum is not comprehensive whereas syllabus is.
C. Curriculum is based on the needs of the child whereas syllabus is not.
D. Curriculum is school centric and syllabus is classroom centric.
62. Behaviourism is not described by:
A. Knowledge construction
B. Readiness for learning
C. Learning by trial and error
D. Conditioning
63. "NISHTHA" portal facilitates:
A. In-service training of school teachers
B. Pre-service training of school teachers
C. In-service training of university teachers
D. Pre-service training of university teachers
64. As per cognitivism, learning involves:
A. Trial and error
B. Linking new and old learning
C. Learning within social setting
D. Conditioning
65. A sound recreational activity promotes development of:
A. body only
B. mind only
C. both mind and body
D. neither mind nor body
66. Knowledge explosion in the world today requires a teacher to be:
A. Facilitator of learning
B. Provider of knowledge
C. Creator of knowledge
D. Both creator and provider of knowledge
67. Which of the following is not a co-curricular activity?
A. a quiz in a class
B. a cultural programme
C. reading textbook
D. reading a story book in the school library
68. Instructions in a Distance Education system are commonly imparted through:
A. Personal Contact Programme
B. Printed Study Material
C. Radio
D. Television
69. Which of the following does not hold good for the use of audiovisual aids?
A. use of multiple sense organs
B. creating novality
C. making abstractions concrete
D. making simple concepts complex
70. Jacques Delors report to the UNESCO was titled:
A. International Commission on Education Report
B. Millennium Development Report
C. Learning : The Treasure Within
D. World Declaration on Education for All
71. For the qualitative improvement of elementary education in India, NPE, 1986 recommended the establishment of:
A. NCERT
B. SCERT
C. DIET
D. IASE
72. Which teaching method makes learner's participation optimal and proactive?
A. Discussion method
B. Lecture method
C. Demonstration method
D. Lecture-cum-demonstration method
73. Summative evaluation is:
A. assessment while teaching a topic
B. assessment after teaching a topic
C. assessment at the end of a semester
D. assessment after teaching a chapter
74. In a lively classroom situation, it is unlikely that there would be:
A. occasional roars of laughter
B. complete silence
C. frequent teacher-student dialogue
D. discussion among students
75. Teaching should involve:
A. Avoidance of proximity
B. Voice modulation
C. Repetitive pause
D. Fixed posture
76. RCI stands for:
A. Reserve Court of India
B. Rehabilitation Centre of India
C. Reserve Council International
D. Rehabilitation Council of India
77. The approach explaining learning from peers is:
A. Behaviourism
B. Cognitivism
C. Constructivism
D. Social constructivism
78. Research undertaken to solve problems of students in schools is called:
A. Fundamental Research
B. Action Research
C. Applied Research
D. Basic Research
79. Change in attitude pertains to:
A. Cognitive Domain
B. Psychomotor Domain
C. Affective Domain
D. Both Affective and Cognitive Domains
80. Elementary education is a fundamental right under the Article
$\qquad$ of the Indian Constitution.
A. 15 A
B. 20 A
C. 21 A
D. 20 B

## PART-B

## Section-V : (i) Science

81. Which colour of the rainbow has the maximum wavelength?
A. Violet
B. Green
C. Yellow
D. Red
82. A body moving along the circumference of a circle may have a constant:
A. speed
B. velocity
C. momentum
D. acceleration
83. A normal eye forms the image of an object on:
A. Iris
B. Cornea
C. Retina
D. Pupil
84. The instrument used to measure atmospheric pressure is:
A. Thermometer
B. Sonometer
C. Barometer
D. Hygrometer
85. The density of water is maximum at:
A. $-4^{\circ} \mathrm{C}$
B. $0^{\circ} \mathrm{C}$
C. $4^{\circ} \mathrm{C}$
D. $100^{\circ} \mathrm{C}$
86. If weight of a person on earth is $\mathrm{W}_{\mathrm{E}}$ and his weight on Moon is $\mathrm{W}_{\mathrm{M}}$, we have:
A. $\mathrm{W}_{\mathrm{E}}>\mathrm{W}_{\mathrm{M}}$
B. $\mathrm{W}_{\mathrm{E}}<\mathrm{W}_{\mathrm{M}}$
C. $\mathrm{W}_{\mathrm{E}}=\mathrm{W}_{\mathrm{M}}$
D. No prediction is possible
87. An organic compound must contain:
A. Hydrogen
B. Carbon
C. Oxygen
D. Silicon
88. Diamonds are made of:
A. Pure Carbon
B. Carbon and Silicon
C. Glass and Silicon
D. Pure Silicon
89. On heating white phosphorus it is converted into red phosphorus. If a little Iodine is added the conversion is faster. Here Iodine acts as:
A. Oxidizer
B. Catalyst
C. Lubricant
D. Detergent
90. Starch can be detected using a drop of iodine. In the presence of starch, iodine:
A. Turns blue
B. Vapourises
C. Becomes colourless
D. Turns black
91. Geiger-Muller counters are instruments for measuring:
A. Time
B. X-rays
C. Photons
D. Radioactivity
92. Which of the following is not essential for rust to form?
A. Iron
B. Water
C. Oxygen
D. Carbon dioxide
93. Which of the following is a chemical compound?
A. Copper
B. Oxygen
C. Common salt
D. Iron
94. All the following organs in the human body are located both on the right and the left sides, except:
A. Kidneys
B. Lungs
C. Eyes
D. Spleen
95. Typhoid is caused by:
A. Bacteria
B. Virus
C. Hormones
D. Fungus
96. All living beings have this process:
A. Respiration
B. Photosynthesis
C. Breathing
D. Transpiration
97. Molybdenum is a:
A. Macronutrient
B. Micronutrient
C. Not a nutrient
D. Compound
98. Cataract is the disease of:
A. Eye
B. Ear
C. Lungs
D. Heart
99. Of the following types of teeth which one is used for grinding food?
A. Canine
B. Molar
C. Incisor
D. Milk teeth
100. The depletion of ozone layer in the atmosphere is caused by:
A. Nitrous oxide
B. Sulphur dioxide
C. Carbon dioxide
D. Chlorofluorocarbons

## Section-V : (ii) Mathematics

101. The sum of the first 15 multiples of 8 is:
A. 760
B. 1060
C. 860
D. 960
102. Twelve observations are recorded as under:
$14,25,14,28,18,17,18,14,23$, 22, 14, 18
The mode is:
A. 14
B. 17
C. 18
D. 22
103. Twenty fifth percentile is the same as:
A. First quartile
B. Second quartile
C. Third quartile
D. Quartile deviation
104. When Mean $>$ Median, the curve is:
A. Positively skewed
B. Negatively skewed
C. Normal probability curve
D. Frequency curve
105. The value of $9 \sec ^{2} \mathrm{~A}-9 \tan ^{2} \mathrm{~A}$ is:
A. 1
B. 0
C. 8
D. 9
106. A tower stands vertically on the ground. From a point on the ground, which is 15 m away from the foot of the tower, the angle of elevation of the top of the tower is $60^{\circ}$. The height of the tower is:
A. $\frac{15}{\sqrt{3}} \mathrm{~m}$
B. $15 \sqrt{3} \mathrm{~m}$
C. $\frac{5}{\sqrt{3}} \mathrm{~m}$
D. $5 \sqrt{3} \mathrm{~m}$
107. ABC and BDE are two equilateral triangles such that $D$ is the mid point of BC. Ratio of
the areas of the triangles ABC and BDE is:
A. $4: 1$
B. $1: 4$
C. $1: 2$
D. $2: 1$
108. 16 men or 20 women can do a piece of work in 25 days. In how many days 28 men and 15 women will do the same?
A. 10 days
B. $14 \frac{2}{7}$ days
C. $18 \frac{3}{4}$ days
D. $20 \frac{1}{3}$ days
109. A coconut merchant finds that the cost price of 2750 coconuts is the same as the selling price of 2500 coconuts. Percentage of gain or loss is:
A. $15 \%$ loss
B. $15 \%$ gain
C. $10 \%$ gain
D. $10 \%$ loss
110. What should be diameter of the wheel if a distance of 5.5 kilometres is to covered in 1750 revolutions?
A. 0.5 metre
B. 0.75 metre
C. 1.0 metre
D. 1.25 metre
111. The most approximate value of $3 \sqrt{5}-4 \sqrt{3}+2 \sqrt{80}+2 \sqrt{12}$ is:
A. 24
B. 24.5
C. 25.0
D. 24.6
112. The length of a train and that of a platform are equal. If with a speed of 90 kmph the train crosses the platform in one minute, then the length of train (in metres) is:
A. 700 m
B. 750 m
C. 800 m
D. 850 m
113. A student failed by 30 marks, securing 201 marks. If minimum pass marks are $33 \%$, the maximum marks for the exam is:
A. 700
B. 750
C. 650
D. 600
114. A sum of money amounts to ₹ 1,008 in 2 years and $₹ 1,112$ in 3 years. The rate of interest is:
A. $13.5 \%$
B. $12 \%$
C. $13 \%$
D. $12.5 \%$
115. The median of the following ten numbers is:
$14,32,24,18,29,15,13,27,26,31$
A. 27
B. 26
C. 24
D. 25
116. A person's salary was increased by $25 \%$ and then decreased by some per cent to bring at the previous level. The decrease per cent was:
A. $25 \%$
B. $20 \%$
C. $24 \%$
D. $18 \%$
117. The average weight of $A, B$ and $C$ is 45 kg . If the average weight of $A$ and $B$ is 40 kg and that of $B$ and $C$ is 43 kg , then the weight of B is:
A. 31 kg
B. 41 kg
C. 36 kg
D. 38 kg
118. There are two numbers in the ratio of $7: 4$. If 12 is added to the smaller number the ratio becomes $7: 5$. The bigger number is:
A. 48
B. 64
C. 77
D. 84
119. Twelve years ago, a father's age was 2 times the age of his son.

