

प्रश्न पुस्तिका तब तक न खोलें जब तक आपको इसके लिये निर्देशित न किया जाये ।

DO NOT OPEN THIS QUESTION BOOKLET UNTIL YOU ARE ASKED TO DO SO.

प्रश्न पत्र / QUESTION PAPER

Engagement of Trade Apprentices 55th batch in Ordnance Factories

EX - ITI

Group Code : 1

Q.P. Series :

C

ROLL NO.

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Sr. No.

निरीक्षक के हस्ताक्षर / Signature of the Invigilator.....

दिनांक / Date:- _____

अवधि / Duration : 3 घंटे / 3 Hours

समय / Time:- 10:00 AM to 1:00 PM

अधिकतम अंक : 150 / Max. Marks : 150

	SUBJECT	No. of Questions
PART - I	ENGLISH	15
	GENERAL KNOWLEDGE	15
	MATHEMATICS	15
	APTITUDE / REASONING	15
PART - II	RELEVANT TRADE	90
	TOTAL QUESTIONS	150

निर्देश:- उत्तर देने से पहले कृपया निम्नलिखित निर्देशों को ध्यानपूर्वक पढ़ें ।

Instructions:- Please read the following instructions carefully before writing your answer.

- सभी प्रश्न अनिवार्य हैं। All questions are compulsory.
- प्रत्येक प्रश्न 1 अंक का है। गलत उत्तर के लिए कोई अंक नहीं काटा जाएगा। Each question carries 1 mark. There is no negative marking for wrong answer.
- प्रत्येक प्रश्न के 4 संभावित उत्तर लिखे हैं (A),(B),(C),(D) जिनमें से एक उत्तर सही है। अपने उत्तर को ओ.एम.आर. उत्तर पुस्तिका पर गोला भरकर अंकित करें। There are four options-(A),(B),(C),(D) given against each question, out of which only one is correct. Mark your answer by filling bubble on the OMR answer sheet.
- अभ्यर्थी अपने उत्तर को केवल अलग से दी गई ओ.एम.आर. उत्तर पुस्तिका पर ही अंकित करें। Candidate has to mark all his responses only on the separate OMR sheet provided.
- केवल नीले या काले बाल प्वाइंट पेन का ही उपयोग करें। पेन्सिल के उपयोग की अनुमति नहीं है। Use only blue or black ball point pen. Use of pencil is not allowed.
- ओ.एम.आर. उत्तर पुस्तिका में उत्तर अंकित करने से पहले, अपने प्रवेश पत्र के अनुसार दिये गए ओ.एम.आर. उत्तर पुस्तिका में विवरण सावधानीपूर्वक भरें। ओ.एम.आर. में गलत / अधूरा विवरण भरने पर मूल्यांकन नहीं किया जाएगा। यदि ओ.एम.आर. अभ्यर्थी / निरीक्षक द्वारा हस्ताक्षर नहीं किया हुआ है तो मूल्यांकन नहीं किया जाएगा। Before you proceed to mark your response in OMR answer sheet, you have to fill in some particulars carefully in the OMR answer sheet as per your admit card. The OMR shall not be evaluated if incorrect/incomplete details are filled. OMR not signed by the Candidate/Invigilator shall not be evaluated.
- प्रश्न पुस्तिका में से कोई पन्ना अलग न करें। No sheet from the question paper should be detached.
- रफ कार्य करने के लिये प्रश्न पत्र के अंत में शीट प्रदान की गयी है। Sheet for rough work is appended in the question paper at the end.
- यदि अभ्यर्थी एक से अधिक उत्तर देता है तो उसे गलत माना जाएगा चाहे उनमें से कोई भी एक उत्तर सही हो। If candidate gives more than one answer, it will be treated as wrong answer even if one of given answer happens to be correct.
- परीक्षा समाप्त होने के बाद अपना ओ.एम.आर. उत्तर पुस्तिका निरीक्षक को सौंपें। अभ्यर्थी को अपने साथ प्रश्न पत्र ले जाने की अनुमति दी जाएगी। After completion of examination, you have to hand over your OMR answer sheet to invigilator. Candidate shall be allowed to take the question paper along with him.

