

QUESTION PAPER AND KEY

Recruitment Test held on 9.4.2011 (Evening Session)

**POST:
ASSISTANT OPERATOR
AND
BOILER ATTENDANT**

StudySite.org

ENGLISH VERSION

Code 21 (HAO/ABA)

- Q.1. ਪੰਜਾਬ ਦੀ ਸਰਕਾਰੀ ਭਾਸ਼ਾ ਕਿਹੜੀ ਹੈ:
(A) ਹਿੰਦੀ (B) ਅੰਗਰੇਜ਼ੀ (C) ਪੰਜਾਬੀ (D) ਕੰਨੜ
- Q.2. 'ਪੱਤਾ' ਸ਼ਬਦ ਦਾ ਬਹੁ-ਵਚਨ ਕੀ ਹੈ:
(A) ਪੱਤਿਆਂ (B) ਪੱਤੇ (C) ਪੱਤੀਆਂ (D) ਪੱਤੀ
- Q.3. ਕਾਲ ਕਿੰਨੇ ਪ੍ਰਕਾਰ ਦੇ ਹੁੰਦੇ ਹਨ :
(A) ਤਿੰਨ (B) ਚਾਰ (C) ਪੰਜ (D) ਛੇ
- Q.4. 'ਅਧਿਆਪਕ' ਸ਼ਬਦ ਦਾ ਇਸਤਰੀ ਲਿੰਗ ਹੈ:
(A) ਅਧਿਆਪਕਣ (B) ਅਧਿਆਪਕਾ (C) ਅਧਿਆਪਕੀ (D) ਮਾਸਟਰਾਣੀ
- Q.5. ਨਾਂਵ ਕਿੰਨੇ ਪ੍ਰਕਾਰ ਦੇ ਹੁੰਦੇ ਹਨ:
(A) ਚਾਰ (B) ਦੋ (C) ਛੇ (D) ਪੰਜ
- Q.6. 'ਉਸਤਾਦੀ ਕਰਨੀ' ਮੁਹਾਵਰੇ ਦਾ ਅਰਥ ਹੈ:
(A) ਉਸਤਾਦ ਬਣਨਾ (B) ਆਈ ਚਲਾਈ ਕਰਨਾ (C) ਚਲਾਕੀ ਮਾਰਨਾ (D) ਕੰਮ ਚੋਰ ਹੋਣਾ
- Q.7. 'ਰੰਗ ਉੱਡ ਜਾਣਾ' ਦਾ ਅਰਥ ਸਪਸ਼ਟ ਕਰੋ:
(A) ਘਬਰਾ ਜਾਣਾ (B) ਰੰਗ ਫਿੱਕਾ ਪੈ ਜਾਣਾ (C) ਬੇਰੰਗਾ ਹੋ ਜਾਣਾ (D) ਭੱਜ ਜਾਣਾ
- Q.8. 'ਮੱਤ' ਸ਼ਬਦ ਦਾ ਅਰਥ ਹੈ:
(A) ਸਕੂਲ (B) ਅਕਲ (C) ਮੁਹਾਂਦਰਾ (D) ਭੈੜਾ
- Q.9. 'ਅੱਖਾਂ' ਸ਼ਬਦ ਦਾ ਉਲਟ-ਭਾਵੀ ਹੈ :
(A) ਵੱਡਾ (B) ਛੋਟਾ (C) ਸੌਖਾ (D) ਭੀੜਾ
- Q.10. ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਵਿੱਚ ਲਿਖਣ ਲਈ ਜਿਸ ਲਿੱਪੀ ਦਾ ਪ੍ਰਯੋਗ ਹੁੰਦਾ ਹੈ ਉਸਦੇ ਅੱਖਰਾਂ ਦੀ ਗਿਣਤੀ ਹੈ:
(A) ਛੱਤੀ (B) ਪੈਂਤੀ (C) ਅਠੱਤੀ (D) ਉੱਨੀ
- Q.11. 'ਇਸਤਰੀ' ਸ਼ਬਦ ਦਾ ਸਮਾਨਾਰਥਕ ਹੈ:
(A) ਬੰਦਾ (B) ਮੁੰਡਾ (C) ਕੁੜੀ (D) ਤੀਵੀਂ
- Q.12. 'ਜਾਂਦਾ' ਸ਼ਬਦ ਹੈ:
(A) ਵਿਸ਼ੇਸ਼ਣ (B) ਨਾਮ (C) ਕਿਰਿਆ (D) ਕਿਰਿਆ ਵਿਸ਼ੇਸ਼ਣ
- Q.13. 'ਬੱਚਾ ਦੁੱਧ ਪੀਂਦਾ ਹੈ' ਵਾਕ ਵਿੱਚ 'ਬੱਚਾ' ਸ਼ਬਦ ਹੈ :
(A) ਨਾਮ (B) ਪੜਨਾਂਵ (C) ਵਿਸ਼ੇਸ਼ਣ (D) ਕਿਰਿਆ
- Q.14. The manager invited all the employees _____ a cup of tea.
(A) for (B) to (C) on (D) at
- Q.15. Choose the correct sentence:
(A) He does not like me. (B) He does not likes me.
(C) He not likes me. (D) He does not liked me.
- Q.16. Complete the sentence:
Birds of a feather.....
(A) fly together (B) flock together (C) sink together (D) eat together
- Q.17. Fit to be eaten means
(A) eatable (B) delicious (C) edible (D) tasty
- Q.18. Choose the correct sentence
(A) We are giving the test. (B) We are gave the test.
(C) We are given the test. (D) We are taking the test.
- Q.19. The antonym of Cool is
(A) hot (B) warm (C) tempered (D) indifferent