Three years later, the ratio of father and son's ages will be $5: 3$. How old is the son now?
A. 38 years
B. 40 years
C. 42 years
D. 45 years
120. A two-digit number is below 30 . Sum of its digits is 10 and difference is 6 . The number is:
A. 24
B. 26
C. 28
D. 29

## Section-V : (iii) Social Science

121. Who was the first GovernorGeneral of India during the British rule?
A. Lord Mountbatten
B. Warren Hastings
C. William Bentinck
D. Charles Wood
122. The treaty that ended the First World War was:
A. The treaty of Paris
B. The treaty of Brest-Litovsk
C. The treaty of Versailles
D. The treaty of Nevilly
123. Who was the founder of Brahmo Samaj Movement?
A. Bipin Chandra Pal
B. Bal Gangadhar Tilak
C. Lala Lajpat Rai
D. Raja Ram Mohan Roy
124. Which of the following structures of school education has been recommended by the National Education Policy, 2020?
A. $5+3+4+3$
B. $5+4+3+3$
C. $4+5+3+3$
D. $5+3+3+4$
125. When was the constitution of India adopted by the Constituent Assembly?
A. 26 January, 1950
B. 5 December, 1949
C. 26 November, 1949
D. 15 August, 1948
126. Which of the following Articles of the Indian constitution includes the Right of Children to Free and Compulsory Education Act, 2009?
A. Article 21 (A)
B. Article 45
C. Article 30
D. Article 29 (1)
127. Which of the following states has Kuchipudi as a classical dance form?
A. Karnataka
B. Andhra Pradesh
C. Kerala
D. Odisha
128. The Aravalli mountain range stretches across which of the Indian states?
A. Maharashtra, Goa and Karnataka
B. Kerala, Tamil Nadu and Andhra Pradesh
C. Delhi, Haryana, Rajasthan and Gujarat
D. Punjab, Himachal Pradesh and Jammu and Kashmir
129. What soil is the best for the growth of sugarcane?
A. Black soil
B. Alluvial soil
C. Red soil
D. Loamy soil
130. Which of the following is the longest river in the world?
A. Nile
B. Amazon
C. Yangtze
D. Ganga
131. Who is called as the 'Father of Sociology'?
A. Karl Marx
B. Auguste Comte
C. Max Weber
D. Harriet Martineau
132. Which is not a sedimentary rock?
A. Limestone
B. Sandstone
C. Granite
D. Siltstone
133. The regulation and control of all banks in India is performed by:
A. Central Bank of India
B. State Bank of India
C. Reserve Bank of India
D. Punjab National Bank
134. Which is not an example of the Barter System?
A. Mangoes are exchanged for oranges
B. Tea is exchanged for salt
C. Shoes are exchanged for cloths
D. Purchasing goods as per market rate by exchanging money
135. The book "Das Kapital" by Karl Marx was published in the year:
A. 1867
B. 1877
C. 1887
D. 1897
136. Which of the following battles was fought between Alexander and King Porus in 326 B.C.?
A. Panipat
B. Hydaspes
C. Buxar
D. Tarain
137. Chipko movement is associated with:
A. Human Rights
B. Milk Production
C. Environmental Conservation
D. Agricultural Production
138. Which of the following Acts introduced provincial autonomy during the British rule?
A. The Government of India Act, 1919
B. The Government of India Act, 1909
C. The Government of India Act, 1858
D. The Government of India Act, 1935
139. Where did the practice of 'Shadow Cabinet' originate?
A. India
B. Great Britain
C. U.S.A.
D. Italy
140. Hirakud Dam is located on which of the following rivers?
A. Mahanadi
B. Kaveri
C. Godavari
D. Krishna

## Section-V : (iv) English

Directions (Qs. Nos. 141-145): Choose
the word that is nearest in meaning to the underlined word:
141. Covalent compounds consist of discrete molecules.
A. Concrete
B. Grouped
C. Separate
D. Convoluted
142. The pearls bought by Anaisha are genuine.
A. Inexpensive
B. Attractive
C. Expensive
D. Authentic
143. There is not a single word that is redundant in the report.
A. Bombastic
B. Unimportant
C. Flowers
D. Unnecessary
144. All mail is censored by the government during war time.
A. distributed
B. confiscated
C. examined
D. supervised
145. The art movie that I watched this evening has put me in expensive mood.
A. cheerful
B. reflective
C. confused
D. depressed

Directions (Qs. Nos. 146-150): In each of the following group of words, only one of them is correctly spelt. Select the one with the correct spelling:
146. A. asending
B. ascending
C. acending
D. ascanding
147. A. presumptous
B. presamptous
C. presumptus
D. presamptus
148. A. fasade
B. facade
C. fasad
D. facad
149. A. mundane
B. mondane
C. mundan
D. mondan
150. A. falacy
B. fallacy
C. falecy
D. fallecy

Directions (Qs. Nos. 151-154): Choose the word that is opposite in meaning to the underlined word:
151. The Gupta rulers patronised all cultural activities and thus the period came to be called the 'Golden Age' of Indian history.
A. admired
B. rejected
C. indulged
D. favoured
152. Tilak always advocated the use of indigenous goods.
A. cheap
B. native
C. silly
D. foreign
153. His timidity led him to trouble.
A. boldness
B. arrogance
C. self-assertion
D. self-confidence
154. We should not belittle the value of small things.
A. expand
B. downplay
C. praise
D. scorn

Directions (Qs. Nos. 155 and 156): Pick out the most appropriate word from the given alternatives to fill in the blank to complete the sentence:
155. He is too $\qquad$ to be deceived easily.
A. strong
B. modern
C. kind
D. intelligent
156. The police have $\qquad$ a complaint against the culprits.
A. entered
B. registered
C. noted
D. lodged

Directions (Qs. Nos. 157-160): Choose the correct answer:
157. The novel 'Jane Eyre' was written by:
A. Charlotte Bronte
B. Emily Bronte
C. George Eliot
D. Jane Austen
158. The poem 'Ode to the West Wind' was written by:
A. Keats
B. Shelley
C. Wordsworth
D. Byron
159. The play 'Othello' was written by:
A. Shakespeare
B. Bernard Shaw
C. Eugene O'Neil
D. Brecht
160. The novel 'Gora' was written by:
A. Tagore
B. R.K. Narayan
C. Anita Desai
D. Khushwant Singh

## Section-V : (v) हिन्दी

निर्देश (प्रश्न संख्या 161 से 165): निम्नलिखित गयांश को ध्यानपूर्वक पढ़कर उसके आधार पर पूछे गए प्रश्नों के उत्तर दीजिए :

निर्लिप्त रहकर दूसरों का गला काटने वालों से लिप्त रहकर दूसरों की भलाई करने वाले कहीं अच्छे होते हैं। क्षात्रधर्म का संबंध लोकरक्षा से है। अतः वह जनता के सम्पूर्ण जीवन को स्पर्श करने वाला है। कोई राजा होगा तो अपने घर का होगा $\qquad$ इससे बढ़कर झूठी बात शायद ही कोई हो। झूठे खिताबों द्वारा यह कभी सच नहीं की जा सकती। क्षात्र जीवन के इतना व्यापक होने के कारण ही हमारे मुख्य अवतार राम और कृष्ण क्षत्रिय हैं।

कर्म-सौंदर्य की योजना जितने रूपों में क्षात्र जीवन में संभव है, उतने रूपों में किसी में नहीं। शक्ति के साथ क्षमा, वैभव के साथ विनय, तेज के साथ कोमलता, पराक्रम के साथ रूप-माधुर्य, प्रताप के साथ कठिन धर्म-पथ का अवतंबन क्षात्रधर्म में ही हो सकता है। इस व्यापार युग में, इस वणिगधर्म प्रधान युग में क्षात्रधर्म की चर्चा करना शायद पुरानी बातों को याद करना समझा जाए परन्तु आधुनिक व्यापार की अन्याय रक्षा भी शास्त्रों द्वारा ही की जाती है। क्षात्रधर्म का उपयोग समाप्त नहीं हुआ है, केवल धर्म के साथ उसका असहयोग हो गया है।
161. प्रस्तुत गद्यांश के लिए एक उचित शीर्षक दीजिए :
A. क्षात्रधर्म से हानि
B. क्षात्रधर्म की महत्ता
C. वणिग्धर्म के दोष
D. राम-कृष्ण का व्यक्तित्व
162. क्षात्रधर्म में कौन-सा सौंदर्य अनेक रूपों में दिखाई देता है?
A. धर्म
B. अर्थ
C. कर्म
D. भलाई
163. वणिग्धर्म किसको कहा गया है?
A. व्यापारी के काम को
B. व्यापारी के सौंदर्य को
C. व्यापार के धन को
D. व्यापारी की सोच को
164. क्षात्रधर्म का संबंध किससे है?
A. जीवरक्षा
B. पशुरक्षा
C. लोकरक्षा
D. झूठे खिताबों से
165. क्षात्रधर्म की चर्चा वणिग्धर्म प्रधान युग में कैसी समझी जाती है?
A. पुरानी बातों को याद करने जैसी
B. सफलता प्रदान करने वाली
C. व्यर्थ की
D. बहुत ही ज्ञानवर्धक
166. सब कुछ जानने वाले को कहते हैं:
A. कृतज्ञ
B. सर्वज्ञ
C. अज्ञ
D. विशेषज्ञ
167. हिन्दी वर्णमाला में अयोगवाह वर्ण कौन-से हैं?
A. अ, आ
B. इ, ई
C. उ, ऊ
D. अं, अ:
168. ‘ऋजु’ का विलोम शब्द कौन-सा है ?
A. मृदु
B. वक्र
C. अद्यतन
D. निश्चित
169. कौन-से शब्द की वर्तनी अशुद्ध है ?
A. कवियत्री
B. कवयित्री
C. आकलन
D. प्रादुर्भाव
170. जिस वाक्य में ‘एक कर्त्ता’ और ‘एक क्रिया’ हो, उसे कहते हैं :
A. संयुक्त वाक्य
B. मिश्र वाक्य
C. सरल वाक्य
D. विकसित वाक्य
171. 'अथ' का विलोम शब्द है :
A. अंत
B. शब्द
C. अर्थ
D. इति
172. किस शब्द में ‘आवा’ प्रत्यय नहीं है?
A. चढ़ावा
B. दिखावा
C. लावा
D. भुलावा
173. निम्नलिखित शब्दों में से विशेषण कौन-सा शब्द है?
A. सौंदर्य
B. कृतज्ञ
C. व्यक्तित्व
D. बड़प्पन
174. 'अमिय' का पर्यायवाची शब्द है :
A. आम्र
B. सुधा
C. विष
D. मधुप
175. 'ध्रुवस्वामिनी' नाटक के रचनाकार का नाम है :
A. महादेवी वर्मा
B. जयशंकर प्रसाद
C. मुंशी प्रेमचंद
D. मोहन राकेश
176. 'कहाँ राजा भोज कहाँ गंगू तेली' कहावत का अर्थ है?
A. गुण के विरुद्ध नाम होना
B. उच्च और साधारण की तुलना कैसी
C. घर के गुणी व्यक्ति को तुच्छ समझना
D. केवल बाह्य प्रदर्शन
177. ‘आँख-कान खुले रखना’ मुहावरे का अर्थ है :
A. आँख खोलकर सुनना
B. एक-दूसरे को देखना
C. सचेत रहना
D. होश में रहना
178. ‘काली घटा का घमंड घटा’ में अलंकार है :
A. श्लेष
B. यमक
C. अनुप्रास
D. अर्थालंकार
179. पुस्तक कौन-सा शब्द है?
A. तद्भव
B. तत्सम
C. विदेशज
D. देशज
180. ‘देशभक्ति’ में कौन-सा प्रत्यय है?
A. तत्पुरुष समास
B. कर्मधारय समास
C. द्वंद्व समास
D. द्विगु समास