विवाद की स्थिति में अंग्रेजी संस्करण मान्य होगा. In case of dispute, English version will prevail.

TML

ENGLISH

Questions : 15

Direction for questions 1 – 3 :

Choose the **best word or expression** to complete the sentences.

Questions :

- He informed _____ me to the police.
(A) about (B) against (C) for (D) with
- He lives in the world of _____.
(A) allusions (B) illusions (C) conclusions (D) delusions
- The husband was taken aback when his wife _____ to him that she _____ him for his money.
(A) revealed had married (B) declared married
(C) revealed married (D) confirmed has married

Direction for questions 4 – 6 :

In each of the following questions various words are given, one of which is wrongly spelt. Find out the **WRONGLY SPELT** word.

Questions :

- (A) Doubtfull (B) Awkward (C) Ponderous (D) Distinct
- (A) Broch (B) Bleak (C) Bouquet (D) Baneful
- (A) Delusion (B) Dovetail (C) Divercity (D) Diffident

Direction for questions 7 – 9 :

Choose the word which is **nearest in meaning** to the bold typed word.

Questions :

- In his old age the man turned a **fatalist**.
(A) Disbeliever in God (B) Believer in God
(C) Believer in fate (D) Non-believer in destiny
- The officer was **divested** of all power.
(A) Bared (B) Denuded (C) Dispossessed (D) Disrobed
- He is liked by all for his **candid** behaviour.
(A) Social (B) Simple (C) Frank (D) Sociable

Direction for questions 10 – 12 :

Below several disarranged words are given in each question. Arrange them in proper order so that it makes a sense and indicate the index (A or B or C or D) of the word you have chosen to put LAST.

Questions :

10. me your pleased has news
 (A) (B) (C) — (D)
11. in of I money am need
 — (A) — (B) (C) (D)
12. acts care she with
 (A) (B) (C) (D)

Direction for questions 13 – 15 :

Choose the OPPOSITE meaning of the given word.

Questions :

13. Modest
 (A) Lenient (B) Reserved (C) Humble (D) Arrogant
14. Transparent
 (A) Obvious (B) Distinct (C) Opaque (D) Consistent
15. Immense
 (A) Insignificant (B) Significant (C) Huge (D) Gigantic

GENERAL KNOWLEDGE

Questions – 15

16. Which state government will launch e-wallet "Tokapoisa.in" for cashless transaction in local language?
 (A) Odisha (B) Assam (C) Manipur (D) Kerala
17. Who has won the 2016 Best FIFA Men's player award?
 (A) Cristiano Ronaldo (B) Lionel Messi
 (C) Carli Lloyd (D) Antonie Griezmann
18. The 2017 Vibrant Gujarat Global Investors Summit has started in which city?
 (A) Ahmedabad (B) Rajkot (C) Surat (D) Gandhinagar
19. Veteran actor Om Puri, who passed away recently, was belonged to which state?
 (A) Punjab (B) Haryana (C) Uttar Pradesh (D) Madhya Pradesh
20. Which country, on the map of world, appears as "Long Shoe"?
 (A) Portugal (B) Italy (C) Greece (D) Hungary
21. Which of the following atmospheric layers reflects radio waves that are transmitted from the earth and again back to the earth?
 (A) Ionosphere (B) Stratosphere (C) Mesosphere (D) Troposphere
22. The partition of Bengal was sought to be brought about by
 (A) Lord Curzon (B) Warren Hastings (C) Alfred Lyall (D) Lord Cornwallis
23. The gas usually filled in the electric bulb is
 (A) Nitrogen (B) Hydrogen (C) Carbon dioxide (D) Oxygen
24. The largest river of all the west flowing rivers of the peninsular India is
 (A) Tapi (B) Kaveri (C) Krishna (D) Narmada
25. Rajiv Gandhi Environment Award is given for outstanding contribution
 (A) to health (B) to tourism
 (C) to agriculture (D) in the development of Neat technology
26. The 2017 Island tourism Festival has started in which state / union territory?
 (A) Andaman and Nicobar (B) Gujarat
 (C) Rajasthan (D) Lakshadweep
27. The Chardham highway project will come up in which state of India?
 (A) Jharkhand (B) Sikkim (C) Bihar (D) Uttarakhand

