

BJI (CBRT)

PROVISIONAL ANSWER KEY

Name of the post Fire Officer, Class -2(GMC)

Advertisement No. 11/2024-25

Preliminary Test Held On 17-11-2024

Que. No 001-300

Publish Date 25-11-2024

Last Date to Send Suggestion (s) 29-11-2024

THE LINK FOR ONLINE OBJECTION SYSTEM WILL START FROM 26-11-2024; 04:00 PM ONWARDS

Instructions / સૂચના

Candidate must ensure compliance to the instructions mentioned below, else objections shall not be considered: -

- (1) All the suggestion should be submitted through **ONLINE OBJECTION SUBMISSION SYSTEM** only. Physical or submission through E- Mail of suggestions will not be considered.
- (2) Question wise suggestion to be submitted in the prescribed format (proforma) published on the website / online objection submission system.
- (3) All suggestions are to be submitted with reference to the Master Question Paper with provisional answer key (Master Question Paper), published herewith on the website / online objection submission system. Objections should be sent referring to the Question, Question No. & options of the Master Question Paper.
- (4) Suggestions regarding question nos. and options other than provisional answer key (Master Question Paper) shall not be considered.
- (5) Objections and answers suggested by the candidate should be in compliance with the responses given by him in his answer sheet. Objections shall not be considered, in case, if responses given in the answer sheet /response sheet and submitted suggestions are differed.
- (6) Objection for each question should be made on separate sheet. Objection for more than one question in single sheet shall not be considered.

ઉમેદવારે નીચેની સૂચનાઓનું પાલન કરવાની તકેદારી રાખવી, અન્યથા વાંધા-સૂચન અંગે કરેલ રજૂઆતો ધ્યાને લેવાશે નહીં

- (1) ઉમેદવારે વાંધા-સૂચનો ફક્ત **ઓનલાઇન ઓબ્જેક્શન સબમીશન સીસ્ટમ** દ્વારા જ સબમીટ કરવાના રહેશે. રૂબરૂ, ટપાલ અથવા ઈ-મેઇલ દ્વારા આયોગની કચેરીએ મોકલવામાં આવેલ વાંધા-સૂચનો ધ્યાને લેવામાં આવશે નહીં જેની ખાસ નોંધ લેવી.
- (2) ઉમેદવારે વાંધા-સૂચનો રજૂ કરવા વેબસાઇટ / ઓનલાઇન ઓબ્જેક્શન સબમીશન સીસ્ટમ પર પ્રસિધ્ધ થયેલ નિયત નમૂનાનો જ ઉપયોગ કરવો.
- (3) ઉમેદવારે પોતાને પરીક્ષામાં મળેલ પ્રશ્નપુસ્તિકામાં છપાયેલ પ્રશ્નક્રમાંક મુજબ વાંધા-સૂચનો રજૂ ન કરતા તમામ વાંધા-સૂચનો વેબસાઇટ પર પ્રસિધ્ધ થયેલ પ્રોવિઝનલ આન્સર કી (માસ્ટર પ્રશ્નપત્ર) ના પ્રશ્નક્રમાંક મુજબ અને તે સંદર્ભમાં રજૂ કરવા.
- (4) માસ્ટર પ્રશ્નપત્રમાં નિર્દિષ્ટ પ્રશ્ન અને વિકલ્પ સિવાયના વાંધા-સૂચનો ધ્યાને લેવામાં આવશે નહીં.
- (5) ઉમેદવારે પ્રશ્નના વિકલ્પ પર વાંધો રજૂ કરેલ છે અને વિકલ્પ રૂપે જે જવાબ સૂચવેલ છે એ જવાબ ઉમેદવારે પોતાની ઉત્તરવહીમાં આપેલ હોવો જોઈએ. ઉમેદવારે સૂચવેલ જવાબ અને ઉત્તરવહીનો જવાબ ભિન્ન હશે તો ઉમેદવારે રજૂ કરેલ વાંધા-સૂચનો ધ્યાને લેવાશે નહીં.
- (6) એક પ્રશ્ન માટે એક જ વાંધા-સૂચન પત્રક વાપરવું. એક જ વાંધા-સૂચનો પત્રકમાં એકથી વધારે પ્રશ્નોની રજૂઆત કરેલ હશે તો તે અંગેના વાંધા-સૂચનો ધ્યાને લેવાશે નહીં.

Website link for online objection submission system : <http://gpsc.safevaults.in/login/>

M

001. નીચેનામાંથી કયા ગ્રંથમાં આધુનિક દશાંશ પદ્ધતિની ચર્ચા થયેલી છે?
- (A) આર્યભટ્ટીય (B) બૃહત્સંહિતા
(C) પંચસૈદ્ધાંતિક (D) બ્રહ્મસ્ફુટસિદ્ધાંત
002. 'નાગાનંદ, પ્રિયદર્શિકા અને રત્નાવલી' એ ત્રણ નાટકોના રચયિતા કોણ હતા?
- (A) કૃષ્ણ દેવરાય (B) ચંદ્રગુપ્ત બીજો
(C) હર્ષ (D) નરસિંહ વર્મા
003. ગુપ્તકાલીન ભિત્તિચિત્રો માટે સુપ્રસિદ્ધ બુદ્ધની ગુફાઓ નીચેનામાંથી કયા રાજ્યમાં આવેલી છે?
- (A) ઉત્તર પ્રદેશ (B) મધ્ય પ્રદેશ
(C) રાજસ્થાન (D) બંગાળ
004. વેદોને બીજા કયા નામથી ઓળખવામાં આવે છે?
- (A) સ્મૃતિ (B) સૂત્ર
(C) શ્રુતિ (D) શ્રુજય
005. સુપ્રસિદ્ધ કાંસાની પૂતળી સિંધુ સંસ્કૃતિના કયા સ્થળેથી મળી છે?
- (A) હરપ્પા (B) લોથલ
(C) મોહે-જો-દડો (D) કાલીબંગન
006. હરિવંશ નામે પ્રાચીન કૃતિમાં કોનું વર્ણન-નિરૂપણ કરવામાં આવ્યું છે?
- (A) રામ (B) કૃષ્ણ
(C) નરસિંહ (D) બ્રહ્મા
007. ગૌતમ બુદ્ધનો પ્રથમ ઉપદેશ કયા નામે ઓળખાયો?
- (A) દિવ્ય સંદેશ (B) ધર્મચક્ર
(C) ધર્મચક્ર પ્રવર્તન (D) ધર્મોપદેશ
008. "એવું કોઈ શાસ્ત્ર નથી, એવું કોઈ શિલ્પ નથી, એવી કોઈ વિદ્યા નથી, એવું કોઈ કર્મ નથી. કે જે નાટ્યકલામાં ના હોય" આવું વર્ણન કોના કયા ગ્રંથમાં કરવામાં આવ્યું છે?
- (A) નંદીકેશ્વર - 'અભિનય દર્પણ'
(B) હસમુખ બારાડી કૃત - 'નાટક સરીખો નાદર હુન્નર'
(C) ભરત મુનિ - નાટ્યશાસ્ત્ર
(D) ભાગ્ય ચંદ્ર - 'ગોવિંદ સંગીત લીલા વિલાસ'

001. Modern decimal system is discussed in which of the following texts?
(A) Aryabhatia (B) Brihatsamhita
(C) Panch Saidhantika (D) Brahmasfut Siddhanta
002. Who was the composer of the three dramas 'Nagananda', 'Priyadarshika' and 'Ratnavali'?
(A) Krishna Devarai (B) Chandra Gupta 2
(C) Harsh (D) Narasimha Verma
003. Buddha caves, famous for Gupta paintings, are located in which of the following states?
(A) Uttar Pradesh (B) Madhya Pradesh
(C) Rajasthan (D) Bengal
004. By what other name is Vedas known?
(A) Smruti (B) Sutra
(C) Shruti (D) Shrujay
005. From which place of the Indus Civilization is the legendary bronze statue found?
(A) Harappa (B) Lothal
(C) Mohenjo-Daro (D) Kalibangan
006. Who is described in the ancient work called Harivansha?
(A) Rama (B) Krishna
(C) Narasimha (D) Brahma
007. Gautama Buddha's first sermon was known by which name?
(A) Divine Message (B) Dharma Chakra
(C) Dharmachakra pravartan (D) Dharmopadesh (Preaching)
008. "There is no scripture like that, no sculpture like that, no science like that, no karma like that, Drama does not have. In whose book such a description has been made?
(A) Nandikeshwar – Abhinay Darpan
(B) Hasmukh Baradi Krit – 'Natak Sarikho Nadar Hunnar'
(C) Bharata Muni – Natyashastra
(D) Bhagya Chandra – 'Govind Sangeet Leelavilas'

M

009. 2010માં યુનેસ્કોએ નીચેના પૈકી કયા લોકગીત તથા નૃત્યને માનવતાની અમૂર્ત સાંસ્કૃતિક વિરાસતોની સૂચિમાં સ્થાન આપ્યું છે?
- (A) ભાંગડા / ગિદ્દ (B) કાલબેલીયા અને છઉ
(C) ઘૂમ્મર / ગણગોર (D) બિહુ
010. સ્ત્રીઓ દ્વારા રજૂ થતાં 'જનાની ઝુમર' અને પુરુષો દ્વારા રજૂ થતાં 'મદાના ઝુમર' નૃત્ય કયા રાજ્યોના જનજાતિય લોકો દ્વારા થતું લોકપ્રિય પાક કાપણીનું નૃત્ય છે?
- (A) જારખંડ, ઓડિશા, છત્તીસગઢ (B) ઓડીસા અને મણિપુર
(C) રાજસ્થાન, હિમાચલ પ્રદેશ (D) મધ્ય પ્રદેશ, છત્તીસગઢ
011. પોતાના સંદેશનો પ્રચારપ્રસાર માટે હિન્દીનો ઉપયોગ કરનાર પ્રથમ ભક્તિમાર્ગીસંત કોણ હતા?
- (A) તુલસી દાસ (B) કબીર
(C) રામાનંદ (D) દાદુ
012. ગાંધીજી માટે "ગુજરાતનો તપસ્વી" કાવ્ય કયા કવિએ લખ્યું હતું?
- (A) ઝવેરચંદ મેઘાણી (B) કાન્ત
(C) કલાપી (D) ન્હાનાલાલ
013. આ કઠાઈમાં ફૂલ અને અન્ય સુંદર પેટર્ન બનાવવા માટે સફેદ રંગના દોરાનો ઉપયોગ કરવામાં આવે છે અને આ લખનો માં પ્રસિદ્ધ છે.
- (A) કલમકારી (B) ચીકનકારી
(C) ફૂલકારી (D) કસીદા
014. સંયુક્ત રાષ્ટ્રધ્વજમાં જે વૃક્ષની ડાળીઓ બતાવવામાં આવી છે તે વૃક્ષ કયું છે?
- (A) પામ ટ્રી (B) ગુલમહોર ટ્રી
(C) ગુલાબ ટ્રી (D) ઓલિવ ટ્રી
015. ભારતનું સૌથી મોટું વિન્ડફાર્મ કયા રાજ્યમાં આવેલું છે?
- (A) તામિલનાડુ (B) આંધ્રપ્રદેશ
(C) મહારાષ્ટ્ર (D) ગુજરાત
016. "ગેનીમેડ" નામના ચંદ્ર ધરાવતા ગ્રહનું નામ જણાવો.
- (A) ગુરુ (Jupiter) (B) શુક્ર (Venus)
(C) મંગળ (Mars) (D) શનિ (Saturn)
017. નીચેનામાં થી કયો ખડક કોલસો અને પેટ્રોલિયમ ધરાવે છે?
- (A) ગ્રેનાઈટ (B) અગ્નિકૃત
(C) મેટામોર્ફિક (D) જળકૃત

009. In 2010, UNESCO included which of the following folk songs and dances in the list of intangible cultural heritage of humanity?
- (A) Bhangra / Gidda (B) Kalbelia and Chhau
(C) Ghummar / Gangor (D) Bihu
010. 'Janani Jhumar' performed by women and 'Mardana Jhumar' performed by men is a popular harvest ritual dance performed by the tribal people of which states?
- (A) Jharkhand, Odisha, Chhattisgarh (B) Odisha, Manipur
(C) Rajasthan, Himachal Pradesh (D) Madhaya Pradesh, Chhattisgarh
011. Who was the first devotional saint to use Hindi to propagate his message?
- (A) Tulsi Das (B) Kabir
(C) Ramananda (D) Dadu
012. Which poet wrote the poem "Tapaswi of Gujarat" for Gandhiji?
- (A) Zaverchand Meghani (B) Kant
(C) Kalapi (D) Nhanalal (Nanlal)
013. White thread is used to make flowers and other beautiful patterns in this cauldron and this is famous in Lucknow: _____
- (A) Kalamkari (B) Chikankari
(C) Phulkari (D) Kasida
014. Which is the tree whose branches are shown in the United Nations Flag?
- (A) Palm tree (B) Gulmohar tree
(C) Rose tree (D) Olive tree
015. In which state the largest wind farm of India is located?
- (A) Tamil Nadu (B) Andhra Pradesh
(C) Maharashtra (D) Gujarat
016. Name the planet that has a moon called "Ganymede"
- (A) Jupiter (B) Venus
(C) Mars (D) Saturn
017. Which of the following rocks contains coal and petroleum?
- (A) Granite (B) Igneous
(C) Metamorphic (D) Sedimentary