## ANSWERS

1. (A)
2. (B)
3. (B)
4. (D)
5. (A)
6. (C)
7. (B)
8. (D)
9. (A)
10. (D)
11. (C): $12: 143$

$$
\begin{array}{rlrl}
\Rightarrow & & (12)^{2}-1 & =144-1=143, \\
& & : & : ? \\
\Rightarrow & (2)^{2}-1 & =4-1=3 \\
& \therefore & & =3
\end{array}
$$

12. (B): $225: 14$

$$
\begin{aligned}
& \Rightarrow \sqrt{225}-1=15-1=14 \\
& \text { 81:? } \\
& \Rightarrow \quad \sqrt{81}-1=9-1=8 \\
& \therefore \quad ?=8
\end{aligned}
$$

13. (D):


Similarly,

$\therefore$ ? $=$ OPR.
14. (A):


Similarly,

$\therefore ?=$ DWVE.
15. (C):

$\therefore$ the missing number $=93$.
16. (C):

$\therefore$ the missing number $=55$.


$\therefore$ the missing term $=$ DCE.
18. (B): The letters of the word are coded by their represented letters in the reverse series.

$\therefore$ the missing term $=$ IREV.
19. (D): Given,


Similarly,

$\therefore$ SMART would be coded as TRAMS.
20. (C): Given, BAR $\Rightarrow$ RAB REAK $\Rightarrow$ KAER

Letters written in reverse
Similarly, SPEAR $\Rightarrow$ RAEPS
$\therefore$ SPEAR would be coded as RAEPS.
21. (A): Given, R A C E
and,

| S | P | A | $R$ | K |
| :---: | :---: | :---: | :---: | :---: |
| $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ |
| 5 | 6 | 2 | 1 | 7 |

$\therefore S \quad P \quad E \quad A \quad E \quad R$ $\begin{array}{ccccccc}\downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 5 & 6 & 4 & 2 & 7 & 4 & 1\end{array}$
$\therefore$ SPEAKER would be coded as 5642741.
22. (B): Given, $1234=10$
$\Rightarrow \quad 1+2+3+4=10$
and $3456=18$
$\Rightarrow \quad 3+4+5+6=18$

Similarly $5678=$ ?
$\Rightarrow \quad 5+6+7+8=26$
$\therefore 5678$ would be coded as 26 .
23. (D):


Here, Starting point $=0$
Finally, he is walking in SouthWest direction.
24. (A):


Here, Starting point $=\mathrm{A}$
Final point $=\mathrm{C}$
Now he is facing in North-West direction.
25. (C): Momentum $\rightarrow$ Monument $\rightarrow$ Mountain $\rightarrow$ Movement.
Momentum appears first in the dictionary.
26. (C)
27. (A): Let the present age of younger is $x$ yrs.
then, the present age of elder is $(x+6)$ yrs.
According to question,
After 3 yrs.

$$
\begin{aligned}
& & x+6+3 & =2(x+3) \\
\Rightarrow & & x+9 & =2 x+6 \\
\Rightarrow & & 2 x-x & =9-6 \\
\Rightarrow & & x & =3 \text { years. }
\end{aligned}
$$

28. (B):


Here, he is the brother-in-law to you.
29. (D): $\mathrm{E}>\mathrm{B}>\mathrm{A}, \mathrm{C}>\mathrm{B}>\mathrm{D}$
$\Rightarrow \mathrm{E}>\mathrm{C}>\mathrm{B}>\mathrm{A}>\mathrm{D}$
Here, B is at the median height.
30. (C)
31. (A)
32. (C)
33. (B)
34. (B)
35. (C)
36. (A)
37. (A)
38. (A)
39. (D)
40. (B)
41. (B)
42. (C)
43. (B)
44. (A)
45. (B)
46. (B)
47. (B)
48. (B)
49. (C)
50. (D)
51. (D)
52. (D)
53. (A)
54. (B)
55. (A)
56. (C)
57. (B)
58. (D)
59. (C)
60. (D)
61. (D)
62. (A)
63. (A)
64. (C)
65. (C)
66. (D)
67. (C)
68. (B)
69. (D)
70. (C)
71. (C)
72. (A)
73. (C)
74. (B)
75. (B)
76. (D)
77. (D)
78. (B)
79. (D)
80. (C)
81. (D)
82. (A)
83. (C)
84. (C)
85. (C)
86. (A)
87. (B)
88. (A)
89. (B)
90. (A)
91. (D)
92. (D)
93. (C)
94. (D)
95. (A)
96. (A)
97. (B)
98. (A)
99. (B)
100. (D)
101. (D): [Sum of first $n$ natural numbers

$$
\left.=\frac{n(n+1)}{2}\right]
$$

Here, The sum of the first 15 multiples of 8

$$
\begin{aligned}
& =8(1+2+3+\ldots+15) \\
& =8\left[\frac{15(15+1)}{2}\right] \\
& =8\left[\frac{15 \times 16}{2}\right]=8[15 \times 8] \\
& =8[120]=960 .
\end{aligned}
$$

102. (A): In the given observations 14 is 4 times

$$
\therefore \quad \text { Mode }=14 .
$$

103. (A) 104. (A)
104. (D): $9 \sec ^{2} \mathrm{~A}-9 \tan ^{2} \mathrm{~A}$
$=9\left(\sec ^{2} \mathrm{~A}-\tan ^{2} \mathrm{~A}\right.$
$=9 \times 1=9\left[\because \sec ^{2} \mathrm{~A}-\tan ^{2} \mathrm{~A}=1\right]$
105. (B): Let $A B$ be a tower of height $h \mathrm{~m}$.

and

$$
\begin{aligned}
\mathrm{BC} & =15 \mathrm{~m} \\
\angle \mathrm{ACB} & =60^{\circ}
\end{aligned}
$$

In $\triangle \mathrm{ABC}$

$$
\begin{aligned}
& & \tan 60^{\circ} & =\frac{\mathrm{AB}}{\mathrm{BC}} \\
& \Rightarrow & \sqrt{3} & =\frac{h}{15} \\
\Rightarrow & & h & =15 \sqrt{3} \mathrm{~m}
\end{aligned}
$$

$\therefore$ The height of the tower

$$
=15 \sqrt{3} \mathrm{~m} .
$$

107. (A): Given, $\triangle \mathrm{ABC}$ and $\triangle \mathrm{BDE}$ are two equilateral triangles such that $D$ is the mid-point of BC


Let side of equilateral $\triangle \mathrm{ABC}=x$
then,

$$
\mathrm{BD}=\frac{x}{2}
$$

$\therefore$ side of equilateral $\triangle \mathrm{BDE}=\frac{x}{2}$ $[\because$ Area of equilateral

$$
\text { triangle } \left.=\frac{\sqrt{3}}{4} \times(\text { side })^{2}\right]
$$

$\therefore$ area ( $\triangle \mathrm{ABC}$ ) : area ( $\triangle \mathrm{DBC}$ )
$=\frac{\sqrt{3}}{4}(x)^{2}: \frac{\sqrt{3}}{4}\left(\frac{x}{2}\right)^{2}$
$=\frac{\sqrt{3}}{4} x^{2}: \frac{\sqrt{3}}{4} \times \frac{x^{2}}{4}$
$=1: \frac{1}{4}=4: 1$.
108. (A): Given, 16 men $=20$ women
$\Rightarrow \quad 1$ men $=\frac{20}{16}$ women $=\frac{5}{4}$ women
$\Rightarrow 1$ women $=\frac{4}{5}$ men
$\therefore 28$ men +15 women
$=28$ men $+15 \times \frac{4}{5}$ men

$$
\begin{aligned}
& =28 \mathrm{men}+12 \mathrm{men} \\
& =40 \mathrm{men}
\end{aligned}
$$