28. Which bollywood personality has been conferred honorary doctorate by the Maulana Azad National Urdu University?
- (A) Aamir Khan (B) Nawazuddin Siddiqui
(C) Shahrukh Khan (D) Salman Khan
29. Which of the following islands in India was once named "New Denmark"?
- (A) Salsatte Island (B) Elephanta Island
(C) Lakshadweep (D) Andaman & Nicobar Island
30. Which become the first cricket venue in India to have a roof top solar power plant ?
- (A) Jawaharlal Nehru Stadium (B) Chinnaswamy Stadium
(C) Salt Lake Stadium (D) Eden Gardens

MATHEMATICS
Questions – 15

31. In an increasing sequence of 10 consecutive integers, the sum of the first 5 integers is 560. What is the sum of the last 5 integers in the sequence?
(A) 585 (B) 580 (C) 575 (D) 570
32. The water from one outlet, flowing at a constant rate, can fill a swimming pool in 9 hours. The water from a second outlet, flowing at a constant rate, can fill the same pool in 5 hours. If both outlets are used at the same time, approximately what is the number of hours required to fill the pool?
(A) 0.22 (B) 2.50 (C) 3.21 (D) 4.56
33. Car A is 20 miles behind Car B, which is traveling in the same direction along the same route as Car A. Car A is traveling at a constant speed of 58 miles per hour and Car B is traveling at a constant speed of 50 miles per hour. How many hours will it take for Car A to accelerate and drive 8 miles ahead of Car B?
(A) 2.0 (B) 2.5 (C) 3.0 (D) 3.5
34. There are 4 more women than men on Centerville's board of education. If there are 10 members on the board, how many are women?
(A) 3 (B) 4 (C) 6 (D) 7
35. Machine A produces bolts at a uniform rate of 120 every 40 seconds, and Machine B produces bolts at a uniform rate of 100 every 20 seconds. If the two machines run simultaneously, how many seconds will it take for them to produce a total of 200 bolts?
(A) 22 (B) 25 (C) 28 (D) 32
36. If Mahim loses 8 pounds, he will weigh twice as much as his sister. Together they now weigh 278 pounds. What is Mahim's present weight, in pounds?
(A) 131 (B) 139 (C) 147 (D) 188
37. If $x + 5 > 2$ and $x - 3 < 7$, the value of x must be between which of the following pairs of numbers?
(A) -3 and 10 (B) -3 and 4 (C) 2 and 7 (D) 3 and 4
38. A man sells his typewriter at 5% loss. If he sells it for Rs. 80 more, he gains 5%. The cost price of the typewriter is
(A) Rs. 1600 (B) Rs. 1200 (C) Rs. 1000 (D) Rs. 800
39. Which of the following is the value of $\sqrt[3]{0.000064}$?
(A) 0.004 (B) 0.02 (C) 0.04 (D) 0.2