- Q.20. The synonym of Different is
 (A) dissimilar (B) various (C) special (D) changed
- Q.21. That which can never be believed
 (A) irrevocable (B) inevitable (C) incredible (D) irritable
- Q.22. He behaves as if he _____ a king
 (A) was (B) were (C) has (D) had
- Q.23. Changed voice of "I am doing the work" is:
 (A) the work is being done by me. (B) the work is done by me.
 (C) I have done the work. (D) work has been done by me.
- Q.24. Indirect speech of
 He said to me, "I am your brother."
 (A) He told me that I was your brother. (B) He told me that he was my brother.
 (C) He said that he was my brother. (D) He informed me he was my brother.
- Q.25. Your sister is good in the class but mine is.....
 (A) best (B) fine (C) top (D) better
- Q.26. If the weight of 13 metre long rod is 23.4 kg, what is the weight of 6 metre long rod?
 (A) 7.2 kg (B) 12.4 kg (C) 18.0 kg (D) 10.8 kg
- Q.27. Ram gives 35% of his money to his wife and 50% of total money to his sons. He was left with Rs.11250/-. What was the total amount of money he had?
 (A) Rs.63750/- (B) Rs.75000/- (C) Rs.73650/- (D) Rs.72450/-
- Q.28. Find the average of the following numbers:
 136, 144, 171, 121, 117, 139
 (A) 142 (B) 136 (C) 138 (D) 144
- Q.29. Simple interest accrued on an amount in eight years at the rate of 11% per annum is Rs.28600/-. Find the amount
 (A) Rs.32500/- (B) Rs.41000/- (C) Rs.37500/- (D) Rs.36000/-
- Q.30. Ram sells an article for Rs.6480/- and earns profit of 20%. What is the cost price of the article?
 (A) Rs.5600/- (B) Rs.5400/- (C) Rs.5640/- (D) Rs.5500/-
- Q.31. The length and breadth of a plot are 35 metre and 16 metre respectively. If the cost of fencing is Rs.7/- per metre, What is the total cost of fencing the plot?
 (A) Rs.3920/- (B) Rs.714/- (C) Rs.357/- (D) Rs.602/-
- Q.32. 66% of number is lesser than its 82% by 56. What is the number?
 (A) 350 (B) 450 (C) 400 (D) 460
- Q.33. 16 men can complete a work in 7 days. In how many days will 28 men complete the same work?
 (A) 6 days (B) 8 days (C) 3 days (D) 4 days
- Q.34. $55\% \text{ of } 860 + 24\% \text{ of } 450 = ?$
 (A) 571 (B) 681 (C) 581 (D) 591
- Q.35. The average age of Ram, Shyam and Krishan is 25 years. The total age of Ram and Krishan is 57 years. What is the age of Shyam?
 (A) 18 years (B) 17 years (C) 28 years (D) 16 years
- Q.36. Three primary colours are
 (A) blue, green and red (B) blue, yellow and red
 (C) yellow, orange and red (D) violet, blue and indigo
- Q.37. Swat Valley is situated in
 (A) Afganistan (B) Bangladesh (C) Pakistan (D) India
- Q.38. 'Dalal Street' is known for
 (A) grain market (B) stock exchange (C) cotton market (D) bullion

