

BIH (CBRT)

PROVISIONAL ANSWER KEY

Name of the post	Archaeological Chemist, Class-2 under the Directorate of Archaeology and Museum
Advertisement No.	11/2023-24
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THE LINK FOR ONLINE OBJECTION SYSTEM WILL START FROM 23-07-2024; 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/>

001. કયા રાજ્યમાં એક પર્વત પર આશરે 863 જૈન મંદિરો આવેલાં છે?
- (A) રાજસ્થાન (B) ગુજરાત
(C) ઓરિસ્સા (D) બિહાર
002. ભારતની આઝાદી પહેલા ગુજરાતનું કયું સ્થળ ગોહિલવાડ તરીકે ઓળખાતું હતું?
- (A) બનાસકાંઠા (B) સાબરકાંઠા
(C) ભાવનગર (D) વડોદરા
003. પશ્ચિમ જ્વેલરી મૂળ ની છે.
- (A) વડોદરા (B) કચ્છ
(C) મહેસાણા (D) ભાવનગર
004. સુરત શહેર બીજા કયા નામથી પણ ઓળખાય છે?
- (A) સત્યપુર (B) સુરતપુર
(C) સુપુર (D) સૂર્યપુર
005. કયા દેશે 2021માં વડાપ્રધાન મોદીને સર્વોચ્ચ નાગરિક સન્માન 'ઓર્ડર ઓફ ડુક ગ્યાલ્પો'થી સન્માનિત કર્યા છે?
- (A) નેપાળ (B) શ્રીલંકા
(C) ભૂતાન (D) સંયુક્ત આરબ અમીરાત
006. ભારતીય અવકાશ સંશોધન સંસ્થા (ઈન્ડિયન સ્પેસ રિસર્ચ ઓર્ગેનાઈઝેશન-ISRO)ના પુનઃઉપયોગી લોન્ચ વ્હીકલ (RLV) કે જેણે તેનું ત્રીજું મિશન સફળતાપૂર્વક હાથ ધર્યું તેને કયું નામ આપવામાં આવ્યું છે?
- (A) પુષ્પક (B) વિનાયક
(C) ગરુડ (D) મારુતિ
007. ભારતીય અને અમેરિકાના નૌકાદળે માર્ચ 2024માં હાથ ધરેલી દ્વિપક્ષીય માનવતાવાદી સહાય અને આપત્તિ રાહત (HADR) કવાયત કયાં નામે ઓળખાય છે?
- (A) એક્સસાઈઝ મિલન (B) મલબાર
(C) રીમ-ઓફ-ધ-પેસિફિક (D) ટાઈગર ટ્રાયમ્ફ-24
008. અગ્નિબાણ
- (A) ઈન્દોર, ઉજ્જૈન અને ભોપાલથી પ્રકાશિત થતું અગ્રણી હિન્દી દૈનિક સાંધ્ય અખબાર છે.
(B) સુપરસોનિક કૂઝ મિસાઈલ બનાવવા માટે ભારત અને રશિયા વચ્ચે સંયુક્ત સાહસ છે.
(C) આઈઆઈટી-મદ્રાસ દ્વારા ઈન્ક્યુબેટેડ સ્પેસ સ્ટાર્ટ-અપ અગ્નિકુલ કોસ્મોસ દ્વારા લો અર્થ ઓર્બિટ (LEO) માટે નાના ઉપગ્રહો માટે મોબાઈલ લોન્ચ સિસ્ટમ છે.
(D) ઓરી-રુબેલા નાબૂદી માટે કેન્દ્ર સરકારનો રસીકરણ કાર્યક્રમ છે.
009. ઈન્ટેન્સિફાઈડ મિશન ઈન્દ્રધનુષ 5.0 (IMI 5.0) અભિયાન કયા કાર્યક્રમ સાથે સંબંધિત છે?
- (A) પોલિયો અને હેપેટાઈટિસ-બીના રસીકરણ અભિયાનમાં સુધારણા ઝૂંબેશ
(B) ઓરી અને રૂબેલાના રસીકરણ વ્યાપમાં સુધારો
(C) પલ્મોનરી ટીબીના નિવારણ માટે બીસીજી રસીની અસરકારકતામાં સુધારો
(D) શીતળા નાબૂદી કાર્યક્રમમાં સુધારો