M

018. નીચેનામાંથી કયું એક પૃથ્વીના જીવન સહાયક ઝોન/ક્ષેત્ર તરીકે ઓળખાય છે?
(A) ઈકોસિસ્ટમ (B) જીવમંડળ (બાયોસ્ફિયર)
(C) વાતાવરણ (Atmosphere) (D) બાયોમ (Biome)
019. હિન્દ મહાસાગરમાં સૌથી મોટો ટાપુ કયો છે?
(A) તાસ્માનિયા (B) મડાગાસ્કર
(C) શ્રીલંકા (D) સુમાત્રા
020. ઓઝત, કરનાલ, ઉતાવળી, ફોફલ, મોજ, મુનસર-આ નદીઓ કઈ નદીની સહાયક નદીઓ છે?
(A) શેત્રુંજી (B) ભોગાવો
(C) ભાદર (D) આજી
021. ભારત-પાકિસ્તાન-અફઘાનિસ્તાન સરહદ કયા નામે ઓળખાય છે?
(A) મેનરહીમ લાઈન (B) મેકમોહન લાઈન
(C) રેડકિલફ લાઈન (D) દુરાન્દ લાઈન
022. ગ્રોસ ડોમેસ્ટિક પ્રોડક્ટ (જીડીપી) ને બધાના મૂલ્ય તરીકે વ્યાખ્યાયિત કરવામાં આવે છે....
(A) એક વર્ષમાં અર્થતંત્રમાં ઉત્પાદિત માલ
(B) એક વર્ષમાં અર્થતંત્રમાં ઉત્પાદિત માલ અને સેવાઓ
(C) એક વર્ષમાં અર્થતંત્રમાં ઉત્પાદિત અંતિમ માલ
(D) એક વર્ષમાં અર્થતંત્રમાં ઉત્પાદિત અંતિમ માલ અને સેવાઓ
023. ભારતમાં સેવા ક્ષેત્રનો સમાવેશ થાય છે....
1. ખાણ કામ અને ક્વારીઈંગ (Quarrying)
2. પરિવહન અને સંદેશા વ્યવહાર
3. હોટેલ્સ
4. વન સંવર્ધન અને માછીમારી
નીચે આપેલા કોડમાં થી તમારો સાચો જવાબ પસંદ કરો.
(A) માત્ર 1 અને 2 (B) માત્ર 2 અને 3
(C) માત્ર 3 અને 4 (D) માત્ર 1 અને 4
024. ભારતની પ્રથમ ઈલેક્ટ્રીક ટ્રેન (ડેકન કિવન) કયા સ્ટેશનો વચ્ચે દોડાવવામાં આવી હતી?
(A) કલ્યાણ અને પુણે (B) મુંબઈ અને સુરત
(C) હાવડા અને દિલ્હી (D) દિલ્હી અને ચેન્નાઈ
025. 2011ની વસ્તી ગણતરી મુજબ સૌથી ઓછી વસ્તી ધરાવતું શહેર કયું છે?
(A) બાંસવાડા (રાજસ્થાન) (B) કપૂરથલા (પંજાબ)
(C) નાગદા (મધ્ય પ્રદેશ) (D) ગંગટોક (સિક્કિમ)

018. Which of the following is known as the life supporting zone of the Earth?
(A) Ecosystem (B) Biosphere
(C) Atmosphere (D) Biome
019. Which is the largest island in the Indian Ocean?
(A) Tasmania (B) Madagascar
(C) Sri Lanka (D) Sumatra
020. Ozat, Karnal, Utavali, Fofal, Moj, Munsar – these rivers are tributaries of which river?
(A) Shetrunji (B) Bhogavo
(C) Bhadar (D) Aji
021. India-Pakistan-Afghanistan border is known by which name?
(A) Mannerheim Line (B) McMahon Line
(C) Radcliffe Line (D) Durand Line
022. Gross Domestic Product (GDP) is defined as the value of all
(A) goods produced in an economy in a year
(B) goods and services in an economy in a year
(C) final goods produced in an economy in a year
(D) final goods and services produced in an economy in a year
023. In India service sector includes
1. Mining and Quarrying
2. Transport and communication
3. Hotels
4. Forestry and Fishing
Select your correct answer from the codes given below:
(A) Only 1 and 2 (B) Only 2 and 3
(C) Only 3 and 4 (D) Only 1 and 4
024. The first electric train (Deccan Queen) of India was run between _____
(A) Kalyan and Pune (B) Mumbai and Surat
(C) Howrah and Delhi (D) Delhi and Chennai
025. Which is the least populated city in India according to the 2011 Census?
(A) Banswara (Rajasthan) (B) Kapurthala (Punjab)
(C) Nagda (M.P.) (D) Gangtok (Sikkim)

M

026. 'હરિયાણી ક્રાંતિ' શબ્દનો ઉપયોગ ઉચ્ચ ઉત્પાદન દ્વારા દર્શાવવા માટે કરવામાં આવ્યો છે....
- (A) ઘાસના મેદાનોની રચના (B) વધુ વૃક્ષો વાવવા
(C) શહેરી વિસ્તારોમાં બગીચાઓનું નિર્માણ (D) પ્રતિ હેક્ટર કૃષિ ઉત્પાદકતામાં વધારો
027. FDI નો સંદર્ભ....
- (A) ફિક્સ્ડ ડિપોઝિટ વ્યાજ (B) ફિક્સ્ડ ડિપોઝિટ રોકાણ
(C) વિદેશી પ્રત્યક્ષ રોકાણ (D) ફ્યુચર ડિરાઈવેટિવ ઈન્વેસ્ટમેન્ટ
028. BIO ઈન્ટરનેશનલ કન્વેન્શન 2024ની થીમ શું હતી?
- (A) ટાઈમ ફોર મેક લાઈફ વેલ (B) ટાઈમ ફોર સાયન્સ ટુ શાઈન
(C) ટાઈમ ફોર સાયન્સ ટુ સસ્ટેનેબલ (D) ટાઈમ ફોર કન્સર્વ ધ બાયોટેક
029. પવનનો વેગ શેના દ્વારા માપવામાં આવે છે?
- (A) બેરો મિટર (B) એનીમોમિટર
(C) હાઈડ્રોમિટર (D) વિન્ડ વેન
030. નીચેનામાંથી કઈ ધાતુઓની જોડી ગરમીના ખૂબ સારા વાહક છે?
- (A) સિલ્વર અને કોપર (B) સિલ્વર અને સીસું (Lead)
(C) કોપર અને પારો (Mercury) (D) સીસું અને પારો (Lead and Mercury)
031. સેમિકંડક્ટરની પ્રતિકારકતા આના પર આધાર રાખે છે:
- (A) સેમિકંડક્ટરનો આકાર (B) સેમિકંડક્ટરની લંબાઈ
(C) સેમિકંડક્ટરની અણુ પ્રકૃતિ (D) સેમિકંડક્ટરનો આકાર અને અણુ પ્રકૃતિ
032. નો ઉપયોગ મેમરીમાં સંગ્રહિત ડિજિટલ ઈમેજ બનાવવા માટે હસ્તલિખિત અથવા મુદ્રિત ટેક્સ્ટને વાંચવા માટે થાય છે.
- (A) પ્રિન્ટર (B) લેસર બીમ
(C) સ્કેનર (D) ટચ પેડ
033. ઈલેક્ટ્રીક બલ્બમાં ટંગસ્ટેન વાયર સાથે આર્ગોન ગેસ શા માટે વપરાય છે?
- (A) બલ્બનું આયુષ્ય વધારવું
(B) વીજળીનો વપરાશ ઘટાડવા માટે
(C) ઉત્સર્જિત પ્રકાશને રંગીન બનાવવો
(D) બલ્બની કિંમત ઘટાડવા માટે
034. જીવતંત્રની આંતરિક રચનાના અભ્યાસને શું કહે છે?
- (A) મોરફોલોજી (Morphology) (B) શરીર રચના (Anatomy)
(C) હીસ્ટોલોજી (Histology) (D) સાયટોલોજી (Cytology)

026. The term 'Green Revolution' has been used to indicate higher production through
(A) creation of grasslands
(B) planting more trees
(C) creation of gardens in urban areas
(D) enhanced agricultural productivity per hectare
027. FDI refers to _____
(A) Fixed Deposit Interest
(B) Fixed Deposit Investment
(C) Foreign Direct Investment
(D) Future Derivative Investment
028. What was the theme of BIO International Convention 2024?
(A) Time for Make Life Well
(B) Time for Science to Shine
(C) Time for Science to Sustainable
(D) Time for Conserve the Biotech
029. The velocity of wind is measured by
(A) Barometer
(B) Anemometer
(C) Hydrometer
(D) Wind Vane
030. Which one of the following pairs of metals are very good conductors of heat?
(A) Silver and Copper
(B) Silver and Lead
(C) Copper and Mercury
(D) Lead and Mercury
031. Resistivity of semiconductor depends on:
(A) shape of semiconductor
(B) length of semiconductor
(C) atomic nature of semiconductor
(D) shape and atomic nature of semiconductor
032. A _____ is used to read handwritten or printed text to make a digital image that is stored in memory.
(A) Printer
(B) Laser beam
(C) Scanner
(D) Touch pad
033. Why is argon gas used along with tungsten wire in an electric bulb?
(A) To increase the life of the bulb
(B) To reduce the consumption of electricity
(C) To make the emitted light coloured
(D) To reduce the cost of the bulb
034. What is the study of internal structure of organism called?
(A) Morphology
(B) Anatomy
(C) Histology
(D) Cytology

035. RAW (રિસર્ચ અને એનાલિસિસ વિંગ)ના નવા ચીફ તરીકે કોની નિમણૂક કરવામાં આવી છે?
- (A) અરવિંદ કુમાર (B) સામંત ગોયલ
(C) રવી સિંહા (D) આલોક વર્ધન
036. ભારતીય કોસ્ટ ગાર્ડ માટે લોન્ચ કરેલ ઓફશોર પેટ્રોલ વેસલ (OPV) શીપને શું નામ આપવામાં આવેલ છે?
- (A) નિશાંત (B) નેત્ર
(C) સાર્થક (D) સારસ
037. રાજ્યપાલને ન્યાયિક સત્તા અંતર્ગત પ્રાપ્ત થયેલો આ અધિકાર નથી.
- (A) રાજ્યના ઉચ્ચ ન્યાયાલયમાં (ન્યાયાધીશની) નિમણૂક અંગે રાષ્ટ્રપતિ દ્વારા તેમનું પરામર્શન મેળવવામાં આવવું જોઈએ.
(B) ક્ષમાદાન
(C) મૃત્યુદંડ ક્ષમાદાન
(D) દંડ માફ કરવો અથવા સજા સ્થગિત કરવી
038. નીચેનામાંથી કયું વિધાન સંવિધાનના સુધારાલક્ષી પ્રક્રિયા સંદર્ભે ખોટું છે?
- (A) સુધારા માટે પ્રસ્તુત થયેલ ખરડો માત્ર લોકસભામાં જ પસાર કરી શકાય છે.
(B) સંસદના બંને ગૃહોમાં ખરડો સ્વતંત્રપણે પસાર કરવામાં આવે છે .
(C) ખરડાને પસાર કરવા માટે રાષ્ટ્રપતિની મંજૂરી જરૂરી હોય છે.
(D) વિધેયક પસાર કરવાના પ્રત્યેક તબક્કે વિશિષ્ટ બહુમતી જરૂરી છે.
039. નીચેનામાંથી કયો કેસ નીતિ નિર્દેશક સિદ્ધાંતો અને કાયદા સમક્ષ સમાનતાના સિદ્ધાંતને લગતો છે?
- (A) અહમદખાન વિરુદ્ધ શાહબાનો કેસ
(B) વિશાખા વિરુદ્ધ રાજસ્થાન રાજ્ય કેસ
(C) ઓલ્ગા ટેલિસ વિરુદ્ધ મુંબઈ બૃહદપાલિકા કેસ
(D) મેનકા ગાંધી વિરુદ્ધ ભારતીય સંઘ કેસ
040. રાજ્યમાં અનુસુચિત જાતિઓની જ્ઞાતિઓ, જાતિઓ વગેરે તથા અનુસુચિત જનજાતિઓના આદિવાસી સમુદાયોને નક્કી કરવા કોણ અધિકૃત છે?
- (A) અનુ. જાતિ અને અનુ. જન જાતિ રાષ્ટ્રીય આયોગો (B) કેન્દ્રિય મંત્રીમંડળ
(C) રાજ્યપાલ સાથે પરામર્શ કર્યા પછી રાષ્ટ્રપતિ (D) વડાપ્રધાન
041. નીચેના કાર્યોમાંથી કયું કાર્ય ભારતીય નિર્વાચન આયોગ (ચૂંટણી પંચ)નું નથી?
- (A) રાજ્ય વિધાનસભાઓની ચૂંટણીનું સંચાલન
(B) રાષ્ટ્રપતિ તથા ઉપરાષ્ટ્રપતિની ચૂંટણીનું સંચાલન
(C) લોકસભાના અધ્યક્ષ તથા ઉપાધ્યક્ષની ચૂંટણીનું સંચાલન
(D) લોકસભા અથવા વિધાનસભાની ચૂંટણી પહેલા મતદાર યાદીઓ નક્કી કરવી.