- Q.39. Which of the following is not one of the five rivers of Punjab?**
 (A) Sutlej (B) Chenab (C) Ravi (D) Indus
- Q.40. The administrator of Chandigarh is:**
 (A) Chief Minister of Punjab (B) Governor of Haryana
 (C) Governor of Punjab (D) Chief Minister of Haryana
- Q.41. Water is combination of:**
 (A) 2 units of hydrogen and 2 units of oxygen (B) 2 units of hydrogen and 1 unit of oxygen
 (C) 1 unit of hydrogen and 2 units of oxygen (D) 1 unit of hydrogen and 1 unit of oxygen
- Q.42. How many colours a rainbow has:**
 (A) 7 (B) 8 (C) 6 (D) 5
- Q.43. Which district of Punjab has recently been named as Shaheed Bhagat Singh Nagar?**
 (A) Hoshiarpur (B) Kapurthala (C) Jalandhar (D) Nawanshehar
- Q.44. Note of Rupee one is printed by:**
 (A) Finance Ministry (B) RBI (C) SBI (D) Home Ministry
- Q.45. Gateway of India is in**
 (A) Delhi (B) Agra (C) Mumbai (D) Fatehpur Sikri
- Q.46. A person is said to have fever, if his body temperature is**
 (A) more than 98.4°F (B) less than 98.4°F
 (C) equal to 98.4°F (D) none of the above
- Q.47. In which year reorganization of Punjab took place?**
 (A) 1967 (B) 1968 (C) 1966 (D) 1965
- Q.48. 'Googly' is associated with**
 (A) tennis (B) cricket (C) football (D) hockey
- Q.49. National flower of India is:**
 (A) rose (B) sunflower (C) lotus (D) marigold
- Q.50. The element common to all acids is:**
 (A) carbon (B) oxygen (C) sulphur (D) hydrogen
- Q.51. Devi Talab Mandir is located in**
 (A) Amritsar (B) Ludhiana (C) Jalandhar (D) Hoshiarpur
- Q.52. Common Wealth Games-2010 were held in**
 (A) Delhi (B) Kolkata (C) Chandigarh (D) Chennai
- Q.53. The result of World Cup Cricket match between India and England on 27th February 2011 at Bangluru was:**
 (A) England won (B) India won (C) tied (D) washed away
- Q.54. Which type of government is found in India?**
 (A) Monarchy (B) Democracy (C) Military rule (D) Dictatorship
- Q.55. 'Durgiana Temple' is located in:**
 (A) Jalandhar (B) Patiala (C) Amritsar (D) Ludhiana
- Q.56. Who was known as Shere-Punjab?**
 (A) Lala Lajpat Rai (B) Sardar Patel (C) Bhagat Singh (D) Partap Singh Kairon
- Q.57. 'Give me blood, I will give you freedom', were the words of :**
 (A) Sardar Patel (B) Subhash Chander Bose
 (C) Jawahar Lal Nehru (D) Mahatma Gandhi
- Q.58. Female ratio is expressed as:**
 (A) males per thousand females (B) females per thousand population
 (C) males per thousand population (D) females per thousand males