$\because$ more men, less days $\rightarrow$ Indirect proportion

Men Days
16: $40:: x: 25$
$\Rightarrow 16 \times 25=40 \times x$
$\Rightarrow \quad x=\frac{16 \times 25}{40}$
$=\frac{16 \times 5}{8}$
$=2 \times 5=10$
$\therefore$ Required number of days $=10$.
109. (C):

Let the selling price of 1 coconut is ₹ 1
then, selling price of 2750 coconuts $=₹ 2750$
and cost price of 2750 coconuts
$=$ selling price of 2500 coconuts = ₹ 2500
profit $=$ S.P. - C.P.
$\therefore$ gain $=2750-2500=₹ 250$
$\therefore$ gain $\%=\frac{\text { gain } \times 100}{\text { C.P. }}$
$=\frac{250 \times 100}{2500}=\frac{100}{10}=10 \%$.
110. (C): Here,

Distance $=5.5$ kilometres

$$
\begin{aligned}
& =5.5 \times 1000 \text { metres } \\
& =5500 \text { metres }
\end{aligned}
$$

and number of revolutions

$$
=1750
$$

$\therefore 1$ revolution $=\frac{5500}{1750}$

$$
\begin{aligned}
& =\frac{22}{7} \text { metre } \\
\Rightarrow \quad 2 \pi r & =\frac{22}{7} \\
\Rightarrow \quad 2 \times \frac{22}{7} r & =\frac{22}{7} \\
\Rightarrow \quad 2 r & =1 \text { metre } \\
\Rightarrow \text { diameter } & =1 \text { metre }
\end{aligned}
$$

111. (D): $3 \sqrt{5}-4 \sqrt{3}+2 \sqrt{80}+2 \sqrt{12}$
$=3 \sqrt{5}-4 \sqrt{3}+2 \sqrt{16 \times 5}+2 \sqrt{4 \times 3}$
$=3 \sqrt{5}-4 \sqrt{3}+8 \sqrt{5}+4 \sqrt{3}$
$=11 \sqrt{5}$
$=11 \times 2.2360$
$=24.59=24.6$ (approx)
112. (B): Let the length of a train = length of a platform $=x \mathrm{~m}$ given, speed of train $=90 \mathrm{kmph}$

$$
\begin{aligned}
& =90 \times \frac{5}{18} \mathrm{mps} \\
& =25 \mathrm{mps} \\
\because \quad \text { time } & =\frac{\text { distance }}{\text { speed }} \\
\Rightarrow \quad \frac{x+x}{25} & =1 \text { minute } \\
\Rightarrow \quad \frac{2 x}{25} & =60 \text { seconds }
\end{aligned}
$$

$$
\begin{array}{rlrl}
\Rightarrow & 2 x & =60 \times 25 \\
\Rightarrow & x & =30 \times 25 \\
& =750 \text { metres }
\end{array}
$$

$\therefore$ the length of train $=750 \mathrm{~m}$.
113. (A): Let the maximum marks for the exam is $x$
then, $x \times \frac{33}{100}=201+30$
$\Rightarrow \quad \frac{33 x}{100}=231$
$\Rightarrow \quad x=\frac{231 \times 100}{33}$

$$
=7 \times 100
$$

$\Rightarrow \quad x=700$.
114. (C): According to question Interest of money in 1 year

$$
\begin{aligned}
& =₹ 1112 \text { - ₹ } 1008 \\
& =₹ 104
\end{aligned}
$$

$\Rightarrow$ Interest of money in 2 years

$$
=2 \times 104=₹ 208
$$

$\therefore$ principal of money in 2 years

$$
\begin{aligned}
& =1008-208 \\
& =₹ 800
\end{aligned}
$$

$\therefore$ The rate of interest

$$
\begin{aligned}
& =\frac{\text { Interest } \times 100}{p \times t} \\
& =\frac{208 \times 100}{800 \times 2} \\
& =\frac{26}{2}=13 \%
\end{aligned}
$$

115. (D): Given, ten numbers in ascending order.
$13,14,15,18,24,26,27,29,31,32$
Here, number of observations

$$
n=10 \text { (even number) }
$$

$\therefore$ Median $=\frac{1}{2}\left[\frac{n}{2}\right.$ th term +

$$
\left.\left(\frac{n}{2}+1\right) \text { th } \text { term }\right]
$$

$=\frac{1}{2}[5$ th term +6 th term $]$

$$
\begin{aligned}
& =\frac{1}{2}[24+26] \\
& =\frac{1}{2} \times 50=25 .
\end{aligned}
$$

116. (B): The decrease per cent was

$$
\begin{aligned}
& \frac{25}{100+25} \times 100 \\
= & \frac{25}{125} \times 100 \\
= & \frac{1}{5} \times 100 \\
= & 20 \%
\end{aligned}
$$

117. (A): The total weight of $A, B$ and $C$

$$
=3 \times 45=135 \mathrm{~kg}
$$

the total weight of A and B

$$
=2 \times 40=80 \mathrm{~kg}
$$

and the total weight of B and C

$$
=2 \times 43=86 \mathrm{~kg}
$$

$\therefore$ the total weight of $\mathrm{A}+2 \mathrm{~B}+\mathrm{C}$

$$
=80+86=166 \mathrm{~kg}
$$

$\therefore$ the weight of $\mathrm{B}=166-135$

$$
=31 \mathrm{~kg} .
$$

118. (D): Let the two numbers are $7 x$ and $4 x$
then $\frac{7 x}{4 x+12}=\frac{7}{5}$
$\Rightarrow \quad 7 x \times 5=7 \times(4 x+12)$
$\Rightarrow \quad 35 x=28 x+84$
$\Rightarrow 35 x-28 x=84$
$\Rightarrow \quad 7 x=84$
$\therefore$ The bigger number $=84$.
119. (C): Let 12 years ago, father's age was $2 x$ years and his son was $x$ year
Then, father's present age

$$
=2 x+12 \text { years }
$$

Son's present age $=x+12$ years Now, 3 years later
$(2 x+12)+3:(x+12)+3=5: 3$
$\Rightarrow(2 x+15):(x+15)=5: 3$
$\Rightarrow 3(2 x+15)=5(x+15)$
$\Rightarrow \quad 6 x+45=5 x+75$
$\Rightarrow \quad 6 x-5 x=75-45$
$\Rightarrow \quad x=30$
$\therefore$ Son's present age $=x+12$

$$
\begin{aligned}
& =30+12 \\
& =42 \text { years }
\end{aligned}
$$

120. (C):

Let two digits number is $10 y+x$
According to question,
and $\quad \begin{aligned} x+y & =10 \\ x-y & =6\end{aligned}$
Adding (i) and (ii)
$2 x=16$
$\Rightarrow \quad x=8$

Putting the value of $x$ in (i) $8+y=10 \Rightarrow y=2$
$\therefore \quad$ Number $=10 \times 2+8=28$.

| 121. (C) | 122. (C) | 123. (D) |
| :--- | :--- | :--- |
| 124. (D) | 125. (C) | 126. (A) |

127. (B) 128. (C) 129. (D)
128. (A) 131. (B) 132. (C)
129. (C) 134. (D) 135. (A)
130. (B) 137. (C) 138. (D)
131. (B) 140. (A) 141. (C)
132. (D) 143. (D) 144. (C)
133. (A) 146. (B) 147. (A)
134. (B) 149. (A) 150. (B)
135. (B) 152. (D) 153. (A)
136. (C) 155. (D) 156. (D)
137. (A) 158. (B) 159. (A)
138. (A) 161. (B) 162. (C)
139. (A) 164. (C) 165. (A)
140. (B) 167. (D) 168. (B)
169.(A) 170.(C) 171.(A)
141. (C) 173. (B) 174. (B)
142. (B) 176. (B) 177. (C)
143. (B) 179. (B) 180.(A)

## B.Ed. Entrance Examination-2022*

## PART-A

## Section-I : General English Comprehension

Directions (Qs. No. 1-10): Read the following passage carefully and choose the best answer out of the four choices after each question that follows:

A great deal of discussion continues as to the real extent of global environmental degradation and its implications. What few people challenge, however, is that the renewable natural resources of developing countries are today subject to stresses of unprecedented magnitude. These pressures are brought about, in part, by increased population and the quest for an ever expanding food supply. because the health, nutrition and general well-being of the poor majority are directly dependent on the integrity and productivity of their natural resources, the capability of government to manage them effecting over the long-term becomes of paramount importance.

Developing countries are becoming more aware of the ways in which present and future economic development must build upon a sound and sustainable natural resource base. Some are looking at our long tradition in environmental protection and are
receptive to US assistance which recognises the uniqueness of the social and ecological systems in these tropical countries. Developing countries recognise the need to improve their capability to analyse issues and their own natural resource management. Some countries such as Senegal, India, Indonesia, Thailand etc. are now including conservation concerns in their economic development process.

Because so many governments of developing nations have recognised the importance of these issues, the need today is not merely one of raising additional consciousness, but for carefully designed and sharply focussed activities aimed at the establishment of effective resource management reforms that are essential to the achievement of sustainable development.