035. Who has been appointed as the new chief of RAW (Research and Analysis Wing)?
(A) Arvind Kumar (B) Samant Goel
(C) Ravi Sinha (D) Alok Vardhan
036. What is the name given to the Offshore Patrol Vessel (OPV) ship launched for the Indian Coast Guard?
(A) Nishant (B) Netra
(C) Sarthak (D) Saras
037. Judicial power of the Governor does not include the right to
(A) be consulted by the President about appointment of the State High Court
(B) grant pardon
(C) Pardon death sentence
(D) remit punishment or suspend the sentence
038. Which statement is incorrect about the amendment process?
(A) Introduction of the amendment Bill can be done only in the Lok Sabha
(B) Both Houses are to pass the Bill separately
(C) President's assent to the Bill is required
(D) Special majority at every stage of passing the Bill
039. In which case, the directive principles of equality before law were dealt in?
(A) Ahmad Khan v. Shah Bano
(B) Vishakha v. State of Rajasthan
(C) Olga Tellis v. Bombay Municipal Corporation
(D) Menaka Gandhi v. Union of India
040. Who is empowered to specify the castes, races etc. in SCs and tribal communities among STs in a state?
(A) National Commissions for SCs/STs
(B) Union Cabinet
(C) President after consultation with Governor
(D) Prime Minister
041. Which of the following is not the function of the Election Commission of India?
(A) conduct election of the State Assemblies
(B) conduct election of the President and Vice-President
(C) conduct election for the posts of Speaker and Deputy Speaker
(D) fixing electoral rolls before Lok Sabha or Assembly election

M

042. જાહેર સેવા આયોગના સલાહકાર રૂપેના કયા કાર્યો છે?
- (A) ભરતી અંગેની બાબતો
(B) નાગરિક સેવામાં નિમણૂંક અંગેના નિયમો
(C) નાગરિક સેવાના નોકરિયાતોને સ્પર્શતી શિસ્તની બાબતો
(D) ઊપરોક્ત તમામ
043. નીચેનામાંથી કઈ બાબત સહવર્તી સૂચિમાં સમાવિષ્ટ થાય છે?
- (A) વેપાર વાણિજ્ય
(B) સ્ટેમ્પડ્યૂટી
(C) માલનું ઉત્પાદન અને વિતરણ
(D) ઉક્ત (A) અને (B) બંને
044. ભારતના બંધારણમાં જાહેરહિતની અરજી (PIL)ની સંકલ્પના કયા દેશ પાસેથી લેવામાં આવી છે?
- (A) યુ.કે.
(B) યુ.એસ.એ.
(C) કેનેડા
(D) ઓસ્ટ્રેલિયા
045. 'લીબેરો' કઈ રમત સાથે સંબંધિત છે?
- (A) કબ્બડી
(B) ખો-ખો
(C) બાસ્કેટબૉલ
(D) વોલીબૉલ
046. પેરિસ ખાતેના પેરાલિમ્પિક રમતોમાં પ્રવિણ કુમાર કઈ રમતમાં સુવર્ણચંદ્રક વિજેતા થયા હતા?
- (A) કલબ શ્રો
(B) બેડમિન્ટન
(C) હાઈ જમ્પ
(D) શૂટિંગ
047. તાજેતરમાં કયા રાજ્ય દ્વારા કન્યા કેળવણીને પ્રોત્સાહન આપવા માટે "મુખ્ય મંત્રી નિજુત મોઈના" યોજના શરૂ કરાઈ હતી?
- (A) કર્ણાટક
(B) આસામ
(C) કેરલ
(D) આંધ્રપ્રદેશ
048. તાજેતરમાં કોણ ઈન્ટર નેશનલ ચેમ્બર ઓફ કોમર્સના પ્રથમ વાઈસ ચેરમેન તરીકે ચૂંટાયા છે?
- (A) હર્ષપતિ સિંધાનીયા
(B) જ્યોતિ વિજ
(C) સુનિલ ભારતી મિત્તલ
(D) રાકેશ મોહન જોશી
049. તાજેતરમાં કયા રાજ્યનું મુખ્ય મથક ભારતનું સૌ પ્રથમ ઈકો-ફ્રેન્ડલી મુખ્ય મથક બન્યું છે?
- (A) રાંચી, જારખંડ
(B) ગુવાહાટી, આસામ
(C) ગાંધીનગર, ગુજરાત
(D) ભોપાલ, મધ્ય પ્રદેશ
050. વર્ષ 2024ના આંતર રાષ્ટ્રીય યોગ દિવસની ઉજવણીની થીમ શું હતી?
- (A) 'યોગ ફોર વેલનેસ'
(B) 'યોગ ફોર વસુધૈવ કુટુંબકમ'
(C) 'યોગ ફોર મેડિટેશન એન્ડ મેન્ટલ હેલ્થ'
(D) 'યોગ ફોર સેલ્ફ એન્ડ સોસાયટી'

042. What are the advisory functions of the Public Service Commission?
(A) on matters of recruitment
(B) principles of appointments to civil services
(C) disciplinary matters affecting civil servants
(D) all of the above
043. Which of the following is/are included in the Concurrent List?
(A) Trade and Commerce (B) Stamp Duty
(C) Production and distribution of goods (D) Both (A) and (B)
044. The concept of the public interest litigation (PIL) in the Constitution of India is taken from which country?
(A) U.K. (B) U.S.A.
(C) Canada (D) Australia
045. 'Libero' is related to which game?
(A) Kabaddi (B) Kho-Kho
(C) Basketball (D) Volleyball
046. In which sport did Pravin Kumar win the gold medal at the Paralympic Games at Paris?
(A) Club throw (B) Badminton
(C) High jump (D) Shooting
047. Which state recently launched "Chief Minister Nijut Moina" scheme to promote girl child education?
(A) Karnataka (B) Assam
(C) Kerala (D) Andhra Pradesh
048. Who has been recently elected as the first vice-chairman of the International Chamber of Commerce?
(A) Harshapati Sindhania (B) Jyoti Vij
(C) Sunil Bharati Mittal (D) Rakesh Mohan Joshi
049. Which state headquarter has recently become India's first 'Eco-friendly' headquarter?
(A) Ranchi, Jharkhand (B) Guwahati, Assam
(C) Gandhinagar, Gujarat (D) Bhopal, Madhya Pradesh
050. What was the theme of the International Yoga Day celebrations of the year 2024?
(A) 'Yoga for Wellness'
(B) 'Yoga for Vasudhaiva kutumbakam'
(C) 'Yoga for Meditation and Mental Health'
(D) 'Yoga for Self and Society'

M

051. ઘડિયાળના તમામ અંકને 1 ને બદલે A, 2 ને બદલે B, 3 ને બદલે C તેમ ક્રમમાં બદલવામાં આવે, તો 7:25 કલાકે નાનો કાંટો કયા બે અક્ષર વચ્ચે હશે?
- (A) H અને I (B) E અને F
(C) G અને H (D) F અને G
052. 50 વિધાર્થીઓની સીધી લાઈનમાં પાર્વતી ડાબી બાજુથી 18માં ક્રમે છે. શિક્ષક દ્વારા ફેરફાર સૂચવાતાં પાર્વતી, જમણી બાજુએ 22માં ક્રમે ઉભેલી અંબિકાનું સ્થાન લે છે. હવે પાર્વતીનું સ્થાન ડાબી બાજુએથી કયા નંબરે હશે?
- (A) 31 (B) 29
(C) 30 (D) એક પણ નહિ
053. એક વ્યક્તિ ઉત્તર તરફ 10 કિ.મી. મુસાફરી કરે છે. ત્યાંથી 12 કિ.મી. પૂર્વ તરફ જાય છે. ત્યાંથી 12 કિ.મી. પશ્ચિમ તરફ જાય છે. ત્યાંથી 18 કિ.મી. દક્ષિણ તરફ જાય છે. તો તે પોતાના પ્રારંભિક બિંદુથી કેટલા કિ.મી. દુર હશે?
- (A) 8 કિ.મી. (B) 12 કિ.મી.
(C) 10 કિ.મી. (D) 18 કિ.મી.
054. નીચેમાંથી સાચો વિકલ્પ શોધો.
AB, BA, ABC, CBA, ABCD, _____?
- (A) DCBA (B) BACD
(C) CABD (D) DBAC
055. જો અંગ્રેજી મૂળાક્ષરો A, B, C, D, ___ ને ઉલ્ટા ક્રમમાં ગોઠવવામાં આવે તો Q અને I મૂળાક્ષરોમાં બરાબર મધ્યમાં કયો મૂળાક્ષર આવશે?
- (A) M (B) L
(C) N (D) O
056. જો DELHI = 73541 અને CALCUTTA = 82589662 તો CALICUT બરાબર કેટલા થાય?
- (A) 5278013 (B) 5279431
(C) 8251896 (D) 8543691
057. જો + એટલે \times , - એટલે \div , \times એટલે - અને \div એટલે + હોય, તો
 $20 \div 40 - 8 \times 5 + 3 = \underline{\quad}$?
- (A) 10 (B) 18
(C) 20 (D) 60
058. A, R ના પિતા છે. V, A નો ભાઈ છે. D, R નો ભાઈ છે. જો I, A ના પિતા હોય, તો D અને V વચ્ચે સંબંધ શુ થાય?
- (A) ભાઈ અને નાનોભાઈ (B) ભત્રીજો અને કાકા
(C) પુત્ર અને પિતા (D) એક પણ નહિ

051. If all the digits of the clock are replaced by A instead of 1, B instead of 2, C instead of 3, then at 7:25 hours the small hand will be between which two letters?
 (A) H and I (B) E and F
 (C) G and H (D) F and G
052. Parvati is 18th from the left in a straight line of 50 students. As the teacher suggests a change, Parvati takes the place of Ambika, who is standing at number 22nd on the right. Now Parvati's position will be at which number from the left?
 (A) 31 (B) 29
 (C) 30 (D) None of the above
053. A person travels 10 km towards north. From there he goes 12 km towards east. From there he goes 12 km towards west. From there he goes 18 km south. So how many km will he be from his starting point?
 (A) 8 km (B) 12 km
 (C) 10 km (D) 18 km
054. Find the correct option from the below.
 AB, BA, ABC, CBA, ABCD, _____?
 (A) DCBA (B) BACD
 (C) CABD (D) DBAC
055. If English alphabets A, B, C, D, _____ are arranged in reverse order, which letter will come exactly in the middle of Q and I alphabet?
 (A) M (B) L
 (C) N (D) O
056. If DELHI = 73541 and CALCUTTA = 82589662 then how much is CALICUT?
 (A) 5278013 (B) 5279431
 (C) 8251896 (D) 8543691
057. If + means \times , - means \div , \times means - and \div means +, then
 $20 \div 40 - 8 \times 5 + 3 = \underline{\hspace{2cm}}$?
 (A) 10 (B) 18
 (C) 20 (D) 60
058. A is the father of R. V is the brother of A. D is the brother of R. If I is the father of A, D and V are related as
 (A) Brother and younger brother (B) Nephew and uncle
 (C) Son and Father (D) None

M

059. એક કિલ્લામાં 35 દિવસ ચાલે તેટલું અનાજ ઉપલબ્ધ છે. જો 5 દિવસ પછી 450 વધુ વ્યક્તિઓ કિલ્લામાં આવે તો અનાજ 20 દિવસ જ ચાલે છે. તો કિલ્લામાં શરૂઆતમાં કેટલા વ્યક્તિઓ હશે?

- (A) 900 વ્યક્તિઓ (B) 1350 વ્યક્તિઓ
(C) 350 વ્યક્તિઓ (D) 675 વ્યક્તિઓ

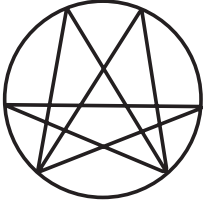
060. એક ડબ્બામાં 4 લાલ, 3 પીળા અને 3 વાદળી રંગના દડા છે, જો ડબ્બામાંથી કોઈપણ બે દડા કાઢવામાં આવે તો, તે બંને દડા સરખા રંગના હોય તેની સંભાવના શોધો.

- (A) $\frac{4}{15}$ (B) $\frac{4}{5}$ (C) $\frac{1}{3}$ (D) $\frac{3}{5}$

061. મીનાબેન અને તેમની બે પુત્રીઓ રીટા અને ગીતા ત્રણેયની હાલની ઉંમરનો સરવાળો 62 વર્ષ છે, મીનાબેનની હાલની ઉંમર 36 વર્ષ હોય તો 4 વર્ષ પછી ત્રણેયની ઉંમર કેટલી હશે?

- (A) મીનાબેનની 40 વર્ષ, રીટા 18 વર્ષ, ગીતા 15 વર્ષ
(B) મીનાબેનની 40 વર્ષ, રીટા 18 વર્ષ, ગીતા 11 વર્ષ
(C) મીનાબેનની 36 વર્ષ, રીટા 13 વર્ષ, ગીતા 11 વર્ષ
(D) મીનાબેનની 38 વર્ષ, રીટા 14 વર્ષ, ગીતા 10 વર્ષ

062. નીચે આપેલ આકૃતિમાં ત્રિકોણ કેટલા છે?



- (A) 22 (B) 28 (C) 26 (D) 24

063. છ વ્યક્તિઓ A, B, C, D, E અને F ગોળ ટેબલના ફરતે ટેબલના કેન્દ્ર તરફ મોં રાખીને બેઠા છે.

1. A અને F ની વચ્ચે C બેઠો છે.
2. E ને જમણે એક જગ્યા છોડીને B બેઠો છે.
3. F ના ડાબે એક જગ્યા છોડીને D બેઠો છે.
તો A ની સામે કોણ બેઠું છે?