- Q.59. Jallianwala Bagh Massacre was held in:
 (A) 1857 (B) 1920 (C) 1919 (D) 1947
- Q.60. Hola Mohalla, a sikh festival is held on
 (A) occasion of Holi (B) one day before Holi
 (C) one day after Holi (D) occasion of Baisakhi
- Q.61. Who is known as 'Flying Sikh'?
 (A) Pargat Singh (B) Ajit Pal Singh (C) Dhayan Chand (D) Milkha Singh
- Q.62. Rajiv Gandhi National Law University is located at:
 (A) Patiala (B) Chandigarh (C) Amritsar (D) Bhatinda
- Q.63. Harike Wetland is located in which district of Punjab?
 (A) Kapurthala (B) Ferozepur (C) Moga (D) Amritsar
- Q.64. The Upper House of Parliament is known as:
 (A) Parliament House (B) Rashtrapati Bhavan
 (C) Rajya Sabha (D) Lok Sabha
- Q.65. The legal age for a citizen in India to become major is:
 (A) 23 years (B) 18 years (C) 20 years (D) 22 years
- Q.66. Silicon Valley of India is located in:
 (A) Dehradun (B) Bangluru (C) Hyderabad (D) Sri Nagar
- Q.67. Which one among the following is direct tax?
 (A) income tax (B) sales tax (C) excise duty (D) service tax
- Q.68. In India, Dhariwal and Ludhiana towns are famous for
 (A) cotton textiles (B) woolen textiles (C) silk textiles (D) synthetic textiles
- Q.69. Which food crop in India is sown in October-November and reaped in April?
 (A) rice (B) coffee (C) wheat (D) tea
- Q.70. Le Corbusier, the architect of Chandigarh was a national of:
 (A) Portugal (B) Netherlands (C) U.K. (D) France
- Q.71. First Five Year Plan in India started in:
 (A) 1951 (B) 1950 (C) 1952 (D) 1948
- Q.72. Who built Taj Mahal?
 (A) Akbar (B) Jahangir (C) Aurangzeb (D) Shahjahan
- Q.73. Which one of the following is not a sea port?
 (A) Cochin (B) Delhi (C) Mumbai (D) Vishakhapatnam
- Q.74. India became Republic on
 (A) 15th August 1947 (B) 15th August, 1950 (C) 26th January 1950 (D) 26th January 1951
- Q.75. September 5 celebrated as Teacher's Day is the birthday of
 (A) Jawahar Lal Nehru (B) S. Radha Krishan (C) Lal Bahadur Shastri (D) Morarji Desai
- Q.76. On the basis of relationship, fill in the blank
 Shout : Whisper :: Run : _____
 (A) stray (B) stand (C) walk (D) hop
- Q.77. Fill in the blank:
 CG : EI :: EJ : _____
 (A) JK (B) GL (C) LM (D) IJ
- Q.78. Find the missing number:
 6 11 18 27 38 ? 66
 (A) 51 (B) 58 (C) 53 (D) 59
- Q.79. Find the odd word
 (A) blue (B) red (C) yellow (D) gold

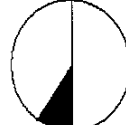
- Q.80. Find the odd number
 (A) 515 (B) 875 (C) 876 (D) 380
- Q.81. If 'QUIZ' is coded as 'RVJA', how will you code 'CLASS'?
 (A) DMBTT (B) BKZRR (C) DMCTT (D) ENCQQ
- Q.82. If 'hearing' is coded as '1234567', how will you code 'rare'?
 (A) 1234 (B) 4342 (C) 4324 (D) 4542
- Q.83. If 20% people of a village are suffering from cancer and 5% from blood pressure, which of the following figure represents the sick population, if shaded area shows share of sick people:



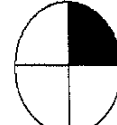
(A)



(B)

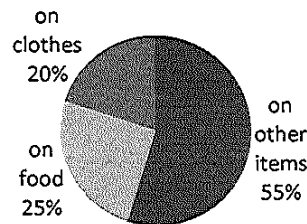


(C)



(D)

- Q.84. A person has Rs.500/- and spends as following:



Find how much he spends on other items?

- (A) Rs.275/- (B) Rs.225/- (C) Rs.250/- (D) Rs.265/-
- Q.85. Ram travels 10 k.m. to the north and turns right and walks 5 k.m. again turns right and walks 10 k.m. How far is he from the starting point?
 (A) 15 k.m. (B) 5 k.m. (C) 25 k.m. (D) 20 k.m.
- Q.86. Amit is son of Rahul and Manish is younger brother of Rahul. How is Amit related to Manish?
 (A) nephew (B) son (C) uncle (D) cousin
- Q.87. In a row, Ram is 5th from the left. If he shifts one place towards right, his position becomes 5th from right. How many persons are in the row?
 (A) 10 (B) 12 (C) 11 (D) 13
- Q.88. In a class, there are 78 students. 7 failed in history and 11 failed in maths. How many students were clearly pass in the class?
 (A) 62 (B) 60 (C) 61 (D) 67
- Q.89. A family had Rs.10000/- income in 2009 and 50% it spent on food. Next year its income increased by 10%. Keeping the share of expenditure same on food, what will be expenditure of the family on food in 2010?
 (A) Rs.5000/- (B) Rs.6000/- (C) Rs.4500/- (D) Rs.5500/-
- Q.90. A train is running at the speed of 60 k.m. per hour. Its engine takes 2 minutes to cross a platform. What is the length of the platform?
 (A) 2 k.m. (B) 1 k.m. (C) 1.5 k.m. (D) 3 k.m.
- Q.91. Pointing towards a portrait a man tells his son that the lady is mother of your mother. How is the lady in portrait related to the son?
 (A) mother (B) aunty (C) grand-mother (D) maternal grand-mother