1. Some developing countries of Asia and Africa have:
A. formulated very ambitious plans of protecting the habitat in their region.
B. laid a great stress on the conservation of natural resources in their educational endeavour.
C. carefully dovetailed environmental conservation with the overall strategies of planned economic development.
D. sought the help of US experts in solving the problems of environmental degradation.
2. Technical know-how developed in the USA:
A. cannot be easily assimilated by the technocrats of developing countries.
B. can be properly utilised on the basis of developing countries being able to launch an in-depth study of their specific problems.
C. can be easily borrowed by the developing countries to solve the problem of environmental degradation.
D. can be very effective in solving the problem of resource management in tropical countries.
3. There has been a pronounced deterioration of habitat all over the globe because of:
A. population explosion
B. unprecedented urbanisation
C. massive industrialisation in the developing countries
D. large scale deforestation
4. The poor people of the developing world can lead a happy and contented life if:
A. aid flows freely to the developing world.
B. industries based on agriculture are widely developed.
C. economic development takes place within the ambit of conservation of natural resources.
D. there is an assured supply of food and medical care.
5. How much environmental pollution has taken place in the developing and the developed world?
A. There has been a marginal pollution of environment in the developed world and extensive damage in the developing world.
B. There has been a considerable pollution of environment all over the globe.
C. There has been an extensive environ-mental degradation both in the developed as well as the developing world.
D. The environmental pollution that has taken place all over the globe continues to be a matter of speculation and enquiry.
6. What, according to the passage, is an unquestionable reality today?
A. The renewable natural resources in developing coun-tries are in great danger and on the verge of coming to an end.
B. The renewable natural resources in developed countries will never end.
C. The renewable natural resources all over the world are going to end soon.
D. The renewable natural resources in the developed world will end soon.
7. What is the most important reason for the depletion of natural resources in developing countries?
A. Lack of knowledge
B. Population explosion
C. Life style of people
D. Callousness of their governments
8. What is the most important for the preservation of natural resources?
A. Funding from external sources to manage resources.
B. Advancement in science
and technology to manage resources.
C. Awareness of the people to manage resources.
D. Capability of governments to manage resources.
9. Activities aimed at preservation of natural resources is important for:
A. Social Development
B. Sustainable Development
C. Political Development
D. Cultural Development
10. The passage is about:
A. Population Explosion
B. Expanding Food Supply
C. US assistance for managing natural resources
D. Effective resource management for sustainable development

## Section-II : Logical and Analytical Reasoning

11. If $4+4=15$ and $6+6=35$, then $8+8=$ ?
A. 65
B. 63
C. 64
D. 62
12. If SYSTEM is coded as METSYS and FORMER is coded as REMROF, then CARPET would be coded as:
A. PETCAR
B. PETRAC
C. TEPRAC
D. RACTEP
13. According to the dictionary order, which of the following words will appear last of others?
A. Dress
B. Drink
C. Dream
D. Drift
14. Gaurav ranks 23 rd from the top and 22 nd from the bottom in a certain test. How many students appeared in the test?
A. 43
B. 44
C. 45
D. 46
15. In a certain coding system, NAME is coded as 3245 and MINT is coded as 4137, then MITE would be coded as:
A. 4317
B. 4725
C. 4571
D. 4175
16. Which of the following is the next term in the series?

2, 9, 28, 65, $\qquad$
A. 99
B. 121
C. 126
D. 145
17. Five books are placed in such a way that book C is above book D , book E is below book A , book D is above book A and book B is below book E. Which book is at the bottom?
A. A
B. B
C. C
D. D
18. A bag contains equal number of rupee 1,50 paisa and 25 paisa coins. If the total amount of money in the bag is ₹ 35 , what is the number of each type of coins?
A. 15
B. 18
C. 20
D. 25
19. A man walking from north to south turns right at right angle. Again he turns right at right angle. In which direction is he now walking?
A. East
B. North
C. South
D. West
20. Which of the following pairs of numbers is different from others in some way?
A. 27-57
B. 25-63
C. 18-28
D. 36-96
21. Which of the following numbers will be placed at the blank space in the series?

20, 19, 17, $\qquad$ , 10, 5
A. 9
B. 11
C. 14
D. 16
22. A woman pointed to a man and said, "His mother is the only daughter of my mother." What is the woman to the man?
A. Niece
B. Sister
C. Daughter
D. Mother
23. Which of the following numbers is different from others in some way?
A. 42
B. 81
C. 121
D. 144
24. If CHDR represents DIES, then SHLD will represent:
A. LIME
B. LINE
C. SINE
D. TIME
25. Which of the following numbers continues the series?
$1,8,27,64,125$, $\qquad$ ?
A. 156
B. 196
C. 216
D. 225
26. EFGH : DEFG :: OPQR : ?
A. PQRS
B. QRST
C. MNOP
D. NOPQ
27. Which of the following would be the next term in the series? CE, HJ, MO, RT, $\qquad$ ?
A. WY
B. YZ
C. XZ
D. UV
28. 'Ignorance' is to 'Education' as 'Disease' is to:
A. Doctor
B. Hospital
C. Medicine
D. Nurse
29. Which of the following fills the gap in the series?

25, 100, 225, $\qquad$ , 625
A. 256
B. 324
C. 400
D. 484
30. Which of the following continues the series?

ABD, DEH, HIM, MNS, $\qquad$ ?
A. STZ
B. SRY
C. TSR
D. TSY

## Section-III : Educational and General Awareness

31. 'Story of My Life' was written by:
A. Morarji Desai
B. Abdul Kalam
C. Vivekananda
D. Tagore
32. The Father of English Poetry was:
A. Geoffery Chaucer
B. Shakespeare
C. Wordsworth
D. Dryden
33. World Water Day is celebrated on:
A. 21 st March
B. 22 nd March
C. 24th March
D. 23rd March
34. Who advises the State Government on legal matters?
A. Attorney General
B. Advocate General
C. Chief Justice of High Court
D. Chief Justice of Supreme Court
35. The maximum duration of zero hour in the Lok Sabha is:
A. 30 minutes
B. 60 minutes
C. 2 hours
D. Indefinite period
36. 'No appeal, No Daleel, No Vakil' perfectly sums up which of the following?
A. Rowlatt Act
B. Non-co-operation Movement
C. Satyagrah
D. Swadesh Movement
37. 'Alice in Wonderland' was written by:
A. George Orwell
B. Lewis Carroll
C. Chester Bowls
D. Sinclair Lewis
38. The question asked orally after the question hour in the House is called:
A. Supplementary Question
B. Short Notice Question
C. Starred Question
D. Unstarred Question
39. Article 280 of the constitution of India deals with:
A. Finance Commission
B. Information Commission
C. Election Commission
D. Public Service Commission
40. Where is the New Moore island situated?
A. Arab Sagar
B. Indian Ocean
C. Bay of Bengal
D. Bay of Mannar
41. Sea territory of India extends upto:
A. 4 nautical miles
B. 12 nautical miles
C. 200 nautical miles
D. 400 nautical miles
42. World Economic Forum was founded by:
A. Klaus Schwab
B. Paul Krugman
C. Bill Gates
D. Peter Thiel
43. Which of the following prepared the draft of Basic Education?
A. Sapru Commission
B. Shiksha Sammelan Wardha
C. Radhakrishnan Commission
D. Zakir Hussain Committee
44. How many inhabited islands are there in Lakshadweep?
A. 17
B. 20
C. 10
D. 15
45. In which of the following historical sites of Haryana did excavation indicate 4500 years old civilization relics?
A. Rakhigarhi
B. Siswal
C. Rohtak
D. Karnal
46. Who described Bal Gangadhar Tilak as the 'Maker of Modern India'?
A. G.K. Gokhale
B. Mahatma Gandhi
C. Jawaharlal Nehru
D. B.C. Pal
47. In which year did the Industrial Policy express the concept of a mixed economy for India?
A. 1948
B. 1951
C. 1954
D. 1956
48. Who translated 'Atharvaveda' in Persion during Mughal period?
A. Abdul Hamid Lahori
B. Haji Ibrahim Sarhindi
C. Khathi Khan
D. Malik Muhammad Jayasi
49. The Rigveda consists of:
A. 1028 hymns
B. 1000 hymns
C. 2028 hymns
D. 1038 hymns
50. Which of the following rivers is called 'Biological Desert'?
A. Brahmaputra
B. Ganga
C. Damodar
D. Yamuna
51. Who is remembered as the pioneer of economic nationalism?
A. Bipin Chandra Paul
B. Gokhale
C. R.C. Dutt
D. Madan Mohan Malviya
52. The 15 th Pravasi Bhartiya Diwas, 2019 was held in:
A. Lucknow
B. Agra
C. Prayagraj
D. Varanasi
53. Establishment of DIETs was the result of the recommendation of:
A. Indian Education Commission (1964-66)
B. University Education Commission (1948-49)
C. Secondary Education Commission (1952-53)
D. National Policy on Education (1986)
54. The ruling dynasty in India during Timur's invasion was:
A. Lodhi
B. Tughlaq
C. Saiyyad
D. Khilji
55. When did Curzon pass the Indian Universities Act?
A. 1901
B. 1902
C. 1903
D. 1904