40. Rabin has 10 pairs of matched socks. If he loses 7 individual socks, what is the greatest number of pairs of matched socks he can have left?
(A) 7 (B) 6 (C) 5 (D) 4
41. $(43\% \text{ of } 2750) - (38\% \text{ of } 2990) = ?$
(A) 43.6 (B) 46.3 (C) 44.7 (D) 49.3
42. The sum of the ages of a father and his son is 100 years now. Five years ago, their ages were in the ratio of 2 : 1. The ratio of the ages of father and son after 10 years will be
(A) 4 : 3 (B) 5 : 3 (C) 3 : 5 (D) 10 : 7
43. A carpenter constructed a rectangular sandbox with a capacity of 10 cubic feet. If the carpenter were to make a similar sandbox twice as long, twice as wide, and twice as high as the first sandbox, what would be the capacity, in cubic feet, of the second sandbox?
(A) 20 (B) 40 (C) 60 (D) 80
44. If y is an integer, then the least possible value of $|23 - 5y|$ is
(A) 2 (B) 3 (C) 4 (D) 5
45. $\frac{(0.0036)(28)}{(0.04)(0.1)(0.003)} = ?$
(A) 840.0 (B) 84.0 (C) 8.4 (D) 0.84

APTITUDE / REASONING**Questions – 15****Direction for questions 46 – 49 :**

In each of the following questions, some words are given which are related in some way. The same relationship obtains among the words in one of the four alternatives given under it. Find the correct alternative.

Questions :

46. Smile : Laugh : Cry
(A) Sit : Sleep : Play
(B) Frown : Anger : Temper
(C) Morning : Night : Day
(D) Touch : Catch : Release
47. Lizard : Reptile : Insects
(A) Fox : Wolf : Forest
(B) Fly : Insect : Bee
(C) Man : Omnivorous : Meat
(D) Tiger : Mammal : Deer
48. Magazine : Story : Article
(A) Tea : Milk : Sugar
(B) Television : Newspaper : Entertainment
(C) Bed : Quilt : Pillow
(D) Novel : Drama : Literature
49. Dog : Squirrel : Tail
(A) Cottage : Hut : Palace
(B) Fish : Crocodile : Water
(C) Horse : Ox : Horn
(D) Truck : Scooter : Gear
-
50. Pointing to a boy in a photograph Akhil says, "He is the son of my mother's only son's son". How is Akhil related to that boy?
(A) Uncle
(B) Brother
(C) Father
(D) Grandfather

Direction for questions 51 – 54 :

Read the information given below and answer the following questions on the basis of the information provided.

- i) There is a family of 5 persons A, B, C, D and E.
- ii) They are working as a doctor, a teacher, a trader, a lawyer and a farmer.
- iii) B, an unmarried teacher, is the daughter of A.
- iv) E, a lawyer, is the brother of C.
- v) C is the husband of the only married couple in the family.
- vi) A, a farmer, is a father of two sons and an unmarried daughter.
- vii) Daughter-in-law of A is a doctor.

Questions :

51. Who is the doctor in the family?
(A) A (B) B (C) C (D) D
 52. Which of the following is a group of female members in the family?
(A) B and D (B) D and E (C) A, C and E (D) B and C
 53. Who is the trader in the family?
(A) A (B) B (C) C (D) D
 54. Which of the following is the married couple?
(A) A and B (B) C and D (C) A and D (D) B and D
-
55. If NAXALITE is written in a certain code as LYVYJGRC, how will INTEGRATE be written in the same code?
(A) LGRECYPRC (B) GLRCEPYRC
(C) RYWMNOPQR (D) BLACKHOLE

Direction for questions 56 – 58 :

Read the following information to answer the questions :

Symbolise the given number and symbol :

Number : 1 2 3 4 5 6 7 8 9

Symbol : × * ? + \$ • + ! Δ

- i) If any number begins by odd number then the odd number symbolized as @.
- ii) If any number ends by even number then the even number symbolized as ©.