- Q.92. What is the next letter?
R, U, X, A, D, ?
(A) F (B) G (C) H (D) I
- Q.93. Vijay walks 8 k.m. towards North and turns right and walks 5 k.m. He again turns right and walks 8 k.m. In what direction Vijay is now from the starting point?
(A) East (B) West (C) North (D) South
- Q.94. 'PICTURE' is coded as 1234567. Decode the 4657
(A) CUTE (B) PURE (C) TRUE (D) TIRE
- Q.95. On the basis of relation between first two, fill in the blanks with most appropriate related words:
Student : Marks :: ___? : ___?
(A) teacher : class (B) scholar : book (C) waiter : tip (D) pen : nib
- Q.96. Kavita is an artist. All artists are beautiful. Which of the following is true?
(A) all beautiful people are artists. (B) Kavita is not beautiful.
(C) all beautiful people are not artists (D) Kavita is beautiful.
- Q.97. Kuldeep, the younger brother of Subhash is older than Uttam. Who is the youngest?
(A) Uttam (B) Subhash (C) Kuldeep (D) can't say
- Q.98. Four years ago, the average age of A and B was 18 years. What is the total age of A and B today?
(A) 40 (B) 22 (C) 44 (D) 42
- Q.99. In a group of 100 people 35 drink tea only, 30 take coffee only and 10 drink tea and coffee both. How many people drink neither tea nor coffee?
(A) 35 (B) 90 (C) 70 (D) 25
- Q.100. In a village, out of total population of 12000, 40% are females and 50% of females are literate. Find the number of illiterate females.
(A) 3000 (B) 4000 (C) 2400 (D) 2800
- Q.101. The latent heat of steam at pressure greater than atmospheric in comparison to latent heat at atmospheric pressure is
(A) Less (B) more
(C) equal (D) may be less or more depending on temperature
- Q.102. The saturation temperature of steam with increase in pressure increases
(A) Linearly (B) Rapidly first and then slowly
(C) Slowly first and then rapidly (D) inversely
- Q.103. Heating of dry steam above saturation temperature is known as
(A) enthalpy (B) superheating (C) supersaturation (D) latent heat
- Q.104. Superheating of steam is done at
(A) Constant volume (B) Constant temperature
(C) Constant pressure (D) Constant entropy
- Q.105. If partial pressure of air and steam be p_a and p_s , respectively in a condenser, then, according to Dalton's law, the pressure in condenser is equal to
(A) $p_s - p_a$ (B) $p_a - p_s$ (C) $p_a + p_s$ (D) $p_a + p_s / 2$
- Q.106. The coal requirement per KW hour generation in the thermal power plant is of the order of
(A) 0.1 to 0.2 kg (B) 0.2 to 0.4 kg (C) 0.6 to 0.8 kg (D) 1.0 to 1.5 kg
- Q.107. One kg of steam sample contains 0.8 kg dry steam; its dryness fraction is
(A) 0.2 (B) 0.8 (C) 1.0 (D) 0.6
- Q.108. Latent heat of dry steam at atmospheric pressure is equal to
(A) 530 kcal/kg (B) 539 BTU/lb (C) 427 kcal/kg (D) 100 kcal/kg
- Q.109. Adiabatic process is
(A) Essentially an isentropic (B) Not heat transfer
(C) Reversible (D) Constant temperature