- (A) E (B) D (C) C (D) એક પણ નહિ

064. નીચેની સંખ્યાનો મધ્યસ્થ શોધો.

5, 15, 20, 9, 10, 45, 30, 95, 120

- (A) 15 (B) 20 (C) 45 (D) 30

065. તર્કસંગત ક્રમમાં ગોઠવો: 1. ફોગ (દેડકો), 2. ઈગલ (ગરૂડ), 3. ગ્રાસહોપર (તીડ) 4. સ્નેક (સાપ), 5. ગ્રાસ (ઘાસ)

- (A) 1, 5, 3, 2, 4 (B) 3, 4, 2, 5, 1
(C) 5, 3, 1, 4, 2 (D) 5, 3, 4, 2, 1

059. A fort has enough grain available to last 35 days. If 450 more persons arrive in the fort after 5 days, the grain lasts only 20 days. So how many persons will there be in the fort initially?

- (A) 900 persons (B) 1350 persons
(C) 350 persons (D) 675 persons

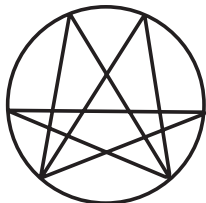
060. A box contains 4 red, 3 yellow and 3 blue balls, if any two balls are drawn randomly from the box, find the probability that both the balls are of same color.

- (A) $\frac{4}{15}$ (B) $\frac{4}{5}$ (C) $\frac{1}{3}$ (D) $\frac{3}{5}$

061. The sum of the present ages of Meenaben and her two daughters Rita and Geeta is 62 years. If the present age of Meenaben is 36 years, what will be the ages of the three after 4 years?

- (A) Meenaben 40 years, Rita 18 years, Geeta 15 years
(B) Meenaben 40 years, Rita 18 years, Geeta 11 years
(C) Meenaben 36 years, Rita 13 years, Geeta 11 years
(D) Meenaben 38 years, Rita 14 years, Geeta 10 years

062. How many triangles are there in the figure given below?



- (A) 22 (B) 28 (C) 26 (D) 24

063. Six persons A, B, C, D, E and F are sitting around a round table facing the center of the table.

1. C is sitting between A and F.
2. B is sitting leaving one space to E's right.
3. D sits leaving one space to the left of F.

So, who is sitting in front of A?

- (A) E (B) D (C) C (D) None of the above

064. Find the median of the following numbers.

5, 15, 20, 9, 10, 45, 30, 95, 120

- (A) 15 (B) 20 (C) 45 (D) 30

065. Arrange in logical order: 1. Frog, 2. Eagle, 3. Grasshopper, 4. Snake, 5. Grass

- (A) 1, 5, 3, 2, 4 (B) 3, 4, 2, 5, 1
(C) 5, 3, 1, 4, 2 (D) 5, 3, 4, 2, 1

066. ગીતા પોતાના મહાનિબંધ પર સળંગ 8 દિવસ કામ કરે છે અને દર નવમે દિવસે વિરામ લે છે. જો તેણીએ સોમવારે કામ શરૂ કર્યું હોય તો તેણી છઠ્ઠીવાર નો વિરામ અઠવાડિયા ના કયા વારે લેશે?

- (A) રવિવાર (B) શુક્રવાર
(C) બુધવાર (D) ગુરૂવાર

067. આપેલી શ્રેણી 201, 208, 215,....., 369 માં કેટલા પદો છે?

- (A) 23 (B) 24
(C) 25 (D) 26

068. એક બાળક તેના પિતાને શોધી રહ્યો છે. તેની જમણી તરફ વળતા પહેલા તે પૂર્વમાં 90 મીટર ગયો. તે આ બિંદુથી 30 મીટર દૂર તેના કાકાના સ્થાને તેના પિતાને શોધવા માટે ફરીથી તેની જમણી તરફ વળતા પહેલા 20 મીટર ગયો. તેના પિતા ત્યાં ન હતા. અહીંથી તે તેના પિતાને શેરીમાં મળતા પહેલા તેના ઉત્તર તરફ 100 મીટર ગયો. દીકરો તેના પિતાને શરૂઆતના બિંદુથી કેટલા દૂર મળ્યો?

- (A) 80 Metres (B) 100 Metres
(C) 140 Metres (D) 260 Metres

069. નીચેનામાંથી કઈ આકૃતિ વર્ગો વચ્ચેના સંબંધને યોગ્ય રીતે રજૂ કરે છે: ટેનિસ ચાહકો, ક્રિકેટ ખેલાડીઓ, વિદ્યાર્થીઓ?

- (A)  (B) 
(C)  (D) 

070. જો એક શબ્દ 'STETHOPHONE' ના ત્રીજા, છઠ્ઠા, સાતમા અને દસમા અક્ષરો વડે અર્થપૂર્ણ શબ્દ બનાવવો શક્ય હોય તો તે શબ્દનો પ્રથમ અક્ષર જવાબ તરીકે લખો. જો આવો કોઈ શબ્દ ન બનાવી શકાય, તો જવાબ તરીકે 'X' આપો, જો એક કરતા વધુ શબ્દ બની શકતા હોય તો જવાબ તરીકે 'M' આપો.

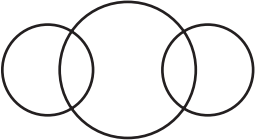
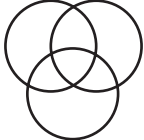
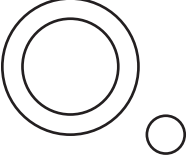

- (A) M (B) X
(C) O (D) P

071. એક જૂથમાં છે 21 બાળકો, 35 મહિલાઓ અને 49 પુરૂષ તેઓ બધા એક જ હોટલમાં રહેવા માંગે છે. તેમના રોકાણ માટે જરૂરી રૂમની ન્યૂનતમ સંખ્યા શોધો, જેથી દરેક રૂમમાં સમાન સંખ્યામાં સભ્યો એ શરત સાથે રહે કે બાળકો, સ્ત્રી અને પુરૂષ અલગ-અલગ રૂમમાં રહે.

- (A) 16 (B) 15 (C) 14 (D) 12

072. જો કોઈ ટીમના 133 ખેલાડીઓના રનની સરેરાશ 38 છે. જો પુરુષ ખેલાડીઓના રનની સરેરાશ 43 અને મહિલા ખેલાડીઓના રનની સરેરાશ 24 છે, તો પુરૂષ ખેલાડીઓ અને મહિલા ખેલાડીઓના કુલ રન નો ગુણોત્તર અનુક્રમે શું હશે?

- (A) 301 : 60 (B) 7 : 3 (C) 39 : 11 (D) 60 : 207

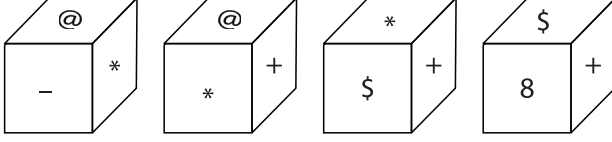
066. Geeta works on her dissertation for 8 consecutive days and takes a break every 9th Day. If she started her work on Monday, what time of the week will she take her 6th break?
 (A) Sunday (B) Friday
 (C) Wednesday (D) Thursday
067. How many terms are there in the series 201, 208, 215, _____, 369?
 (A) 23 (B) 24
 (C) 25 (D) 26
068. A child is looking for his father. He went 90 metres in the east before turning to his right. He went 20 metres before turning to his right again to look for his father at his uncle's place 30 metres from this point. His father was not there. From here he went 100 metres to his north before meeting his father in a street. How far did the son meet his father from the starting point?
 (A) 80 Metres (B) 100 Metres
 (C) 140 Metres (D) 260 Metres
069. Which one of the following diagrams correctly represents the relationship among the classes: Tennis fans, Cricket players, Students?
 (A)  (B) 
 (C)  (D) 
070. If it is possible to make a meaningful word with the third, the sixth, the seventh and the tenth letters of the word STETHOPHONE, write first letter of that word as the answer. If no such word can be made, give 'X' as the answer, if more than one word can be made, give 'M' as the answer?
 (A) M (B) X
 (C) O (D) P
071. In a group there are 21 children, 35 ladies and 49 gents. They all want to stay in the same hotel. Find the minimum number of rooms required for their stay so that in each room equal number of members stay with the condition that children, female and male stay in separate rooms.
 (A) 16 (B) 15 (C) 14 (D) 12
072. The average runs of 133 players of a team is 38. If the average runs of the male players is 43 and the average runs of the female players is 24, then what will be the ratio of the total runs of male players and the total runs of female players respectively?
 (A) 301 : 60 (B) 7 : 3
 (C) 39 : 11 (D) 60 : 207

M

073. એક સંખ્યા જ્યારે 18 વડે ભાગવામાં આવે ત્યારે 15 શેષ બાકી રહે છે. જ્યારે તે જ સંખ્યાને 6 વડે ભાગવામાં આવે ત્યારે તે સંખ્યાની શેષ કેટલી બાકી રહેશે?

- (A) 3 (B) 2 (C) 1 (D) 4

074. “*” ચિહ્નવાળા બાજુની વિરુદ્ધ (સામેની) બાજુ પર કયું પ્રતીક હશે?



- (A) @ (B) \$ (C) 8 (D) +

075. જો શહેર A થી B ની બે ટિકિટ અને શહેર A થી C ની ત્રણ ટિકિટની કિંમત રૂ. 77 છે પરંતુ શહેર A થી B ની ત્રણ ટિકિટ અને શહેર A થી C ની બે ટિકિટ રૂ. 73 છે. તો A થી B અને C શહેરોનું ભાડુ શું હશે?

- (A) Rs. 4, Rs. 23 (B) Rs. 13, Rs. 17
(C) Rs. 15, Rs. 14 (D) Rs. 17, Rs. 13

076. બે ટ્રેનો 60 કિમી/કલાક અને 90 કિમી/કલાકની ઝડપે વિરુદ્ધ દિશામાં આગળ વધી રહી છે. તેમની લંબાઈ અનુક્રમે 1.10 કિમી અને 0.9 કિમી છે. ધીમી ટ્રેન દ્વારા ઝડપી ટ્રેનને પાર કરવામાં કેટલો સમય લાગશે?

- (A) 36 sec (B) 45 sec (C) 48 sec (D) 40 sec

077. જો $x = \frac{\sqrt{3}+1}{\sqrt{3}-1}$ અને $y = \frac{\sqrt{3}-1}{\sqrt{3}+1}$ હોય તો $(x^2 + y^2)$ બરાબર:

- (A) 10 (B) 13 (C) 14 (D) 15

078. જો કોઈ એક વસ્તુ ને વેચતા મળેલ ટકાવારી નફો રૂ.1920 હોય તો તેજ વસ્તુ ને વેચતા મળેલ ટકાવારી નુકશાન રૂ.1280 ને સમાન હોય તો, તે વસ્તુ પર 25% નફો મેળવવા માટે કયા ભાવે વેચવી જોઈએ?

- (A) રૂ. 2000 (B) રૂ. 2200 (C) રૂ. 2400 (D) રૂ. 2250

079. એક પાણીની ટાંકીની લંબાઈ 25 મીટર, પહોળાઈ 12 મીટર અને ઊંડાઈ 6 મીટર છે. તેની દિવાલો અને તળિયાને પ્લાસ્ટર કરવાનો ખર્ચ પ્રતિ ચોરસ મીટર 75 પૈસા છે. તો સમગ્ર પાણીની ટાંકીને પ્લાસ્ટર કરવા માટેનો કુલ ખર્ચ કેટલો થાય?

- (A) રૂ. 456 (B) રૂ. 458 (C) રૂ. 558 (D) રૂ. 568

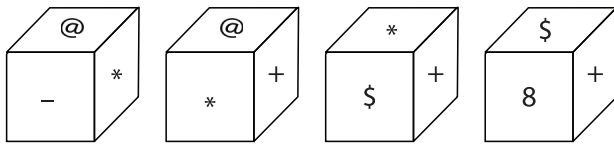
080. બે સંખ્યાઓનો ગુણાંક 4107 છે. જો આ બંને સંખ્યાનો H.C.F. 37 હોય તો, તો બે માંથી મોટી સંખ્યા કઈ હશે?

- (A) 101 (B) 107 (C) 111 (D) 185

073. A number when divided by 18 leaves remainder 15. What is the remainder when the same number is divided by 6?

- (A) 3 (B) 2 (C) 1 (D) 4

074. Which symbol will be on the face opposite to the face with symbol “*”?



- (A) @ (B) \$ (C) 8 (D) +

075. Two bus tickets from city A to B and three tickets from city A to C cost Rs. 77 but three tickets from city A to B and two tickets from city A to C cost Rs. 73. What are the fares for cities B and C from A?

- (A) Rs. 4, Rs. 23 (B) Rs. 13, Rs. 17
(C) Rs. 15, Rs. 14 (D) Rs. 17, Rs. 13

076. Two trains are moving in opposite directions @ 60 km/hr and 90 km/hr. Their lengths are 1.10 km and 0.9 km respectively. The time taken by the slower train to cross the faster train in seconds is:

- (A) 36 sec (B) 45 sec
(C) 48 sec (D) 40 sec

077. If $x = \frac{\sqrt{3}+1}{\sqrt{3}-1}$ and $y = \frac{\sqrt{3}-1}{\sqrt{3}+1}$ then the value of $(x^2 + y^2)$ is:

- (A) 10 (B) 13 (C) 14 (D) 15

078. The percentage profit earned by selling an article for Rs. 1920 is equal to the percentage loss incurred by selling the same article for Rs. 1280. At what price should the article be sold to make 25% profit?