## Section-IV : Teaching-Learning and The School

56. Which of the following is a maxim of teaching?
A. Simple to complex
B. Unknown to known
C. Abstract to concrete
D. Far to near
57. Human Development is determined:
A. by the genetic makeup of the individual.
B. by a complex of inherited and environmental factors.
C. primarily by environmental factors over which the individual has no control.
D. primarily by environmental factor over which the individual has control.
58. Non-formal education means:
A. education obtained through open educational institutions.
B. education obtained through formal schools.
C. education obtained through polytechnics.
D. education obtained in conventional universities.
59. Text-book development at the national level is carried out by:
A. UGC
B. NCERT
C. NCTE
D. AICTE
60. Which among the following is constructivist approach to teaching-learning?
A. Bloom's Approach
B. 5-E Approach
C. Morrison Approach
D. Herbartian Approach
61. The purpose of National Science Talent Search Scheme is to:
A. conduct an all India examination.
B. identify students for recruitment to scientific posts.
C. identify talented students and nurture their talent.
D. provide uniformity in science teaching.
62. While counseling students, a teacher should:
A. plan to do most of talking
B. establish rapport with students
C. refrain from giving information
D. assume complete responsibility for solving problems
63. In teaching, if noting has been learnt, nothing has been:
A. Taught
B. Studied
C. Examined
D. Observed
64. Basic requirement for success of lecture method is:
A. use of teaching aids
B. content delivery in a lucid language
C. theme based interaction among participants
D. including a large number of ideas
65. One of the most powerful factors influencing teaching effectiveness is:
A. teacher's gender
B. experience of teachers
C. location of schools
D. teachers' communication skills
66. The best way for providing value education is through:
A. discussions on texts of a particular religion
B. integration of values within subject content
C. religious discourses
D. lectures on values
67. The purpose of continuous and comprehensive evaluation is to: A. evaluate scholastic and coscholastic aspects continuously
B. priorities term and examination
C. evaluate mainly scholastic aspects
D. evaluate primarily coscholastic aspects
68. What is not required for good teaching?
A. Direction
B. Diagnosis
C. Remedy
D. Teacher's bias
69. Which of the following factors does not impact teaching?
A. Classroom activities that encourage learning
B. Socio-economic background of teachers
C. Learning through experience
D. Teacher's knowledge
70. A good learner is one who:
A. only memorizes
B. is not open-minded
C. does not think divergently
D. thinks critically
71. Instructional aids are used by the teacher to:
A. adhere to educational policies
B. utilise school's resources
C. clarify the concepts
D. ensure discipline
72. CLASS stands for:
A. Complete Literacy and Studies in Schools
B. Computer Literates and Students in Schools
C. Computer Literacy and Students in Schools
D. Centre for Literacy and Studies in Schools
73. The first National Policy on Education following independence was formulated in:
A. 1948
B. 1958
C. 1968
D. 1978
74. Classroom environment should not have:
A. interactivity
B. activity
C. autocracy
D. brainstorming
75. "Spare the rod and spoil the child" gives the message that:
A. punishment the class should be banned
B. corporal punishment is not acceptable
C. undesirable behaviour must be punished
D. positive discipline should be encouraged
76. What is the other name of Yashpal Committee Report?
A. Learning with Burden
B. Learning without Burden
C. Learning with Grace
D. Learning with Progress
77. Choose full form of NCERT:
A. National Coordinator of Educational Resources and Tools
B. National Council of Educational Research and Training
C. National Centre for Educational Research and Training
D. New Centre of Educational Resources and Tools
78. 'Fill in the blanks' with alternatives is which type of question?
A. Open-ended question
B. Objective type question
C. Short answer question
D. Subjective type question
79. Classroom management is ineffective when it is:
A. Autocratic
B. Democratic
C. Co-operative
D. Participatory
80. The idea of basic education was proposed by:
A. Dr. Zakir Hussain
B. Dr. Rajendra Prasad
C. Mahatma Gandhi
D. Rabindranath Tagore

## PART-B

## Section-V : (i) Science

81. The effective resistance of the following combination from A to B is:

A. $2 \Omega$
B. $4 \Omega$
C. $5 \Omega$
D. $8 \Omega$
82. Light year is a unit of:
A. Time
B. Distance
C. Density
D. Pressure
83. Ice floats in water in a cylinder and the water level is at level A. When the ice melts the water level:

A. will remain unchanged
B. will go up
C. will go down
D. may go up or down
84. An ideal fuse wire should have:
A. a low resistance and low melting point
B. a high resistance and high melting point
C. a low resistance and high melting point
D. a high resistance and low melting point
85. Total internal reflection can take place when light travels from:
A. Air to glass
B. Air to water
C. Water to glass
D. Glass to air
86. The lightest element in our world is:
A. Hydrogen
B. Helium
C. Oxygen
D. Chlorine
87. In the upper layers of the earth, that is, in the crust, the most abundant metal is:
A. Iron
B. Zinc
C. Aluminium
D. Copper
88. The nucleus of Helium is like:
A. An alpha particle
B. A beta particle
C. A gamma particle
D. A proton
89. If a chemical reaction is accompanied by evolution of heat, it is:
A. Exothermic reaction
B. Endothermic reaction
C. Reversible reaction
D. Redox reaction
90. Pressure cooker works on the principle:
A. When the pressure increases the boiling point of water increases.
B. When the pressure increases the boiling point of water decreases.
C. Pressure has no effect on boiling point.
D. Heat and steam does not escape from the cooker.
91. For reducing friction between different parts of machines the following is used:
A. Lubricant
B. Detergent
C. Levers
D. Catalyst
92. The sugar in the milk in the natural form is called:
A. Glucose
B. Sucrose
C. Lactose
D. Fructose
93. The following is not an element of the bone:
A. Oxygen
B. Phosphorus
C. Uranium
D. Calcium
94. The following treatment is suggested for a person whose kidneys are not working:
A. Surgical removal of kidneys
B. Radiotherapy
C. Blood transfusion
D. Dialysis
95. If mitochondria are removed from the cell:
A. Nothing happens
B. The cell cannot reproduce
C. Leaves become white
D. Energy metabolism of the cell is reduced
96. The foetal growth is monitored using:
A. X-rays
B. Microwaves
C. Ultrasonics
D. Ultraviolet rays
97. Viruses need the following for growth:
A. Living host
B. Dead host
C. Minerals
D. Sugars
98. The following process does not increase the amount of carbon dioxide in the air:
A. Breathing
B. Photosynthesis
C. Petrol burning
D. Decay of vegetation
99. Polio is a disease of the following type:
A. Air-borne
B. Water-borne
C. Food-borne
D. Bacteria-borne
100. The major pollutants are:
A. Oxygen and Carbon dioxide
B. Oxygen and Nitrogen
C. Hydrogen and Nitrogen
D. Carbon monoxide and Lead

## Section-V : (ii) Mathematics

101. Which of the following has the largest numerical value?
A. $\sqrt{10}$
B. $\sqrt{100}$
C. $\frac{1}{\sqrt{0.01}}$
D. $\frac{1}{0.01}$
102. The value of is: $\frac{1}{2}-\left[2 \frac{1}{3} \div\left\{\frac{3}{4}-\frac{1}{2}\left(\frac{2}{3}-\frac{1}{6}+\frac{1}{8}\right)\right\}\right]$
A. $5 \frac{1}{2}$
B. $5 \frac{1}{3}$
C. $\frac{1}{6}$
D. $\frac{1}{8}$
103. A batsman scores 448 runs in $x$ innings. In his next innings he is out for 62 and thereby increases his average by 2 . The value of $x$ is:
A. 16
B. 18
C. 20
D. 22
104. A's salary is $50 \%$ above B's. How much per cent is B's salary below A's?
A. $33 \frac{1}{3} \%$
B. $40 \%$
C. $100 \%$
D. $150 \%$
105. A producer blends two varieties of tea, one costing ₹ 150 per kg and the other ₹ 200 per kg in the ratio of $7: 3$. He sells the blended variety at $₹ 181.50$ per kg . His profit per cent is:
A. 20
B. 15
C. 10
D. 8
106. A tradesman sells his goods at $10 \%$ discount on the marked price. What price should he mark on an article that costs him ₹ 900 to gain $10 \%$ ?
A. ₹ 1,000
B. ₹ 1,100
C. ₹ 1,150
D. ₹ 1,200
107. A sum of $₹ 1,000$ invested at $10 \%$ per annum compound interest amounts to ₹ 1,331 . The period of time is:
A. 2 years
B. 3 years
C. $31 / 2$ years
D. 4 years
108. A person buys a pen costing $₹ 240$ on hire purchase basis. He pays ₹ 60 cash down and the rest in 6 monthly instalments of $₹ 32$ each. The rate of interest charged by the dealer is:
A. $18 \%$
B. $20 \%$
C. $22 \%$
D. $24 \%$
109. A plane left 30 minutes later than the scheduled time and in order to reach its destination 1500 km away in time it has to increase its speed by $250 \mathrm{~km} / \mathrm{hr}$. from its usual speed. The usual speed of the plane is:
A. $850 \mathrm{~km} / \mathrm{hr}$.
B. $800 \mathrm{~km} / \mathrm{hr}$.
C. $750 \mathrm{~km} / \mathrm{hr}$.
D. $700 \mathrm{~km} / \mathrm{hr}$.
110. If $\sec \theta+\tan \theta=m$, then the value of $\sin \theta$ is:
A. $\frac{m+1}{m-1}$
B. $\frac{m-1}{m+1}$
C. $\frac{m^{2}+1}{m^{2}-1}$
D. $\frac{m^{2}-1}{m^{2}+1}$
111. The value of
$2\left(\frac{\sin 43^{\circ}}{\cos 47^{\circ}}\right)^{2}-\frac{\cot 30^{\circ}}{\tan 60^{\circ}}-\sqrt{2} \sin 45^{\circ}$ is:
A. 0
B. 1
C. -1
D. $\sqrt{2}$
112. From a building 60 metres high the angles of depression of the top and bottom of a lamp post are $30^{\circ}$ and $60^{\circ}$ respectively. The difference of heights between the building and the lamp post is:
A. $20 \sqrt{3} \mathrm{~m}$
B. $\frac{20}{\sqrt{3}} \mathrm{~m}$
C. 20 m
D. 25 m
113. The length of the sides of a triangle are in the ratio $3: 4: 5$ and its perimeter is 144 cm . The area of the triangle is:
A. $840 \mathrm{~cm}^{2}$
B. $1080 \mathrm{~cm}^{2}$
C. $1440 \mathrm{~cm}^{2}$
D. $864 \mathrm{~cm}^{2}$
114. The minute hand of a clock is 12 cm long. The area of the face of the clock described by the minute hand in 35 minutes is:
A. $210 \mathrm{~cm}^{2}$
B. $264 \mathrm{~cm}^{2}$
C. $280 \mathrm{~cm}^{2}$
D. $285 \mathrm{~cm}^{2}$
115. A metallic cone having base radius 2.1 cm and height 8.4 cm is melted and moulded into a sphere. The radius of the sphere is:
A. 2.1 cm
B. 1.05 cm
C. 1.5 cm
D. 2 cm
116. Water is flowing at a rate of $15 \mathrm{~km} / \mathrm{hr}$ through a pipe of diameter 14 cm into a rectangular tank which is 50 m long and 44 m wide. The time in which level of water in the tank will rise by 21 cm is:
A. 1 hour
B. $11 / 2$ hours
C. 2 hours
D. $21 / 2$ hours
117. The mode of the following series is 36 :

| Class Interval | Frequency |
| :---: | :---: |
| $0-10$ | 8 |
| $10-20$ | 10 |
| $20-30$ | $?$ |
| $30-40$ | 16 |
| $40-50$ | 12 |
| $50-60$ | 6 |
| $60-70$ | 7 |