- Q.110. The state of vapour under saturation condition is described by**
 (A) Pressure alone (B) Temperature alone
 (C) Pressure and temperature (D) Pressure and dryness fraction
- Q.111. Water boils when its vapour pressure**
 (A) Equals that of the surroundings (B) Equals 760 mm of mercury
 (C) Greater than atmospheric pressure (D) Equals the pressure of the water in the container.
- Q.112. Mechanical equivalent of heat for 1 kcal or Joule's equivalent is equal to**
 (A) 427 kg (B) 421 kg (C) 539 kg (D) 102 kg
- Q.113. The increase in pressure**
 (A) Lowers the boiling point of a liquid (B) Raises the boiling point of a liquid
 (C) Does not affect the boiling point of a liquid (D) Reduces its volume
- Q.114. Lancashire boiler is a**
 (A) Stationary fire tube boiler (B) Stationary water tube boiler
 (C) Water tube boiler with natural/forced circulation (D) Mobile fire tube boiler
- Q.115. One Kilowatt-hour energy is equivalent to**
 (A) 1000 J (B) 360 kJ (C) 3600 kJ (D) 3600 kW/sec
- Q.116. Water tube boilers are those in which**
 (A) Flue gases pass through tubes and water around it
 (B) Water passes through the tubes and flue gases around it
 (C) Forced circulation takes place
 (D) Tubes are laid vertically
- Q.117. The concentration of hydrogen ion in a sample of soft drink is $3.8 \times 10^{-3}M$. Its pH will be**
 (A) 7.42 (B) 9.42 (C) 2.42 (D) 1.42
- Q.118. A car moving a straight highway with speed of 126 km/hour is brought to a stop within a distance of 200 m. What is the retardation of the car (assumed uniform).**
 (A) 30.6 m/s^2 (B) 3.06 m/s^2 (C) 0.306 m/s^2 (D) 306.0 m/s^2
- Q.119. A constant force acting on a body of mass 3.0 kg changes its speed from 2.0 m/s to 3.5 m/s in 25 s. The direction of the motion of the body remains unchanged. What is the magnitude of the force?**
 (A) 0.18 N (B) 18 N (C) 180 N (D) 0.018 N
- Q.120. The biggest size of thermal unit operating in India is**
 (A) 500 MW (B) 60 MW (C) 100 MW (D) 210 MW
- Q.121. The high pressure boiler is one producing steam at a pressure more than**
 (A) Atmospheric pressure (B) $75 - 80 \text{ kg/cm}^2$
 (C) 10 kg/cm^2 (D) 40 kg/cm^2
- Q.122. Density of water at 4°C is**
 (A) 1.0 kg/m^3 (B) 100 kg/m^3 (C) 1000 kg/m^3 (D) 0.1 kg/m^3
- Q.123. In locomotive boiler, maximum steam pressure is limited to**
 (A) 1 kg/cm^2 (B) 5 kg/cm^2 (C) 10 kg/cm^2 (D) 18 kg/cm^2
- Q.124. Value of gas constant R in J/(mol) (k) is**
 (A) 1.98 (B) 8.314 (C) 0.082 (D) 82.0
- Q.125. Which of the following varieties of coals is mostly used in steam boilers**
 (A) Non-coking bituminous coal (B) Brown coal
 (C) Peat (D) Coking bituminous coal
- Q.126. A boiler in India should conform to safety regulations of**
 (A) DIN (B) BS (C) ASTM (D) IBR
- Q.127. Volume occupied by 1 kmol of a gas at STP is**
 (A) 359 m^3 (B) 22.4 m^3 (C) 225 m^3 (D) 3.59 m^3

- Q.128. A fusible plug is fitted in small boiler in order to**
 (A) avoid excessive build up of pressure
 (B) avoid explosion
 (C) extinguish fire if water level in the boiler falls below alarming limit
 (D) control steam temperature
- Q.129. Viscosity of water at normal temperature is approximately equal to:**
 (A) 1.0 poise (B) 0.01 poise (C) 10.0 poise (D) 0.001 poise
- Q.130. pH of an acidic solution is**
 (A) > 7 (B) < 7 (C) $= 7$ (D) Zero
- Q.131. Thermal efficiency of well maintained boiler will be of the order**
 (A) 20% (B) 90% (C) 50% (D) 75%
- Q.132. Sodium sulphate is produced by the reaction:**
 $2 \text{NaOH} + \text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + 2\text{H}_2\text{O}$
 H_2SO_4 required for producing 142 kg of Na_2SO_4
 (A) 196 kg (B) 49 kg (C) 98 kg (D) 9.8 kg
- Q.133. The heat loss in a boiler takes place in the form of**
 (A) Heat carried away by flue gases (B) Heat carried away by ash
 (C) Radiation (D) All of the above
- Q.134. Bomb calorimeter is used to determine**
 (A) Higher calorific value at constant volume
 (B) Lower calorific value at constant volume
 (C) Higher calorific value at constant pressure
 (D) Lower calorific value at constant pressure
- Q.135. For combustion of a fuel, following is essential**
 (A) Correct fuel air ratio (B) Proper ignition temperature
 (C) O_2 to support combustion (D) All the three above
- Q.136. The major component of LPG is**
 (A) Carbon monoxide (B) Hydrogen (C) Butane (D) Ethylene
- Q.137. O_2 content in atmospheric air on volume basis is**
 (A) 21% (B) 23% (C) 30% (D) 40%
- Q.138. Calorific value of coal is of the order of**
 (A) 200 – 400 kcal/kg (B) 800 – 1200 kcal/kg
 (C) 2000 – 4000 kcal/kg (D) 5000 – 8000 kcal/kg
- Q.139. Evaporative capacity of boiler is expressed as**
 (A) kg of steam produced (B) Steam pressure produced
 (C) kg of fuel fired (D) kg of steam produced per kg of fuel fired
- Q.140. Boiler parameters are expressed by**
 (A) Tonnes/hr of steam (B) Pressure of steam in kg/cm^2
 (C) Temperature of steam in $^\circ\text{C}$ (D) All of the above
- Q.141. The condition of steam in boiler drum is always**
 (A) Dry (B) Wet (C) Saturated (D) Supersaturated
- Q.142. Maximum energy loss in a boiler occurs due to**
 (A) Unburnt carbon in ash (B) Incomplete combustion
 (C) Ash content (D) Flue gases