- (A) Rs. 2000 (B) Rs. 2200
(C) Rs. 2400 (D) Rs. 2250

079. A water tank measures 25 m in length, 12 m in width and 6 m in depth. The cost of plastering its walls and bottom is 75 paise per sq. m. Then what is the total cost of plastering the entire water tank?

- (A) Rs. 456 (B) Rs. 458
(C) Rs. 558 (D) Rs. 568

080. The product of two numbers is 4107. If the H.C.F. of these numbers is 37, then the greater number is:

- (A) 101 (B) 107 (C) 111 (D) 185

M

081. બધી જોડણી સાચી હોય તેવો વિકલ્પ પસંદ કરો.

- (A) મનોરમ્ય, નૈઋત્ય, શબ્સ, તસ્વીર
(B) મનોરમ, નૈઋત્ય, શખશ, તસ્વીર
(C) મનોરમ્ય, નૈઋત્ય, શબ્સ, તસ્વીર
(D) મનોરમ, નૈઋત્ય, શખસ, તસવીર

082. નીચે આપેલાં જૂથ ધ્યાને લઈ સમાનાર્થી શબ્દો વિશે યોગ્ય વિકલ્પ પસંદ કરો.

1. અનાજ, ધાન્ય, શસ્ય, ધાન
2. વહેમ, શંકા, સંશય, ધાંખો
3. પુરૂષાર્થ, ઉદ્યોગ, પરિશ્રમ, મહેનત
4. ફાની, તોફાની, ઉદ્દડ, બારકસ

- (A) ફક્ત 2 અને 3 યોગ્ય છે.
(B) ફક્ત 3 અને 4 યોગ્ય છે.
(C) ફક્ત 1, 2 અને 3 યોગ્ય છે.
(D) 1, 2, 3 અને 4 બધા જ યોગ્ય છે.

083. નીચે આપેલાં જૂથ ધ્યાને લઈ વિરુદ્ધાર્થી શબ્દો વિશે યોગ્ય વિકલ્પ પસંદ કરો.

1. બદગોઈ × પ્રશંસા 2. બદબોઈ × વખાણ 3. બુદ્ધિમંદ × અક્કલમંદ 4. બુભુક્ષિત × ભુક્ત

- (A) 1, 2, 3 અને 4 બધા જ યોગ્ય છે.
(B) ફક્ત 2, 3 અને 4 યોગ્ય છે.
(C) ફક્ત 1 અને 2 યોગ્ય છે.
(D) ફક્ત 1 અને 4 યોગ્ય છે.

084. નીચે આપેલા રૂઢિપ્રયોગ અને તેના અર્થ માટે યોગ્ય વિકલ્પ પસંદ કરો.

- | રૂઢિપ્રયોગ | અર્થ |
|---------------------------|-----------------------|
| 1. ભોંય પર પગ ન મૂકવો | = ઘમંડનો પાર ન હોવો |
| 2. ભોંયમાં પેસવું | = અદૃશ્ય થવું |
| 3. ભોંયમાંથી ભભૂકો નીકળવો | = રહસ્ય બહાર પડવું |
| 4. ભોંય ભારે પડવી | = મુશ્કેલીમાં સપડાવું |

- (A) ફક્ત 1, 2 અને 4 યોગ્ય છે.
(B) ફક્ત 1 અને 4 યોગ્ય છે.
(C) ફક્ત 3 અને 4 યોગ્ય છે.
(D) 1, 2, 3 અને 4 બધા જ યોગ્ય છે.

085. નીચે અ વિભાગમાં આપેલી કહેવતો અને બ વિભાગમાં આપેલા અર્થોને ધ્યાને લઈ તેના વિશે સાચો વિકલ્પ પસંદ કરો.

અ	બ
1. દીઠે દેહ બળે ને સૂતે સોડ બળે	— જોયું ન જવું
2. પારકું વગોણું ને જગલાનું જોણું	— બીજાનું વગોણું હોય તે જોવા સૌ ભેગા થાય
3. પેટથી સૌ હેઠ	— બીજાને નગણ્ય માનવા
4. જેવું મોં તેવું પાન	— જેવી વ્યક્તિ તેવો તેનો આદર સત્કાર

(A) 1, 2, 3 અને 4 બધા જ સાચા છે.

(B) ફક્ત 1, 2 અને 3 સાચા છે.

(C) ફક્ત 1 અને 3 સાચા છે.

(D) ફક્ત 1, 2 અને 4 સાચા છે.

086. નીચે આપેલા સામાસિક શબ્દ અને તેના પ્રકાર વિશે યોગ્ય વિકલ્પ પસંદ કરો.

સામાસિક શબ્દ	— પ્રકાર
1. કાનટોપી	— મધ્યમપદલોપી સમાસ
2. રાજર્ષિ	— કર્મધારય સમાસ
3. ઘણીજોગ	— તત્પુરુષ સમાસ
4. જગજાહેર	— બહુવ્રીહિ

(A) ફક્ત 1 અને 3 યોગ્ય છે.

(B) ફક્ત 2 અને 3 યોગ્ય છે.

(C) 1, 2 અને 3 યોગ્ય છે.

(D) 1, 2, 3 અને 4 બધા જ યોગ્ય છે.

087. નીચે આપેલી સંધિ વિશે યોગ્ય વિકલ્પ પસંદ કરો.

1. અનુ + એષણ = અન્વેષણ

2. તેજસ્ + પુંજ = તેજ:પુંજ

3. જગત્ + લય = જગલ્લય

4. પુરસ્ + કાર = પુરસ્કાર

(A) ફક્ત 1, 3 અને 4 સાચા છે.

(B) ફક્ત 2 અને 3 સાચા છે.

(C) 1, 2, 3 અને 4 બધા જ સાચા છે.

(D) 1, 2 અને 4 સાચા છે.

M

088. નીચે આપેલી કાવ્ય-પંક્તિને ધ્યાને લઈ એના અલંકાર અને છંદના પ્રકારનો યોગ્ય વિકલ્પ પસંદ કરો.

‘શાખાઓમાં તરુવર તણી ચક્રવાકી છુપાતી,
શોધી કાઢે દયિત નયનો, જોઈને હ્રષ્ટ થાતી;’

- (A) સ્વભાવોક્તિ - મંદાકાંતા
(B) ઉપમા - મંદાકાંતા
(C) સ્વભાવોક્તિ - શિખરિણી
(D) ઉત્પ્રેક્ષા - પૃથ્વી

089. નીચે આપેલી કાવ્ય-પંક્તિને ધ્યાને લઈ એના અલંકાર અને છંદના પ્રકારનો યોગ્ય વિકલ્પ પસંદ કરો.

‘સૂતો રવિ જલધિ માંહિ લપાઈ રાતો,
ને શૈલની મુખછવિ પલટાઈ આ તો.’

- (A) સજ્જારોપણ - માલિની
(B) સજ્જારોપણ - વસંતતિલકા
(C) અંત્યાનુપ્રાસ - માલિની
(D) અંત્યાનુપ્રાસ - પુષ્પિતાગ્રા

090. નીચેની વિગતોને ધ્યાને લઈ યોગ્ય વિકલ્પ પસંદ કરો.

- (A) સત્ + શિષ્ય = સદ્શિષ્ય
(B) એર્દુર્દુ - ઉપપદ સમાસ
(C) આ કમળ દમયંતીના મુખ જેવું છે. - ઉપમા અલંકાર
(D) અંધાર્યો ઘન રાધિકે ગગનમાં છાયાં તમાલો વને - શાદ્દલવિકીડિત

091. The security guard sat _____ the officer.

- (A) besides
(B) beside
(C) at
(D) in

092. The clothes were neatly hanged on the cloth line. (Spot the error)

- (A) The clothes
(B) were neatly
(C) hanged
(D) on the cloth line

093. He walks the horse. In the given sentence 'walks' is _____ verb.

- (A) intransitive
(B) transitive
(C) auxiliary
(D) helping

094. I _____ be twenty next month.
(A) may
(B) shall
(C) were
(D) can
095. He said to me, "What are you doing?" (Turn into indirect speech)
(A) He asked me what are you doing?
(B) He asked me what I was doing.
(C) He said to me what was I doing.
(D) He asked me what I am doing.
096. Though you are _____ MLA, nobody cares you.
(A) a
(B) an
(C) the
(D) that
097. Identify the demonstrative adjective in the following sentence:
"These mangoes are sweet."
(A) mangoes
(B) sweet
(C) These
(D) are
098. Prasannakumar has been studying _____ morning.
(A) for
(B) since
(C) in
(D) at
099. There are _____ students in the class as it is a holiday.
(A) a few
(B) few
(C) little
(D) a little
100. You have many books. Give me _____.
(A) many
(B) some
(C) much
(D) less

101. _____ declaration is the declaration to be given by fire safety officer / owner / occupier after the renewal of Fire Safety Certificate till the end of its validity.
- (A) Annual (B) Bi-annual
(C) Tri-annual (D) None of the above
102. The water level of a tank in a sprinkler installation is 60 metres above a pressure gauge. What pressure in bar should register on the gauge?
- (A) 0.6 Bar (B) 8.0 Bar
(C) 6.0 Bar (D) 7.0 Bar
103. Any liquid with a flash point at or above 37.8°C (100°F) and below 93.3°C (200°F) is termed as _____
- (A) Flammable liquid (B) Flammable solid
(C) Combustible liquid (D) Flammable gases
104. Some metal powders can ignite spontaneously in air. When a material does this at ordinary temperatures, it is said to be;
- (A) Pyrolysis (B) Pyrophoric
(C) Flashover (D) None of the above
105. A _____ water barrel along with water buckets/sand buckets shall be placed not more than 50 m distance as first aid fire fighting arrangement at temporary structure and pandal.
- (A) 20 litre (B) 200 litre
(C) 2000 litre (D) 20000 litre
106. When pumping from an open source, it is the _____ alone which can provide the lift necessary for the water to enter the pump.
- (A) Atmospheric pressure (B) Vacuum pressure
(C) Discharge pressure (D) All of the above
107. A fire that spreads rapidly through a diffuse fuel, such as dust, gas or the vapors of an ignitable liquid, without the production of damaging pressure is:
- (A) Flash Fire (B) BLEVE
(C) Flash Over (D) All of the above
108. Every goods carriage used for transporting any dangerous or hazardous goods shall be legibly and conspicuously marked with _____ in each of the three places of vehicle;
- (A) UN Class (B) Placard of Hazmat
(C) Emergency Information Panel (D) None of the above
109. Fire fighting Foam is not effective on the fires involving:
- (A) Class D fires (B) Pressurised gas fires
(C) Three-dimensional fires (D) All of the above
110. When water flows through a hose or pipe, there is a gradual loss of pressure due to friction. The magnitude of this frictional resistance depends on;
- (A) When water is drawn from hydrants on small diameter mains;
(B) When pumping water over long distances by means of a relay;
(C) On the fire ground when small diameter hose is used;
(D) All of the above

111. The _____ refers to the overflowing of a container not on fire when water boils under the surface of a viscous hot oil;
- (A) Slop-over (B) Froth-over
(C) Boil-over (D) None of the above
112. The _____ is a legal term that implies a deliberate intent to cause damage or injury due to fire:
- (A) Arson (B) Fire-play
(C) Fire-setting (D) All of the above
113. The operational objective of the rescue and fire fighting service shall be to achieve a response time not exceeding _____ to any point of each operational runway, in optimum visibility and surface conditions;
- (A) One minutes (B) Three minutes
(C) Four minutes (D) None of the above
114. “Major accident” means an off-site incident involving loss of life outside the installation, or _____ injuries outside or release of toxic chemicals or explosion or fire or spillage of hazardous chemicals resulting in off-site emergencies or damage to equipment leading to stoppage of process or adverse effects to the environment;
- (A) One or more (B) Ten or more
(C) Twenty or more (D) All of the above
115. On donning PPSCBA set for fire fighting operation, wearer has to carry out ‘low pressure test’, which part of set need to be checked;
- (A) Air Cylinder (B) Face Mask
(C) Warning whistle (D) Demand regulator
116. Materials absorb heat and form a hard char with thermal insulation characteristics to help seal voids when exposed to heat is the fire stop technology (passive fire protection) termed as;
- (A) Intumescent (B) Endothermic
(C) Insulative (D) Ablative
117. A _____ is the time it takes an occupant to perceive the alarm or fire clue and decide to take action during evacuation of building;
- (A) Time to notification (B) Response time
(C) Travel time (D) Pre-evacuation activity time
118. A _____ is the weight of the building itself. It includes the weight of all permanent fixed items, such as floor framing, walls, ceilings, roofing, and major fixed service equipment;
- (A) Live Load (B) Wind forces
(C) Dead Load (D) Earthquake force
119. As per Gujarat Fire Prevention and Life Safety Regulation, 2016, the speed of the fire lift shall be such that it can reach the top floor from the ground level within;
- (A) One minute (B) One and half minute
(C) Two minute (D) Three minute
120. As per Gujarat Fire Prevention and Life Safety Regulation, 2016, for buildings more than 40 meters in height shall be provided with an opening/gates to the premises at-least _____ wide;
- (A) 4 meters (B) 6 meters
(C) 8 meters (D) 9 meters