Questions :

56. Which of the following will be the symbol of 178524?
 (A) @ + ! \$ * © (B) x + ! \$ ©
 (C) @ + ! \$ * + (D) None of these
57. Which of the following will be the symbol of 673258?
 (A) * + ? * \$! (B) @ + ? * \$!
 (C) @ ? + \$ * ! (D) * + ? * \$ ©
58. Which of the following will be the symbol of 846721?
 (A) © + * + * x (B) ! + * + * @
 (C) ! + * + * x (D) © + * + * x
-
59. Which pair of English letters should be the next in the series of pairs of letters of English alphabet given below?
 BE GK MR TZ BI
 (A) JR (B) KS (C) JS (D) KR
60. A man travels 3 kms to the West, turns left and goes 3 kms, turns right and goes 1 km, again turns right and goes 3 kms. How far is he from the starting point?
 (A) 7 kms (B) 6 kms (C) 5 kms (D) 4 kms

GROUP - 1**Questions : 90**

61. After thread cutting, the next operation is
(A) drilling (B) chamfering (C) filing (D) facing
62. For general use of drill, point angle is
(A) 60° (B) 118° (C) 120° (D) 59°
63. Enlarging of previously drilled holes is known as
(A) reaming (B) boring (C) broaching (D) None of these
64. 'Thumb rule' for tap drill size is normally taken as
(A) $0.6 d$ (B) $0.75 d$ (C) $0.8 d$ (D) d
Where d = dia of hole
65. An undercut shoulder is produced by using
(A) grooving tool (B) parting-off tool (C) square nose tool (D) None of these
66. In pipe joints, the following thread is used.
(A) BSW (B) BSP (C) BA (D) None of these
67. Mandrel is required to hold the
(A) hollow job (B) solid job (C) stepped job (D) None of these
68. In which of the following power transmission system, key and keyway are needed ?
(A) Coupling (B) Gear drive (C) Belt-pulley drive (D) All of these
69. Which of the following tool angle improves surface finish ?
(A) Clearance angle (B) Rake angle (C) Nose angle (D) None of these
70. In annealing, cooling is done
(A) very rapidly (B) rapidly (C) very slowly (D) in air
71. The signature of the single point cutting tool comprises of _____ elements.
(A) 7 (B) 6 (C) 5 (D) 4
72. Spiral flutes of reamer is
(A) left handed (B) right handed (C) Any one of these (D) None of these
73. Lathe centre has a point angle of
(A) 30° (B) 45° (C) 60° (D) None of these
74. Plug tap is also known as
(A) taper tap (B) bottoming tap (C) intermediate tap (D) None of these

75. Included angle of the centre punch is
(A) 30° (B) 45° (C) 60° (D) 90°
76. In milling machine, which of the following standard taper is mostly used ?
(A) Jarno (B) Morse
(C) Metric (D) Brown and Sharpe
77. Which type of milling cutter is required for high speed mill operation?
(A) Zero rake (B) Negative rake (C) Positive rake (D) None of these
78. To mill the hexagonal headed bolt, the following milling operation is most suitable.
(A) Form milling (B) Straddle milling (C) Face milling (D) Angular milling
79. In vertical milling m/c, cutter is mounted on
(A) spindle (B) collar (C) arbor (D) None of these
80. Which of the following milling machine is suitable for tool room work?
(A) Fix bed type (B) Universal milling machine
(C) Plain milling machine (D) None of these
81. The term 'loading' is associated with
(A) drill bit (B) milling cutter (C) grinding wheel (D) broach
82. Martempering is a _____ process.
(A) normalising (B) tempering (C) annealing (D) hardening
83. To mill a gear of 83 teeth, _____ indexing method is used.
(A) simple (B) compound (C) differential (D) rapid
84. Which of the following is a direct measuring instrument?
(A) Vernier caliper (B) Sine bar
(C) Oddleg caliper (D) Telescopic gauge
85. To obtain better gripping surface, the following operation is required :
(A) Undercut (B) Knurling (C) Reaming (D) Forming
86. High carbon steel contains _____ of carbon.
(A) 0.3% to 0.5% (B) 0.6% to 1.5% (C) 0.15% to 0.3% (D) None of these
87. Drill socket compared to drill sleeve is
(A) smaller (B) larger (C) of equal size (D) much larger
88. The term 'module' is related with
(A) gear (B) coupling (C) pulley (D) None of these