- Q.143. Deaeration of feed water is carried out because it reduces**
(A) cavitations of boiler feed pumps (B) corrosion caused by oxygen
(C) heat transfer coefficient (D) pH value of water
- Q.144. Feed water conditioning in thermal power plants is done to**
(A) Reduce hardness and for removal of solids
(B) Increase efficiency of thermal power plant
(C) Increase heat transfer rate
(D) Increase steam parameters
- Q.145. The basic job of feed water treatment in boilers is to overcome the problem of**
(A) Corrosion (B) Scale (C) Carryover (D) All of the above
- Q.146. Hardness of water refers to**
(A) The presence of scale-forming calcium or magnesium salts in water
(B) Its shear strength
(C) Its pH value
(D) Presence of ions in water
- Q.147. Blow down from boiler drum is carried with a view to**
(A) Control the solids concentration in boiler water (B) To control drum level
(C) Lower steam pressure (D) Increase steam temperature
- Q.148. A dense white smoke from a chimney indicates**
(A) Insufficient air (B) Too much air (C) Correct air (D) Less turbulence
- Q.149. Which impurity in water requires critical attention on very high pressure boilers?**
(A) Hydrogen (B) Ammonia (C) Silica (D) Dissolved salts
- Q.150. The major component of natural gas is**
(A) Nitrogen (B) Carbon monoxide (C) Propane (D) Methane

Key (Code: 2.1)
Post: Assistant Operator and Boiler Attendant

Q. No.	Ans.	Q. No.	Ans.	Q. No.	Ans.	Q. No.	Ans.	Q. No.	Ans.
1	C	31	B	61	D	91	D	121	B
2	B	32	A	62	A	92	B	122	C
3	A	33	D	63	D	93	A	123	D
4	B	34	C	64	C	94	C	124	B
5	D	35	A	65	B	95	C	125	A
6	C	36	A	66	B	96	D	126	D
7	A	37	C	67	A	97	A	127	B
8	B	38	B	68	B	98	C	128	C
9	C	39	D	69	C	99	D	129	B
10	B	40	C	70	D	100	C	130	B
11	D	41	B	71	A	101	A	131	B
12	C	42	A	72	D	102	B	132	C
13	A	43	D	73	B	103	B	133	D
14	B	44	A	74	C	104	C	134	A
15	A	45	C	75	B	105	C	135	D
16	B	46	A	76	C	106	C	136	C
17	C	47	C	77	B	107	B	137	A
18	D	48	B	78	A	108	A	138	C
19	B	49	C	79	D	109	B	139	D
20	A	50	D	80	C	110	D	140	D
21	C	51	C	81	A	111	A	141	B
22	B	52	A	82	B	112	A	142	D
23	A	53	C	83	D	113	B	143	B
24	B	54	B	84	A	114	A	144	A
25	D	55	C	85	B	115	C	145	D
26	D	56	A	86	A	116	B	146	A
27	B	57	B	87	C	117	C	147	A
28	C	58	D	88	B	118	B	148	B
29	A	59	C	89	D	119	A	149	C
30	B	60	C	90	A	120	A	150	D