121. Spalling is a condition ordinarily NOT associated with _____ building materials.
- (A) Brick (B) Cement
(C) Stone (D) Timber
122. Refuge area(s) shall be provided at/or immediately above 24 m and thereafter at every _____ or so;
- (A) 24 m (B) 18 m
(C) 15 m (D) 12 m
123. The lowest concentration of clean agent fire extinguishant at which an adverse toxicological or physiological effect has been observed is termed as;
- (A) Lowest Observed Adverse Effect Level (LOAEL)
(B) No Observed Adverse Effect Level (NOAEL)
(C) Immediately Dangerous to Life and Health (IDLH)
(D) None of the above
124. During water relay, if compound gauge of any intermediate pump shows reading on pressure side, it means that the pump is delivering _____ than received;
- (A) Less Water (B) More Water
(C) No Water (D) None of the above
125. The number of staircase risers shall be limited to;
- (A) 8 per flight (B) 10 per flight
(C) 12 per flight (D) 14 per flight
126. The disclosure of information via Material Safety Data Sheets (MSDS) by _____ to workers on chemical hazards is a statutory requirement;
- (A) Transporters (B) Safety Committee
(C) Plant Supervisor (D) Occupiers
127. Refilling schedule for fire extinguishers and schedule for operational test on fire extinguishers of 'Portable fire extinguisher, mechanical foam type stored pressure' shall be;
- (A) Five years (B) Three years
(C) Ten years (D) None of the above
128. The phases of burning/combustion is depend on;
- (A) The amount of time the fire has burnt
(B) The ventilation characteristics of the confining structure
(C) The amount and type of combustibles present
(D) All of the above
129. For cooling of adjoining flammable liquid tanks, additional quantity of water shall be provided at the rate of 10 LPM / m² of exposed surface of the next tank, for a period of at least _____;
- (A) 4 hours (B) 3 hours
(C) 2 hours (D) 1 hours
130. For pressurization of enclosed staircases adjacent to non-pressurized lobby (or corridors), the pressure differential shall be;
- (A) 30 Pa (B) 40 Pa
(C) 50 Pa (D) 55 Pa

131. The pressure available at hydraulically most remote hydrant should not be less than _____ for light and moderate hazard;
- (A) 3.5 kgf/cm² (B) 4.5 kgf/cm²
 (C) 5.25 kgf/cm² (D) 7.0 kgf/cm²
132. The wordings, 'FIRE OPENABLE PANEL OPEN IN CASE OF FIRE, DO NOT OBSTRUCT' of at least 25 mm letter height shall be marked on the internal side of;
- (A) Glass Facade Panel (B) Glass Window Panel
 (C) Glass Door Panel (D) All of the above
133. All static water tanks for fire fighting shall normally be located within _____ of the risk to be protected;
- (A) 60 meter (B) 100 meter
 (C) 120 meter (D) 150 meter
134. For fighting fires in cable tunnels and other confined areas _____ foams are used;
- (A) Low Expansion (B) Medium Expansion
 (C) High Expansion (D) All of the above
135. A person who has an "inordinate or ungovernable enthusiasm for starting fires, who lacks a conscious motivation for his fire setting" is;
- (A) Pyrotechnic (B) Pyromaniac
 (C) Schizophrenic (D) None of the above
136. Flammable liquids having flash point 23°C and above but below 65°C is _____ liquid;
- (A) Class A (B) Class B
 (C) Class C (D) None of the above
137. As mandated by the DM Act, the _____ has been created for projects exclusively for the purpose of mitigation;
- (A) PM – CARES fund
 (B) National Disaster Response Fund (NDRF)
 (C) National Calamity Contingency Fund (NCCF)
 (D) National Disaster Mitigation Fund (NDMF)
138. A supply of at least _____ spare sprinklers shall be maintained on the premises so that any sprinklers that have operated or been damaged in any way can be promptly replaced;
- (A) Four (B) Five
 (C) Six (D) Eight
139. A substance that will not ignite and burn when subjected to a fire at 750°C shall be considered _____ as per Standard Test Method for Behavior of Materials;
- (A) Combustible (B) Non-combustible
 (C) Fire Resistant (D) Fire Proof
140. As per Gujarat Fire Prevention and Life Safety Regulation, 2016, fire alarm system with smoke detection shall be provided for all non-residential buildings having height of _____ ;
- (A) Less than 25 meters (B) More than 25 meters
 (C) Less than 24 meters (D) More than 24 meters

141. A Jockey Pump of small capacity which is set to come into operation, automatically with drop in _____ pressure in the system and to automatically stop when the pre-set pressure is reached again;
- (A) Running (B) Residual
(C) Static (D) All of the above
142. The _____ is essentially a system to organise, command and control various emergency functions in a standardised manner while responding to any disaster;
- (A) Incident Response System (B) Emergency Operation Centre
(C) Standard Operating Procedure (D) None of the above
143. To determine the type of electrical installation, an area in which an explosive gas atmosphere is likely to occur in normal operation is classified as;
- (A) Zone 0 (B) Zone 1
(C) Zone 2 (D) All of the above
144. Material with _____ specific heat will heat up more rapidly in fire conditions;
- (A) Low (B) High
(C) Low or High (D) None of the above
145. As per Gujarat Fire Prevention and Life Safety Regulation, 2016, electric cable/wires used shall be of _____ grading with mechanical circuit breaker and earth leak circuit breaker;
- (A) 500 volts (B) 600 volts
(C) 700 volts (D) 800 volts
146. Based on the rate of spread of flame, surfacing material shall be considered as divided into four classes, where 'Surfaces of low flame spread' indicates;
- (A) Class 1 (B) Class 2
(C) Class 3 (D) Class 4
147. The carbon dioxide type and clean agent type fire extinguishers shall be pressure tested every time when the cylinders are sent for recharging;
- (A) True (B) False
(C) Can't say (D) None of the above
148. A 4 kg object travelling at 8 m/s has a momentum of;
- (A) 2.0 kg.m/s (B) 12 kg.m/s
(C) 32 kg.m/s (D) None of the above
149. It may be planned to provide orifice plates for landing valves to control pressure to desired limit especially at _____ level in high rise buildings;
- (A) Lower (B) Higher
(C) Pump room (D) None of the above
150. As per Gujarat Fire Prevention and Life Safety Regulation, 2016, the occupier or owner disobey the directives of fire authority while erecting temporary pandal, then he may be fined up to _____;
- (A) Rs. 20,000 (B) Rs. 25,000
(C) Rs. 35,000 (D) Rs. 50,000

151. The height of the ceiling of the temporary structure or pandal from the ground shall not, in any case, be less than;
- (A) 3 meters (B) 4 meters
(C) 6 meters (D) 9 meters
152. The fire pump primer of water tender shall be capable of lifting water at least 7.0 m in not more than _____ when connected with 100 mm suction hose;
- (A) 22 seconds (B) 24 seconds
(C) 28 seconds (D) 30 seconds
153. The division of a building into compartments by elements of a building construction intended to resist the passage of fire is termed as;
- (A) Fire Compartmentation (B) Passive Fire Protection
(C) Active Fire Protection (D) All of the above
154. Foam will begin to lose water as soon as it is applied, and the speed at which the water lost in the foam is termed as;
- (A) Drainage Rate (B) Burn-back Resistance
(C) Spreading Coefficient (D) All of the above
155. Non-load bearing walls form a part of an element of structure of;
- (A) Unframed Building (B) Framed Building
(C) Monolithic Building (D) All of the above
156. Underground Static Water Tank for Riser should be designed suitably to bear a load of fire appliance weighing up to;
- (A) 10 Tonnes (B) 12 Tonnes
(C) 13 Tonnes (D) 18 Tonnes
157. Each carbon dioxide gas cartridge shall be subjected to an internal hydraulic pressure of _____ for a minimum period of one minute before filling;
- (A) 200 kg/cm² (B) 250 kg/cm²
(C) 300 kg/cm² (D) 350 kg/cm²
158. The hose couplings shall be subjected to a hydraulic pressure of 21 kg/cm² for a period of;
- (A) 3 minutes (B) 2.5 minutes
(C) 2 minutes (D) 1 minutes
159. Above ground mains for external hydrant should be adequately supported at regular intervals not exceeding 3.5 m. When located near buildings, the mains should be at least _____ away from the face of the building;
- (A) 2 m (B) 3 m
(C) 4 m (D) 5 m
160. A mixture of flammable gas in air below the LEL will _____ when brought in contact with an ignition source;
- (A) Ignite (B) Not ignite
(C) Uncertain (D) None of the above
161. High pressure tubes and couplings shall be capable of withstanding a test pressure of _____ the maximum designed working pressure of PPSCBA;
- (A) Twice (B) Two and Half
(C) Thrice (D) None

162. Radiative feedback can enhance the reaction rate so that the fire accelerates towards the;
 (A) Growth Phase (B) Fully developed stage
 (C) Decay Phase (D) All of the above
163. The sound level (peak value) of fire alarm sounder shall be not less than 65 dB (A) and not more than _____ when measured at a distance of 1.5 m;
 (A) 70 dB (A) (B) 90 dB (A)
 (C) 100 dB (A) (D) 120 dB (A)
164. Determining all possible fire load requires knowing as much as possible about;
 (A) The building (B) Its contents
 (C) Occupants (D) All of the above
165. The _____ property of a material is an important factor to consider when designing a ventilation system to remove hazardous contaminants from a work space:
 (A) Flash point (B) Vapour Density
 (C) Vapour Pressure (D) Specific Gravity
166. Dry Chemical such as BC or ABC extinguishers should not be used on fires involving;
 (A) Inflammable Gas (B) Inflammable Liquid
 (C) Combustible Solid (D) Combustible Metal
167. The Chairman of the National Executive Committee (NEC) as per Disaster Management Act, 2005 at central level is headed by;
 (A) Union Home Minister (B) Union Home Secretary
 (C) Vice Chairman, NDMA (D) Joint Secretary, DM
168. A minimum output of _____ of foam to each of the hand-lines on either side of the Air Crash Fire Tender to give a minimum effective throw specified foam of 25 m at pump delivery pressures not exceeding 8.5 kg/cm² and using 30 m specified hose;
 (A) 1000 litres (B) 700 litres
 (C) 500 litres (D) 450 litres
169. In case of temporary structure or pandal, the cross gangways shall be provided affording passage after every _____ of seats, width of such passage being not less than 1.5 m;
 (A) 8 row (B) 10 row
 (C) 12 row (D) 14 row
170. The system of colour coding of pipelines consists of a ground colour and colour bands superimposed on it to identify the basic nature of the fluid carried through it, _____ colour indicates acids;
 (A) Sea Green (B) Dark Violet
 (C) Smoke Grey (D) Black
171. When heat is added to a body the temperature rises. The rise in temperature of the body depends on;
 (A) the amount of heat energy supplied to the body;
 (B) the mass of the body;
 (C) the specific heat capacity of the body
 (D) All of the above

172. A _____, mechanical device in which foam solution is sprayed onto a net screen through which air is being forced by a fan;
- (A) Foam-making branch pipe (B) Foam generator (low expansion)
 (C) Foam generator (high expansion) (D) All of the above
173. It is common practice for the main outlet of cylinders containing a flammable gas to be fitted with a _____ to reduce the risk of it being connected to an incorrect supply line;
- (A) Right handed thread (B) Left handed thread
 (C) Either (A) or (B) (D) None of the above
174. The steam formed by the vaporisation of the applied water displaces air from the zone of combustion and thus tends to _____ of the fire;
- (A) Starvation (B) Cooling
 (C) Smothering (D) All of the above
175. CPVC pipes can be used for light hazard occupancies (Non-industrial) where maximum pressure in the sprinkler installation with CPVC pipes shall not exceed _____;
- (A) 8.0 bars (B) 10 bars
 (C) 12 bars (D) None of the above
176. A chemical transformation in which heat energy is liberated is called;
- (A) Exothermic reaction. (B) Combustion.
 (C) Endothermic reaction. (D) Mesothermic reaction
177. According to BIS 2189:2008, requirements for detection zones should be such that the floor area of a single zone shall not exceed;
- (A) 2000 meter square (B) 1200 meter square
 (C) 100 meter square (D) 200 meter square
178. Which one of the following has the lowest rate of false alarms, but it also has the slowest response time?
- (A) Heat detectors (B) Optical smoke detectors
 (C) Rate of rise smoke detectors (D) None of the above
179. The head (pressure in terms of height of liquid) developed by centrifugal pump is approximately equal to the _____ at the periphery of the impeller;
- (A) Velocity energy (B) Pressure energy
 (C) Rotational energy (D) None of the above
180. Alarm signals of fire detectors, where _____ are more useful in places where people with hearing disabilities sleep;
- (A) Audible alarm (B) Visual alarm
 (C) Sensual/vibrating alarm (D) All of the above
181. Multi stage centrifugal pumps are used to;
- (A) Give high discharge (B) Produce high heads
 (C) Pump viscous fluids (D) All of the above
182. Fire resistance is a property of an element of building construction and is the measure of its ability to satisfy for a stated period, the following criteria;
- (A) Integrity (B) Insulation
 (D) All of the above
 (C) Stability