89. Coolant used while turning of cast iron is
(A) soap water (B) kerosine (C) lard oil (D) None of these
90. Gun metal is an
(A) non-ferrous alloy (B) compound (C) alloy of copper (D) All of these
91. Which one of the following is a job supporting device?
(A) Steady rest (B) Mandrel (C) Face plate (D) Chuck
92. Tolerance is of _____ types.
(A) 2 (B) 3 (C) 4 (D) None of these
93. Internal keyway can be cut by
(A) shaping m/c (B) broaching m/c (C) slotting m/c (D) All of these
94. Differential indexing is required to cut _____ gear.
(A) 96 (B) 48 (C) 37 (D) 86
95. Last element of the cutting tool signature is
(A) nose radius (B) side clearance angle
(C) front rake angle (D) None of these
96. Which index plate is to be required to index an angle of $19^{\circ}40'$?
(A) Plate – I (B) Plate – II (C) Plate – III (D) None of these
97. Backlash eliminator should be provided in
(A) upmilling (B) down milling (C) face milling (D) gang milling
98. Downmilling operations should only be performed on
(A) rigid machine (B) plain milling machine
(C) rigid machine with backlash eliminator (D) hand milling machine
99. For tool room work, the following milling m/c is suitable.
(A) Plain milling m/c (B) Fixed bed type milling m/c
(C) Plano-miller (D) Universal milling m/c
100. The thickness of chip is minimum at the beginning and is maximum at the end of cut in case of _____ milling operation.
(A) up (B) down (C) end (D) face
101. Drilling jig is used for
(A) prototype work (B) repairing work (C) mass production (D) All of these work
102. In case of end milling, the cutter has teeth
(A) on the end face (B) on the periphery

- (C) both on the end face and the periphery (D) on half of the periphery
103. Back gear is used for _____ operation
(A) reaming (B) grooving (C) forming (D) Thread cutting
104. To cut a spur gear of 54 teeth having module 3, the size of gear blank is required
(A) 132 mm (B) 168 mm (C) 180 mm (D) None of these
105. Chasing dial is mounted on right end of the
(A) tail stock (B) apron (C) cross slide (D) None of these
106. Which of the following is an example of drilling operation?
(A) Knurling (B) Undercut (C) Trepanning (D) None of these
107. For mass production of helical gears, the following machine is suitable.
(A) Gear shaper (B) Broach
(C) Plain milling machine (D) Hobbing machine
108. Hobbing m/c is used for the mass production of
(A) spur gear (B) thread (C) helical gear (D) None of these
109. Universal milling machine is equipped with
(A) quick return arrangement (B) indexing arrangement
(C) fool-proof arrangement (D) None of these
110. Drill sleeve has
(A) no taper (B) internal taper (C) external taper (D) Both (B) & (C)
111. In mass production, for guiding the milling cutter, _____ is used.
(A) jig (B) dividing head (C) template (D) fixture
112. Lapping is done after
(A) reaming (B) drilling (C) trepanning (D) boring
113. More than one surface can be machined at a time in
(A) shaper (B) lathe (C) plano-miller (D) None of these
114. Tumbler gears are used in
(A) shaper (B) milling m/c (C) lathe (D) broaching
115. In universal milling machine _____ number of table movements can be obtained.
(A) 2 (B) 3 (C) 4 (D) 5
116. Multiple tooling layout is possible in
(A) Capstan lathe (B) plano-miller (C) planer (D) All of these