The missing frequency is:
A. 10
B. 12
C. 8
D. 7
118. What is the probability that an ordinary year as 53 Mondays?
A. $\frac{2}{7}$
B. $\frac{1}{7}$
C. $\frac{7}{53}$
D. $\frac{7}{52}$
119. The sum of all the three-digit natural numbers which are multiples of 7 is:
A. 70336
B. 73306
C. 76033
D. 73360
120. The value of $p$ for which the points $(-5,1),(1, p)$ and $(4,-2)$ are collinear is:
A. 2
B. -2
C. 1
D. -1

## Section-V : (iii) Social Science

121. In the absence of the President and Vice President who discharges the function of President?
A. Attorney General
B. Chief Justice of India
C. PM of India
D. Advocate General
122. Which of the following institutions can expand and increase the scope of Fundamental Rights in the constitution?
A. High Court
B. Supreme Court
C. National Human Rights Commission
D. State Human Right Commission
123. How many members are there in the Election Commission?
A. 1
B. 2
C. 3
D. 4
124. Panchayati Raj is based on the ideology of:
A. Democratic Decentralization
B. People Participation in Govt.
C. Centralization
D. Community Development
125. The United Nations Organisation was estab-lished on:
A. 24th September, 1945
B. 15th July, 1945
C. 24th October, 1945
D. 26th August, 1945
126. The last country to join SAARC was:
A. Sri Lanka
B. Bangladesh
C. Maldives
D. Afghanistan
127. Which of the following nations adopted an Open Door Policy?
A. China
B. Japan
C. U.S.A.
D. South Korea
128. The central nodal agency for implementing value support works for commercial crops is:
A. NAFED
B. NABARD
C. FCI
D. TRIFED
129. Diminishing marginal utility is the basis of:
A. Law of Supply
B. Law of Return
C. Law of Demand
D. Law of Consumption
130. Loss of interest income on funds is an example of:
A. Explicit Cost
B. Implicit Cost
C. Marginal Cost
D. Direct Cost
131. Who was the leader and inspirer of the Young Bengal Movement of the late 1820s and 1830s?
A. Rasik Krishna Mallic
B. Ramtaru Lahiri
C. Henry Vivian Derozio
D. Pearey Chand Mitra
132. The first Indian ruler who joined the subsidiary alliance was:
A. The Nawab of Awadh
B. The Nizam of Hyderabad
C. Peshwa Baji Rao
D. Jhansi ki Rani
133. The Raja Rani temple is located in:
A. Bhubaneshwar
B. Khajuraho
C. Kanchipuram
D. Varanasi
134. Which one of the following rivers flows west-ward?
A. Godavari
B. Kaveri
C. Krishna
D. Tapti
135. The term "Fani" is associated with:
A. Cyclone
B. Rainfall
C. Flood
D. Landslide
136. The literacy rate of India in 2011 was:
A. $72.04 \%$
B. $73.04 \%$
C. $74.04 \%$
D. $75.04 \%$
137. Dualistic economy means existence of:
A. Both industrial and agricultural sectors
B. Both public and private sectors
C. Both socialist and capitalist economies
D. Both foreign and domestic investments
138. Who was the first to unfurl the first Indian National Flag, the parent and precursor of the flag of independent India?
A. Dada Bhai Naoroji
B. Taraknath Das
C. Raja Mahendra Pratap
D. Madam Bhikaji Cama
139. Operation Flood is also known as:
A. Green Revolution
B. White Revolution
C. Blue Revolution
D. Black Revolution
140. In India the Tropic of Cancer passes through how many states?
A. 7
B. 8
C. 6
D. 5

## Section-V : (iv) English

Directions (Q. Nos. 141-145): Choose the word that is nearest in meaning to the underlined word:
141. Employers like diligent employees.
A. Conscientious
B. Obedient
C. Meticulous
D. Hardworking
142. The meeting was adjourned after discussion for two hours.
A. Postponed
B. Stopped
C. Begun
D. Reviewed
143. He is such sham that it is different to get along with him.
A. pretender
B. unnatural
C. blunt
D. unfair
144. On who despises his colleagues can never be successful.
A. accuses
B. ignores
C. hates
D. discourages
145. The school took the students of 9th class on a three days, excursion to Goa.
A. trip
B. picnic
C. visit
D. tournament

Directions (Q. Nos. 146-150): In each of the following group of words, only one of them is spelt correctly. Select the one with the correct spelling.
146. A. megnificent
B. magnifecent
C. magnificant
D. megnifecant
147. A. tanacious
B. tenacious
C. tanecious
D. tenecious
148. A. consummation
B. consumation
C. consammation
D. consamation
149. A. menifest
B. menifast
C. manifest
D. manifast
$\begin{array}{ll}\text { 150. A. posterity } & \text { B. postarity } \\ \text { C. posterety } & \text { D. portarety }\end{array}$
Directions (Q. Nos. 151-154): Choose the word that is opposite in meaning to the underlined word:
151. The criminal was detained by the police.
A. protected
B. dismissed
C. released
D. deterred
152. His depressing attitude was not liked by anyone.
A. horrifying
B. uplifting
C. bewildering
D. digressing
153. Feasibility of the project is under study.
A. Unsuitability
B. Impracticability
C. Impropriety
D. Applicability
154. A mammoth statue overlooked the building.
A. effluent
B. tiny
C. huge
D. narrow

Directions (Q. Nos. 155 and 156): Pick out the most appropriate word from the given alternatives and fill in the blanks to complete the sentence:
155. This book is about a man who
$\qquad$ his family and went to live in the Himalayas.
A. exited
B. deserted
C. banished
D. expelled
156. The villagers $\qquad$ the death of their leader by keeping all the shops closed.
A. announced
B. protested
C. mourned
D. consoled

Directions (Q. Nos. 157-160): Choose the correct answer:
157. The novel 'Persuasion' was written by:
A. Charlotte Bronte
B. Emily Bronte
C. George Eliot
D. Jane Austen
158. The poem 'Ode to Nightingale' was written by:
A. Keats
B. Shelley
C. Wordsworth
D. Bacon
159. The play 'Desire under the Elms' was written by:
A. Shakespeare
B. Bernard Shaw
C. Eugene O'Neill
D. Brecht
160. The novel 'Train to Pakistan' was written by:
A. Tagore
B. R.K. Narayan
C. Anita Desai
D. Khushwant Singh

## Section-V : (v) हिन्दी

निर्देश (प्रश्न संख्या 161 से 165): निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर उसके आधार पर पूछे गए प्रश्नों के उत्तर दीजिए :
"मनुष्य की विशेषता उसके चरित्र में है। चरित्र के कारण ही एक मनुष्य दूसरे से अधिक सम्मानित समझा जाता है। विद्या का मान तभी होता है जब विद्यावान विनय एवं चरित्र से युक्त हो। विद्या, बल तथा पद होते हुए भी रावण अपने राक्षसी कर्म के कारण निंदनीय रहा। रावण ज्ञानी होते हुए भी सम्मानित नहीं बन पाया। मनुष्य का मूल्य उसके चरित्र में है। विनय, उदारता, सत्यता, धैर्य, वचन प्रतिबद्धता तथा कर्त्तब्यपरायणता ये सब गुण चरित्र में आते हैं।
161. मनुष्य की विशेषता किसमें है?
A. उसके पद में
B. उसके ज्ञान में
C. उसके अच्छे विचारों में
D. उसके चरित्र में
162. मनुष्य सम्मान किस कारण से पाता है?
A. चरित्र के कारण
B. पद के कारण
C. शिक्षा के कारण
D. विचार के कारण
163. चत्रि में कौन-कौन से गुण आते हैं?
A. अधिक शिक्षित होना
B. सत्यता तथा वचन प्रतिबद्धता
C. अच्छे पद पर आसीन होना तथा धन कमाना
D. आर्थिक रूप से सम्पन्न होना तथा व्यवसाय करना
164. रावण की निंदा क्यों की जाती थी?
A. उसके ज्ञानी होने के कारण
B. वेदों के ज्ञाता होने के कारण
C. राक्षसी कर्मों के कारण
D. सीता हरण के कारण
165. विद्यावान का मान कब होता है?
A. जब वह आर्थिक रूप से सम्पन्न हो।
B. जब वह विनय तथा चरित्र से युक्त हो।
C. जब वह अच्छे पद पर आसीन हो।
D. जब वह उच्च जाति से संबंध रखता हो।
166. 'महात्मा' में कौन-सा समास है?
A. बहुब्रीहि समास
B. अव्ययीभाव समास
C. तत्पुरुष समास
D. कर्मधारय समास
167. किस शब्द में अनुस्वार के स्थान पर 'ण’ लिखा जाता है?
A. पंडित
B. पंक्ति
C. पंजा
D. पंद्रह
168. कौन-सी भाववाचक संज्ञा है?
A. बचपन
B. पानी
C. नदी
D. समुद्र
169. 'क्ष' ध्वनि किसके अन्तर्गत आती है ?
A. घोष वर्ण
B. तालव्य
C. संयुक्त वर्ण
D. अघोष वर्ण
170. इनमें से विरामचिहन नहीं है :
A. अवतरण
B. अल्पविराम
C. पूर्णविराम
D. विस्मयादि बोधक
171. संज्ञा के भेद हैं :
A. पाँच
B. सात
C. आठ
D. दस
172. हवा का पर्यायवाची है :
A. तनुज
B. बयार
C. आँधी
D. तूफान
173. ‘पृथ्वीराज रासो’ किस काल की रचना है?
A. आदिकाल
B. भक्तिकाल
C. रीतिकाल
D. आधुनिककाल
174. प्रत्यययुक्त शब्द है :
A. आजन्म
B. खुशबू
C. इकहरा
D. पगड़ी
175. 'ई' और ‘इ’ किस प्रकार के वर्ण है?
A. दन्तोष्ठ्य
B. कण्ठ्य
C. दन्त्य
D. तालव्य
176. 'आँखें बिछाना' किस मुहावरे का अर्थ है?
A. धमकी देना
B. बहुत इज्जत देना
C. बेइज्जती करना
D. आँख बंद कर लेना
177. ‘काली घटा का घमंड घटा’ में अलंकार है :
A. श्लेष अलंकार
B. यमक अलंकार
C. अनुप्रास अलंकार
D. अर्थालंकार
178. 'आग' कौन-सा शब्द है ?
A. विदेशज
B. देशज
C. तद्भव
D. तत्सम
179. 'पुस्तक' कौन-सा शब्द है ?
A. तद्भव
B. तत्सम
C. विदेशज
D. देशज
180. निम्नलिखित में से किसके प्रथम तथा तृतीय चरण में 13-13 तथा द्वितीय व चतुर्थ चरण में 11-11 मात्राएँ होती हैं?
A. दोहे में
B. चौपाई में
C. सोरठा में
D. रोला में