183. A person need not obtain a license for the transport or storage of petroleum _____, if the total quantity in his possession at any one place does not exceed 45000 litres and such petroleum is transported or stored in accordance with the rules made under section 4 of the Petroleum Act, 1934;
- (A) Class A (B) Class B
 (C) Class C (D) All of the above
184. In the case of hydrocarbons fire, the formation of carbon monoxide and soot _____ with the oxygen deficiency;
- (A) Decreases (B) Remains same
 (C) Increases (D) None of the above
185. If air conditioning and ventilation ducts pierce a fire-resisting compartment or protected escape routes, smoke and fire have a ready means of access, therefore, it is necessary or desirable to install _____ in the ducting to maintain the integrity of a compartment;
- (A) Fire Drenchers (B) Fire Dampers
 (C) Fire Screens (D) None of the above
186. After installation of the hydrant system, it should be capable of withstanding pressure equal to _____ of the maximum working pressure for 2 h;
- (A) 100 percent (B) 120 percent
 (C) 150 percent (D) None of the above
187. Stored-pressure extinguishers shall not leak at a rate exceeding five percent per _____ of service pressure;
- (A) Quarter (B) Half-yearly
 (C) Annum (D) All of the above
188. Temporary buildings and structures shall not be permitted in _____ as per NBC - 2016;
- (A) Fire Zone No. 1 (B) Fire Zone No. 2
 (C) Fire Zone No. 3 (D) All of the above
189. All uninsulated pipes having temperatures above _____ (Heat resistant Aluminium painted) need not be identified with colour bands. As special case, if required colour bands may be applied using Teflon Tape;
- (A) 100° C (B) 80° C
 (C) 50° C (D) All of the above
190. Water mist extinguishes fire by;
- (A) Heat extraction (B) Oxygen displacement
 (C) Radiant heat blocking (D) All of the above
191. The resistance of an electrical circuit, which is measured in Ohms, depends on a number of factors, namely;
- (A) The length of a conductor (B) The cross-sectional area of the conductor
 (C) The conductivity of the material used (D) All of the above
192. The National Authority of Disaster Management shall consist of the Chairperson and such number of other members, not exceeding _____, as may be prescribed by the Central Government and, unless the rules otherwise provide;
- (A) Seven (B) Eight
 (C) Nine (D) All of the above

193. Two 9 litre water expelling extinguisher or ABC 5 kg/6 kg fire extinguisher, for every 200 m² with minimum of 4 extinguishers for Class A fire, per compartment/floor is to be installed in;
- (A) Low Hazard Occupancy (B) Medium Hazard Occupancy
(C) High Hazard Occupancy (D) Special Hazard Occupancy
194. What does the term “fire load” refer to in fire safety?
- (A) The weight of firefighting equipment in a building
(B) The amount of fire extinguishing agents available
(C) The time it takes for a fire to spread
(D) The total amount of combustible material present
195. The point when a fire in a room/compartment becomes a compartment completely on fire and continues to burn unimpeded conditions while fuel remains and there is enough air is termed as;
- (A) Backdraft (B) Flashover
(C) Deflagration (D) All of the above
196. Exit access to fireman’s lift and refuge area on the floor shall be step free and clearly sign posted with the _____ of accessibility;
- (A) National Symbol (B) International Symbol
(C) Local Symbol (D) All of the above
197. As per NBC-2016, a substation or a switch-station with oil filled equipment shall be limited to be installed in utility building or in outdoor location. Such substation/utility building shall be at least _____ away from the adjoining building(s);
- (A) 6 meters (B) 7 meters
(C) 8 meters (D) None of the above
198. Each metro railway station shall be provided with two pumps having a minimum discharge of _____ with different prime movers;
- (A) 180 litre/min (B) 1620 litre/min
(C) 2280 litre/min (D) 2850 litre/min
199. For dealing with polar solvent fires, the most suitable and effective fire fighting foam is;
- (A) AFFF concentrate (B) Hazmat Foam concentrate
(C) Alcohol Resistant Foam Concentrate (D) All of the above
200. As per Gujarat Fire Prevention and Life Safety Regulation, 2016, a person who wilfully obstructs or interferes with any member of the Fire Service who is engaged in fire fighting operations, shall be punished with imprisonment for a term which may extend to three months, or with fine which may extend, to _____, or with both;
- (A) Three thousand rupees (B) Five thousand rupees
(C) Seven thousand rupees (D) Ten thousand rupees
201. A condition or changing set of circumstances that presents a potential for injury, illness or property damage is termed as;
- (A) Fire (B) Hazard
(C) Risk (D) All of the above

202. According to Gujarat fire prevention and life safety measures Act 2014, which notice shall be issued to the owner or occupier of building or premises by the authorized officer for the purpose of removal of objects or goods likely to cause the risk of fire in;
- (A) Form-B1 (B) Form-B2
(C) Form-B3 (D) Form-B4
203. The pump drive of _____ shall permit discharge at rated capacity of pump during vehicular speed from 1.6 to 8 kmph in forward as well as reverse gear.
- (A) Air Crash Fire Tender (B) Dry Chemical Powder Fire Tender
(C) Hydraulic Platform (D) All of the above
204. During combustion process, the danger of _____ is that it combines very easily with haemoglobin, which is the oxygen carrier of our blood;
- (A) Carbon dioxide (B) Carbon monoxide
(C) Hydrogen cyanide (D) All of the above
205. In case of temporary pandals, the line of travel from any seat to the nearest exit on the seating area shall not be greater than;
- (A) 15 m (B) 20 m
(C) 25 m (D) None of the above
206. An arrangement for firefighting within the building by means of vertical rising mains of not less than 100 mm internal dia. with landing valves on each floor/landing connected to terrace tank for firefighting purpose, through a terrace pump, gate valve and non-return valve near the tank and to a fire pump, gate and non-return valves, over the static tank is termed as;
- (A) Down - Comer (B) Wet - Riser
(C) Wet - Riser - cum - Down - Comer (D) Dry - Riser
207. A floor numbering signs shall be posted and maintained within each stair enclosure on every floor, indicating the number of the floor, the numerals shall be of bold type and at least;
- (A) 100 mm high (B) 75 mm high
(C) 70 mm high (D) None of the above
208. Alternating current is generally used for transmission as the voltage can be _____ according to the requirements by means of apparatus called a transformer;
- (A) Increased (B) Decreased
(C) Increased or Decreased (D) None of the above
209. The length of hose reels should be such that no part of the floor 'so protected is more than _____ away from the nozzle when the hose reel is fully extended;
- (A) 6.0 m (B) 8.0 m
(C) 10.0 m (D) None of the above
210. The exit and directional signs in building need to be visible during normal as well as emergency conditions, but most commonly accepted maximum viewing distance for such signs is;
- (A) 30 meters (B) 20 meters
(C) 10 meters (D) None of the above
211. The _____ is the component of a means of egress between the termination of an exit and a public way;
- (A) Exit access (B) Exit discharge
(C) Exit stairway (D) None of the above

212. The reinforced Concrete beams are inherently non-combustible but the fire resistance is dependent on the _____ of the beam and the amount of concrete cover provided for the reinforcement;
- (A) Cross-sectional area (B) Quality of concrete
(C) Weight of steel rods (D) None of the above
213. The _____ devices assist rescuers attempting to locate trapped, unconscious, or incapacitated fire fighters during active emergency operations.
- (A) RACE (B) PASS
(C) SCBA (D) None of the above
214. What is the main toxic gas, the fire fighter has to bear in mind while rescuing a trapped person from sewer:
- (A) Hydrogen chloride (B) Carbon monoxide
(C) Hydrogen sulfide (D) Methane
215. Based on the rate of spread of flame, surfacing material of _____ shall be considered to be used in any situation, except on walls, facade of the building, staircase and corridors;
- (A) Class 1 Surfaces of very low flame spread
(B) Class 2 Surfaces of low flame spread
(C) Class 3 Surfaces of medium flame spread
(D) Class 4 Surfaces of rapid flame spread
216. To hoist hose up the outside of a building by means of line (rope), the end of line is made fast to the uncharged hose about 3 to 3.5 m from the branch by means of a;
- (A) Rolling hitch (B) Round turn two half hitch
(C) Double sheet bend (D) None of the above
217. In Positive pressure ventilation (PPV), _____ PPV is carried away from the fire, or after the fire is extinguished, to remove heat and smoke, particularly to improve access and escape routes in areas of the building not directly affected by the fire;
- (A) Offensive (B) Defensive
(C) Sequential (D) All of the above
218. Fire barriers walls shall be provided between transformers where they are less than 15 m apart or where the oil capacity exceeds _____;
- (A) 1000 litres (B) 1500 litres
(C) 2000 litres (D) None of the above
219. Oxygen-deficient atmospheres occur in confined spaces such as sewers, chemical storage tanks, grain bins, or underground caverns where the oxygen percentage is;
- (A) Less than 19.5% (B) More than 19.5%
(C) Between 19.5% to 23.5% (D) None of the above
220. In Glass Façade buildings, openable panels (fire access panels) shall be provided on each floor. Such openings shall be operable at a height between 1.2 m and 1.5 m from the floor, and shall be opening _____;
- (A) Inwards (B) Outwards
(C) Both (A) and (B) (D) None of the above

221. At fires of great intensity where it is considered possible that wall may collapse, then the appliances should be placed at _____ of a building, a reasonably safer points from which to work;
- (A) Centre (B) Corners
(C) Distant (D) All of the above
222. Valve fitted to Carbon Dioxide cylinder shall be provided in the body with a safety release consisting of softened _____ so arranged as to burst at a pressure between 200 kg/cm² and 220 kg/cm²
- (A) Brass disc (B) Copper disc
(C) Gun metal disc (D) None of the above
223. Typical signs of an impending 'Boil-Over' are:
- (A) Small amounts of burning product being ejected front the tank;
(B) An increase in the intensity and the height of flames in the tank;
(C) A 'frying' sound coming from the tank;
(D) All of the above
224. During Smoke Movement in Tunnels, the hot gases and smoke will travel long distances at roof level down-stream, with the layer dropping as it cools. If it cools to the ambient temperature, the gases and smoke will drop to floor level causing a;
- (A) Smoke plug (B) Smoke logging
(C) Back layering (D) All of the above
225. The smoke ventilation of the basement car parking areas, the smoke exhaust fans in the mechanical ventilation system shall be fire rated, that is, 250°C for _____;
- (A) 60 minutes (B) 90 minutes
(C) 120 minutes (D) 180 minutes
226. Where the Gas Turbine Generator is installed in an enclosure and to extinguish fires in electrical equipment, a CO₂ system may be provided where the rate of discharge shall be such that a 34 percent concentration is attained within _____ after actuation.
- (A) 1 minutes (B) 2 minutes
(C) 3 minutes (D) 4 minutes
227. Storage of flammable liquids in laboratories (Group C Occupancies) or in any other area shall be not more than _____ for every 10 m² area.
- (A) 3 litre (B) 4 litre
(C) 5 litre (D) 6 litre
228. When the vapor pockets in the flowing water in the fire pump reach a region of higher pressure, they collapse with a hammer effect, causing noise and vibration is known as;
- (A) Water hammer (B) Cavitation
(C) Shut-off point (D) None of the above
229. High velocity water spray projector system is used to extinguish the _____ fires;
- (A) Coal (B) Transformer
(C) Wood (D) Kitchen
230. As per NBC - 2016, a written record of fire drills shall be kept on the premises for a _____ period and shall be readily available for fire brigade inspection.
- (A) One years (B) Two years
(C) Three years (D) Four years

231. A Jockey pump of small capacity which is set to come into operation automatically with drop in static pressure in the system and use to;
- (A) Prime pump (B) Fight fire
 (C) Maintain pressure in system (D) Check system performance
232. The Director or Fire Officer may, after giving _____ notice to the occupier, or if there is no occupier, to the owner of any place or building or part thereof, enter and inspect such place or building or part thereof at any time between sunrise and sunset where such inspection appears necessary for ascertaining the adequacy or contravention of fire prevention and life safety measures;
- (A) Three hours' (B) Three days'
(C) Three months' (D) None of the above
233. Wherever transformers are planned at higher floors, the HT cables shall be routed through a separate shaft having its own fire resistance rating of 120 min;
- (A) 60 min (B) 90 min
 (C) 120 min (D) 180 min
234. The Gross vehicle weight of Water Tender, Type 'B' shall not be less than _____ including crew, water and equipment;
- (A) 10 000 kg (B) 12 000 kg
(C) 14 000 kg (D) 16 000 kg
235. Provision of cleaning of the kitchen exhaust _____ to ensure that the carbon soot accumulated in the exhaust duct is cleaned to avoid the chances of outbreak of fire shall be made.
- (A) Every month (B) Every two months
(C) Every three months (D) Every six months
236. The Director or Fire Officer shall ensure that Fire and Emergency Management Plans of the Fire Stations and other field formations should be prepared in conformity with the respective;
- (A) National Disaster Management Plans (B) State Disaster Management Plans
 (C) District Disaster Management Plans (D) None of the above
237. A _____ connected on delivery line of fire pump, or in the body of hydro-pneumatic tank at pre-set pressure level so designed to automatically start the fire pumps, when the pressure in the system falls below the pre-set level.
- (A) Pressure pump (B) Pressure switch
(C) Booster pump (D) All of the above
238. External radiological exposure at the time of a single fire emergency can be judged by the use of commercial _____, which measure radiation in roentgens is;
- (A) Radiation dosimeter (B) Radiation contamination monitor
 (C) Radiation survey meter (D) All of the above
239. The respiratory protection devices such as 'Air-purifying respirators (APRs) and powered air-purifying respirators (PAPRs)' are generally sufficient to protect emergency responders from;
- (A) Toxic gases (B) Oxygen deficient atmosphere
 (C) Particulate contaminants (D) All of the above
240. The maximum travel distance on the metro stations platform to a point at which a means of egress route leaves the platform shall not be more than _____;
- (A) 25 m (B) 60 m
(C) 75 m (D) 100 m