117. To mill a gear of 89 teeth, _____ indexing method is to be adopted.
(A) simple (B) compound
(C) differential (D) rapid
118. Drilling is followed by
(A) reaming (B) tapping (C) boring (D) None of these
119. Milling cutter is mounted on spindle in
(A) vertical milling machine (B) horizontal milling machine
(C) plano-miller (D) None of these
120. Dividing head is used in mass production for guiding the
(A) drills (B) milling cutters (C) reamers (D) All of these
121. Which one of the following is an accessories of lathe work ?
(A) Steady rest (B) Tail Stock (C) Feed rod (D) None of these
122. Surface plate is made of
(A) mild steel (B) high carbon steel (C) grey cast iron (D) wrought iron
123. While cutting double start threads of pitch 2 mm in a lathe, the cutting tool will advance by
(A) 2 mm/revolution (B) 1 mm/revolution (C) 4 mm/revolution (D) None of these
124. In chipping process, the following chisel is used.
(A) Cape chisel (B) Hot chisel (C) Cold chisel (D) Side chisel
125. Suitable change gears for cutting 17 TPI on 4 TPI lead screw lathe are
(A) 30, 105 (B) 20, 85 (C) 15, 85 (D) None of these
126. Smaller sizes of drills are not marked and the size is found by the use of
(A) micrometer (B) template (C) drill gauge (D) None of these
127. The average cutting speed for machining mild steel by a high speed steel tool is taken as
(A) 10 mm (B) 30 mm (C) 40 mm (D) 24 mm
128. To obtain the correct diameter of hole, the drill should be ground with both lips at
(A) 30° (B) 45° (C) 59° (D) 60°
129. Spindle speed in a lathe for turning a 40 cm dia job at a cutting speed of 30 m/min would be
(A) 206 rpm (B) 238 rpm (C) 350 rpm (D) None of these
130. Filing is followed by
(A) grinding (B) lapping (C) scraping (D) None of these

131. Which one of the following material has the highest cutting speed?
(A) Brass (B) Bronze (C) Al (D) C.I.
132. Internal thread is cut by
(A) tap (B) die (C) reamer (D) thread chaser
133. Rotary power of lead screw is transmitted to the lathe carriage through
(A) gear (B) rack and pinion
(C) half-nut (D) chain & sprocket
134. Cylindrical job is supported by
(A) stepped block (B) angle plate (C) V- block (D) None of these
135. Translating gear has the following number of teeth :
(A) 127 teeth (B) 20 teeth (C) 47 teeth (D) None of these
136. An alloy made of lead and zinc is called
(A) borax (B) spelter (C) solder (D) None of these
137. The feed shaft must be in disengaged condition during
(A) facing (B) thread cutting (C) turning (D) None of these
138. Austempering is an _____ process.
(A) tempering (B) hardening (C) annealing (D) normalising
139. Which of the following feed is required for grooving operation?
(A) Longitudinal (B) Cross (C) Vertical (D) Combined
140. A rivet consists of head, shank and
(A) neck (B) body (C) tail (D) pilot
141. In lathe operation, job can be centred automatically and quickly by means of
(A) magnetic chuck (B) 4-jaw chuck
(C) air operated chuck (D) 3 jaw chuck
142. The tool for holding and turning the threading die is known as
(A) handle (B) adjusting wrench (C) stock (D) drift
143. In case of turning, speed of job is four times greater than
(A) grooving (B) Knurling (C) facing (D) None of these
144. Zinc chloride is commonly used flux in the process of
(A) welding (B) soldering (C) hard brazing (D) None of these
145. External thread is cut by means of
(A) die (B) reamer (C) tap (D) thread chaser

146. Hardening is followed by
(A) tempering (B) normalising (C) annealing (D) None of these
147. Taper turning attachment is used to cut
(A) external long taper (B) external steep taper
(C) both internal and external tapers (D) only internal taper
148. Extension rods are extra features for
(A) sine bar (B) inside micrometer (C) vernier caliper (D) None of these
149. Fool-proof arrangement is a safety measure of
(A) broaching (B) shaper (C) milling m/c (D) None of these
150. For mass production, inspection of jobs is done by
(A) gauge (B) measuring instrument
(C) template (D) jig