## ANSWERS

1. (D)
2. (D)
3. (A)
4. (C)
5. (D)
6. (A)
7. (B)
8. (D)
9. (B)
10. (D)
11. (B): $\because \quad 4+4=15$
$\Rightarrow \quad 4 \times 4-1=15$
and $\quad 6+6=35$
$\Rightarrow \quad 6 \times 6-1=35$
Then, $\quad 8+8=63$
$\Rightarrow \quad 8 \times 8-1=63$.
12. (C): SYSTEM is coded as

and FORMER is coded as


Then, CARPET would be coded as

13. (A)
14. (B): $23+21=44$

Hence, there are 44 students appeared in the test.
15. (D): N A M E is coded as

and $\mathrm{M} \quad \mathrm{I} \quad \mathrm{T}$ is coded as
$\begin{array}{llll}4 & 1 & 3 & 7\end{array}$
Then, MITE would be coded as

16. (C):

| 2 | 9 | 28 | 65 | 126 |
| :---: | :---: | :---: | :---: | :---: |
| $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ |
| $(1)^{3}+1$ | $(2)^{3}+1$ | $(3)^{3}+1$ | $(4)^{3}+1$ | $(5)^{3}+1$ |

Hence, 126 will come in the next term in the series.
17. (B):


Hence, Book B is at the bottom.
18. (C): Let each type of coins $=x$ According to the question,

$$
\begin{aligned}
& x+\frac{x}{2}+\frac{x}{4}=35 \\
& \Rightarrow \frac{4 x+2 x+x}{4}=35 \\
& \Rightarrow \quad 7 x=4 \times 35 \\
& \Rightarrow \quad x=\frac{4 \times 35}{7}=20
\end{aligned}
$$

Hence, the number of each type
of coins $=20$.
19. (B):


Now, man is walking in North direction.
20. (B): $27-57$

18-28
36-96
But $25-63$ unit digit of both numbers is not same.
Hence, the pair $25-63$ is different from others.
21. (C):


Hence, 14 will come at the blank space in the series.
22. (B):


Hence, woman is sister to the man.
23. (A): $42 \quad 81 \quad 121 \quad 144$

No any square $9^{2} \quad 11^{2} \quad 12^{2}$
Hence, 42 is difference from others.
24. (D):


Then

25. (C): $1 \quad 8 \quad 27 \quad 64125216$

| $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1^{3}$ | $2^{3}$ | $3^{3}$ | $4^{3}$ | $5^{3}$ | $6^{3}$ |

Hence, 216 will come at the place of blank which continues the series.
26. (D):


Then,

27. (A):


Hence, WY will come at the place of blank in the series.
28. (C)
29. (C): $25 \quad 100 \quad 225 \quad 400 \quad 625$

$$
\begin{array}{ccccc}
\downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\
5^{2} & 10^{2} & 15^{2} & 20^{2} & 25^{2}
\end{array}
$$

Hence, 400 fills the gap in the series.
30. (A):


Hence, STZ continues the series.
31. (A)
32. (A)
33. (B)
34. (B)
35. (A)
36. (A)
37. (B)
38. (A)
39. (A)
40. (C)
41. (B)
42. (A)
43. (D)
44. (C)
45. (A)
46. (B)
47. (A)
48. (B)
49. (A)
50. (C)
51. (C)
52. (D)
53. (D)
54. (B)
55. (D)
56. (A)
57. (B)
58. (A)
59. (B)
60. (D)
61. (C)
62. (A)
63. (A)
64. (B)
65. (B)
66. (D)
67. (A)
68. (D)
69. (B)
70. (D)
71. (C)
72. (C)
73. (C)
74. (C)
75. (C)
76. (B)
77. (B)
78. (A)
79. (A)
80. (C)
81. (C)
82. (B)
83. (A)
84. (D)
85. (D)
86. (A)
87. (C)
88. (A) 89. (A) 90. (A)
91. (A) 92. (C) 93. (C)
94. (D)
95. (D)
96. (C)
97. (A)
98. (B)
99. (B)
100. (D)
101. (D): $\frac{1}{0.01}=\frac{1}{\frac{1}{100}}=100$

Hence, the largest numerical value is $\frac{1}{0.01}$.
102. (C): $5 \frac{1}{2}-\left[2 \frac{1}{3} \div\left\{\frac{3}{4}-\frac{1}{2}\left(\frac{2}{3}-\frac{1}{6}+\frac{1}{8}\right)\right\}\right]$

$$
=\frac{11}{2}-\left[\frac{7}{3} \div\left\{\frac{3}{4}-\frac{1}{2}\left(\frac{16-4+3}{24}\right)\right\}\right]
$$

$$
=\frac{11}{2}-\left[\frac{7}{3} \div\left\{\frac{3}{4}-\frac{1}{2} \times \frac{15}{24}\right\}\right]
$$

$$
=\frac{11}{2}-\left[\frac{7}{3} \div\left\{\frac{3}{4}-\frac{5}{16}\right\}\right]
$$

$$
=\frac{11}{2}-\left[\frac{7}{3} \div\left\{\frac{12-5}{16}\right\}\right]
$$

$$
=\frac{11}{2}-\left[\frac{7}{3} \div \frac{7}{16}\right]=\frac{11}{2}-\left[\frac{7}{3} \times \frac{16}{7}\right]
$$

$$
=\frac{11}{2}-\frac{16}{3}=\frac{33-32}{6}=\frac{1}{6} .
$$

103. (A): According to the question,

$$
\frac{448+62}{x+1}-\frac{448}{x}=2
$$

$$
\begin{array}{ll}
\Rightarrow & \frac{510 x-448 x-448}{x(x+1)}=2 \\
\Rightarrow & 62 x-448=2 x^{2}+2 x
\end{array}
$$

$\Rightarrow 2 x^{2}-60 x-448=0$
$\Rightarrow \quad x^{2}-30 x-224=0$
$\Rightarrow \quad(x-16)(x-14)=0$
$\Rightarrow \quad x=16$
or $\quad x=14$
Hence, the value of $x=16$.
104. (A): $\because$ A's salary is $50 \%$ above B's
$\therefore$ B's salary below A's

$$
\begin{aligned}
& =\left(\frac{100 \times x}{100+x}\right) \%=\left(\frac{100 \times 50}{100+50}\right) \% \\
& =\left(\frac{100 \times 50}{150}\right) \%=\frac{100}{3} \% \\
& =33 \frac{1}{3} \% .
\end{aligned}
$$

105. (C): C.P. of 1 kg blended variety

$$
\begin{aligned}
& =\frac{7 \times 150+3 \times 200}{10} \\
& =\frac{1650}{10}=₹ 165
\end{aligned}
$$

$$
\text { Profit }=181.50-165
$$

$$
=₹ 16.50
$$

Profit $\%=\frac{16.50}{165} \times 100=10 \%$.
106. (B): $\because$ C.P. $=900$

$$
\begin{aligned}
\text { gain } & =10 \% \\
\therefore \quad \text { S.P. } & =\frac{110}{100} \times 900=₹ 990
\end{aligned}
$$

Now, $\quad$ Discount $=10 \%$

$$
\therefore \quad \text { S.P. }=₹ 90
$$

When S.P. ₹ 90 then M.P.

$$
=₹ 100
$$

When S.P. ₹ 990 then M.P.
$=₹ \frac{100}{90} \times 990=₹ 1100$
Hence, Marked price of the article $=₹ 1100$.
107. (B): $\mathrm{A}=\mathrm{P}\left(1+\frac{r}{100}\right)^{t}$
$\Rightarrow \quad 1331=1000\left(1+\frac{10}{100}\right)^{t}$
$\Rightarrow \quad \frac{1331}{1000}=\left(1+\frac{10}{100}\right)^{t}$
$\Rightarrow \quad\left(\frac{11}{10}\right)^{3}=\left(1+\frac{10}{100}\right)^{t}$
$\Rightarrow \quad\left(\frac{11}{10}\right)^{3}=\left(\frac{11}{10}\right)^{t} \Rightarrow t=3$
Hence, the period of time $=3$ years.
108. (*)
109. (C): Let the usual speed of the plane $=x \mathrm{~km} / \mathrm{hr}$.
According to the question

$$
\begin{array}{r}
\frac{1500}{x}-\frac{1500}{x+250}=\frac{1}{2} \\
\Rightarrow \frac{1500(x+250-x)}{x(x+250)}=\frac{1}{2} \\
\Rightarrow 3000 \times 250=x^{2}+250 x \\
\Rightarrow \quad x^{2}+250 x-750000=0 \\
\Rightarrow x^{2}+1000 x-750 x-750000 \\
\Rightarrow x(x+1000)-750(x+1000) \\
=0
\end{array}
$$