241. All lavatories in the aircraft have _____, as well as automatic fire-suppression systems in the waste bin;
- (A) Heat detector (B) Smoke detector
(C) Flame detector (D) Gas detector
242. While attending hazmat emergency involving hazardous substance, decontamination corridor must be established in the control perimeter of:
- (A) Hot zone (B) Warm zone
(C) Cold zone (D) All of the above
243. An instantaneous combustion which is characteristic of a dust explosion is due to the very high _____ of the particles;
- (A) Specific surface area (B) Vapour density
(C) Ignition temperature (D) None of the above
244. Separation-distance between outer fencings of two fireworks factories shall be at least _____;
- (A) 60 m (B) 80 m
(C) 100 m (D) 200 m
245. _____ is caused by the heat and smoke generated, as well as by the water used to extinguish the fire;
- (A) Direct damage (B) Indirect damage
(C) Content damage (D) All of the above
246. _____ is the weight of the building itself which includes the weight of all permanent fixed items, such as floor framing, walls, ceilings, roofing, and major fixed service equipment;
- (A) Live load (B) Dead load
(C) Design load (D) All of the above
247. Basically, a tort is a “civil wrong”. If a building owner who locks the exit doors, then it is termed as;
- (A) Intentional tort (B) Strict liability
(C) Negligence (D) None of the above
248. _____, also known as command post exercises, are designed to test and evaluate individual capabilities, multiple functions or activities within a function, or interdependent groups of functions in order to manage crisis;
- (A) Table Top Exercise (B) Full-Scale Exercise
(C) Functional Exercise (D) None of the above
249. ‘Convection’ involves the transfer of heat by a circulating;
- (A) Only gas (B) Only liquid
(C) Both gas & liquid (D) None of the above
250. The _____ is one in which fuel and air are intimately mixed before ignition;
- (A) Premixed flame (B) Diffusion flame
(C) Both (A) and (B) (D) None of the above
251. Gaps such as those between structural and non structural elements are often filled with non rigid _____ materials to allow for seismic or thermal movement;
- (A) Fire stopping (B) Fire separation
(C) Fire-curtain (D) All of the above

252. As per Gujarat Fire Prevention and Life Safety Regulation, 2014, Fire safety officer shall be enrolled by the Director after successful completion of the prescribed training and shall be issued the enrolment certificate in _____;
- (A) Form - B2 (B) Form - B12
(C) Form - A1 (D) None of the above
253. As per National Building Code -2016, Subdivision G-3 falls in _____ fire zone;
- (A) Fire Zone No. 1 (B) Fire Zone No. 2
(C) Fire Zone No. 3 (D) Fire Zone No. 4
254. If _____ fillings are involved in the fire which ignite spontaneously when it dries out, a special precautions are required by the firefighters to handle such events;
- (A) Petrol (B) Phosphorus
(C) Ammonium nitrate (D) Dynamites
255. As per Gujarat Government Gazette, Ex. 2023, the approach road and open spaces shall be of hard surface capable of taking the weight of Fire engine, weighing up to _____ for building up to 60 m in height;
- (A) 22 tons (B) 45 tons
(C) 80 tons (D) All of the above
256. The amount of heat and temperature required to cause ignition depends on;
- (A) The material properties of the fuel (B) The size and shape of the ignited object
(C) The time of exposure to heat (D) All of the above
257. The first indication of a coke fire is usually the appearance at night of an almost _____ flame at some high portion of the stack without smoke and odor;
- (A) Blue (B) Red
(C) Orange (D) Colourless
258. Descriptive of a substance that has the property of absorbing moisture from the air is termed as;
- (A) Hygroscopicity (B) Miscibility
(C) Solubility (D) None of the above
259. The absolute closure of the open end of a pipe, line or pressure vessel opening by fastening a solid, flat plate (designed to retain the pressure) across the opening, using a gasket and fully engaged bolts or stud bolts in all flange bolt-holes is termed as;
- (A) Bonding (B) Blinding
(C) Blanking (D) None of the above
260. The owner or occupier shall appoint fire safety officer within _____ prior to expiry of the validity of fire safety certificate issued under regulation No. 5.4 and upload the details on the Web portal as per Gujarat Government Gazette, Ex., 2023;
- (A) One months (B) Two months
(C) Three months (D) None of the above
261. The downward pressure of a fluid in an open vessel is proportional to the _____ of the fluid;
- (A) Volume (B) Density
(C) Surface Area (D) Shape of Vessel

262. The hazardous atmosphere that has the potential to expose entrants to the risk of death, incapacitation, impairment of ability to self-rescue, injury or acute illness, the causes are;
- (A) Flammable gas, vapor or mist in excess of 10% LEL
 (B) Airborne combustible dust at a concentration that meets or exceed its LEL
 (C) Atmospheric oxygen concentration below 19.5% and above 23.5%
 (D) All of the above
263. A _____ beam is supported at three or more points which is structurally advantageous because if the span between two supports is overloaded, the rest of the beam assists in carrying the load.
- (A) Continuous (B) Simple
 (C) Fixed (D) Overhanging
264. When planning buildings it is important for architects to understand how quickly they need to evacuate people in case of fire. The overall available time for occupants of any building to escape is described as;
- (A) Safe Evacuation Time (B) Required Safe Escape Time (RSET)
 (C) Available Safe Escape Time (ASET) (D) None of the above
265. As per Gujarat Govt. Gazette Ex., 2023, an external stairs shall have straight flight not less than 1250 mm wide with 250 mm treads and risers not more than 190 mm. The number of risers shall be limited to;
- (A) 15 per flight (B) 16 per flight
 (C) 17 per flight (D) 18 per flight
266. Ventilation of the coal crushing room(s) shall be carefully designed; it shall preferably be mechanical to guard against accumulation of _____ gas in any part of the room;
- (A) Methane (B) Hydrogen Sulfide
 (C) Propane (D) None of the above
267. A _____ can be defined as a safe point or object to which a load may be securely attached, which provides the foundation for rope work operations and is a critical part of any rope system while carrying out rope rescue operations;
- (A) Lanyard (B) Anchor
 (C) Rope (D) All of the above
268. All knots will weaken rope. The smaller the radius, the _____ the rope will become at the knot.
- (A) Weaker (B) Stronger
 (C) Unchanged strength (D) None of the above
269. Fisherman's Bend is an alternative to the _____ that allows the rope to slide up and down or along the beam or spar to which it has been tied;
- (A) Clove hitch (B) Double sheet bend
 (C) Bow line (D) Round Turn & Two Half Hitches
270. The Fire safety officer (FSO) shall also perform _____ emergency mock drills along with inspection of the fire safety measures and give declaration and maintain record of the same;
- (A) Annual (B) Bi-annual
 (C) Tri-annual (D) None of the above

271. The fully extended aluminium ladder shall be placed vertically and a man weighing approximately _____ shall jump on each round from the round immediately above. No sign of failure shall be apparent either in the round or at its junction with the strings during this test;
- (A) 65 kg (B) 75 kg
(C) 80 kg (D) None of the above
272. The objective of _____ is to restrict a fireman's movement while working at height so that access to any location where there is a risk of a fall from a height is not possible.
- (A) Work restraint (B) Fall arrestor
(C) Work positioning (D) All of the above
273. _____ is very weak in tensile strength. Its compressive strength is good, particularly when compared to the cost of other construction materials to resist the same load;
- (A) Steel (B) Concrete
(C) High Yield Strength Bars (D) None of the above
274. One of the method of vapor and gas freeing a storage tank is to _____ the vapors or gas from the tank with an inert gas or flue gas. This method requires a readily available supply of inert or flue gas.
- (A) Purge (B) Dilution
(C) Displacement (D) All of the above
275. A high-rise building having height more than _____ shall be provided with fire check floor (entire floor) above, at immediate habitable floor level having drinking and toilet facility;
- (A) 60 m (B) 70 m
(C) 80 m (D) 90 m
276. Fire resisting glazing is usually installed in _____ frames which clamp the glass and prevent it from deforming excessively when it gets hot;
- (A) Aluminium (B) CPVC
(C) Steel (D) All of the above
277. The dusts which ignite readily but the source of heat required for ignition is large involves the following;
- (A) Grains (B) Barley
(C) Charcoal (D) All of the above
278. Which of the following is NOT the criteria to determine fire resistance of an element of building as per National Building Code-2016?
- (A) Stability (B) Integrity
(C) Insulation (D) Fire Load
279. The size of a _____ depends on the weight of the container pieces and on how much liquid vaporizes when the container fails;
- (A) UVCE (B) VCE
(C) BLEVE (D) All of the above
280. After flashover', the fire is often referred to as a;
- (A) Post flashover fire (B) Fully developed fire
(C) Full room involvement (D) All of the above

281. _____ is the maximum concentration of vapour in air above which the propagation of flame will not occur in the presence of an ignition source.
- (A) Lower explosion limit (LEL) (B) Upper explosion limit (UEL)
 (C) Flammability limit (FL) (D) All of the above
282. Maximum allowed size for a Vision pane on a fire door shall not be more than _____ for uninsulated door and in case of insulated door, it shall be not more than 0.06 m²;
- (A) 0.12 m² (B) 0.10 m²
 (C) 0.04 m² (D) None of the above
283. Eutectic mixture of chlorides of sodium, potassium and barium is normally used to fight _____ fires;
- (A) Class A (B) Class B
 (C) Class C (D) Class D
284. Normally in towns/cities, the hydrants should be provided at an intervals of _____ in the area desired to be protected;
- (A) 80 m (B) 100 m
 (C) 120 m (D) 150 m
285. Designing and maintaining a 'safe' building is the first step to ensuring reasonable levels of fire safety. The fundamental features that provide a basis for both building and life safety in all buildings are;
- (A) Elements of structure (B) Compartmentation
 (C) Internal linings (D) All of the above
286. Clean agents shall not be used on fires involving the following materials unless they have been tested;
- (A) Cellulose nitrate and gunpowder (B) Reactive metals such as lithium, sodium
 (C) Metal hydrides (D) All of the above
287. When evacuating hospital patients from surgical theatres, they will be initially moved to an adjacent fire compartment within the building prior to an eventual removal, if necessary is termed as;
- (A) Zoned evacuation (B) Progressive horizontal evacuation
 (C) Total Simultaneous evacuation (D) All of the above
288. As per MSIHC Rules, 1989, the preparation of Off-Site Emergency Plan as per Rule 14, is the duty and responsibility of the following authority;
- (A) Occupier / Owner (B) Factory Inspector
 (C) District Magistrate / DDMA (D) All of the above
289. The infill material used for fire door, shall be resin bonded, however, the following _____ shall be not used as infill material;
- (A) Mineral wool (B) Polyurethane foam (PUF)
 (C) Honeycomb paper core (D) Ceramic wool
290. The risk of fires and explosions attributed to electrostatic discharges that arise from machinery such as the Neoprene belt on a conveyor unit or from processes such as the decanting of solvents can be managed effectively by;
- (A) Replacing insulating material with static dissipative material
 (B) Managing the environment, e.g. Humidity
 (C) Grounding metallic objects
 (D) All of the above

291. Firefighters can carry out a number of different maneuver with a TTL and use it for a variety of purposes. 'To move the head of a ladder to right or left by rotating the turntable' is termed as;
- (A) Train (B) Plumb
(C) Shoot up (D) Elevate
292. The _____ are liquefied gases that exist in their container at temperatures below -90°C ;
- (A) Corrosive Gases (B) Pyrophoric Gases
(C) Cryogenic Gases (D) Irritant Gases
293. As per MSIHC Rules, 1989, the occupier shall ensure that a mock drill of the on-site emergency plan is conducted _____;
- (A) Every six months (B) Every year
(C) Every quarter (D) None of the above
294. The velocity of water from the nozzle varies inversely with the _____;
- (A) Acceleration (B) Dia. of the Nozzle
(C) Pressure (D) None of the above
295. 'Using inappropriate equipment to gain access at height', which may lead to damage or injury is termed as;
- (A) Unsafe condition (B) Unsafe act
(C) Both (A) and (B) (D) None of the above
296. As per NFPA 704, Hazard Diamond has been developed for;
- (A) Emergency responders (B) Architects
(C) Transportation workers (D) Doctors
297. Most arson fires are started with;
- (A) Lead-based paints. (B) Petroleum-based accelerants.
(C) An oxidizing agent. (D) Highly unsaturated oils.
298. Ammonium phosphate and eutectic chloride dry chemical powder are slightly _____, and in the presence of moisture, they can corrode metals such as steel, cast iron and aluminium;
- (A) Acidic (B) Alkaline
(C) Neutral (D) None of the above
299. _____ are often preferred over rope when loads are passed over edges as the load is distributed over the whole width of the tape, which reduces the load on individual fibres;
- (A) Lanyards (B) Webbing slings
(C) Safety belts (D) All of the above
300. Average flow rates of people through given exit widths can be calculated to demonstrate that as the width available for people increases so does their rate of flow through that width. Flow rate is expressed as;
- (A) persons/sec/m (B) persons/sec
(C) persons/m (D) None of the above