001. In which State, approximately 863 Jain temples are located on one mountain?
(A) Rajasthan (B) Gujarat
(C) Odisha (D) Bihar
002. Which place in Gujarat was known as Gohilwad before India's independence?
(A) Banaskantha (B) Sabarkantha
(C) Bhavnagar (D) Vadodara
003. Originally the Pachchikam jewellery is from _____.
(A) Vadodara (B) Kutch
(C) Mehsana (D) Bhavnagar
004. The city of Surat is also known by the name of _____.
(A) Satyapur (B) Suratpur
(C) Supur (D) Suryapur
005. Which country has conferred the Order of the Druk Gyalpo, the highest civilian decoration, on Prime Minister Modi in 2021?
(A) Nepal (B) Sri Lanka
(C) Bhutan (D) United Arab Emirates
006. The Reusable Launch Vehicle (RLV) of the Indian Space Research Organisation (ISRO) which successfully conducted its third mission is named _____.
(A) Pushpak (B) Vinayak
(C) Garuda (D) Maruti
007. Indian and United States navies have conducted a bilateral Humanitarian Assistance and Disaster Relief (HADR) exercise conducted in March 2024 called _____.
(A) Exercise MILAN (B) Malabar
(C) Rim-of-the-Pacific (D) Tiger Triumph-24
008. Agnibaan is _____.
(A) A leading Hindi daily evening newspaper published from Indore, Ujjain and Bhopal
(B) A joint venture between India and Russia to produce supersonic cruise missiles
(C) A mobile launch system for small satellites to Low Earth Orbits (LEO) by the space start-up Agnikul Cosmos incubated by IIT-Madras
(D) A central government immunization program to eradicate Measles-Rubella
009. Intensified Mission Indradhanush 5.0 (IMI 5.0) campaign is related to which programme?
(A) Improvement of Polio and Hepatitis B vaccination drive
(B) Improvement of Measles and Rubella vaccination coverage
(C) Improvement of the efficacy of BCG vaccine in the prevention of pulmonary TB
(D) Improvement of the Smallpox eradication programme

010. પગ અને મોંના રોગ (FMD) સાથે કયું સંબંધિત છે?
- (A) બેક્ટેરિયાથી થતો પશુરોગ
(B) ફૂગથી થતો પક્ષીરોગ
(C) વનસ્પતિ રોગ
(D) ફાટેલી ખરીવાળા ક્ષતિગ્રસ્ત (કલોવેન-હૂફ) પ્રાણીઓનો વાયરલ રોગ
011. 2024 સુધીમાં રશિયાના રાષ્ટ્રપતિ વ્લાદિમીર પુતિને રાષ્ટ્રપતિની ચૂંટણીમાં કેટલી મુદત માટે વિજય મેળવ્યો છે?
- (A) 3 ટર્મ્સ (B) 4 ટર્મ્સ
(C) 5 ટર્મ્સ (D) 6 ટર્મ્સ
012. આદર્શ આચાર સંહિતા (MCC)ના સંબંધમાં કયું/કયા સાચું/સાચા છે?
- I. ચૂંટણી દરમિયાન રાજકીય પક્ષો અને ઉમેદવારોના વર્તનને નિયંત્રિત કરવા માટે ભારતીય ચૂંટણીપંચ (EC) દ્વારા જારી કરાયેલ માર્ગદર્શિકાઓનો સમૂહ.
II. આદર્શ આચાર સંહિતાની રચના તમામ ઉમેદવારો માટે સમાન રમતનું ક્ષેત્ર જાળવીને અને ચૂંટણીલક્ષી લાભ માટે સત્તાવાર મશીનરીનો દુરુપયોગ અટકાવીને મુક્ત અને ન્યાયી ચૂંટણીઓ સુનિશ્ચિત કરવા માટે કરવામાં આવી છે.
III. આદર્શ આચાર સંહિતાની શરૂઆતમાં 1968-69માં મધ્ય-ગાળાની ચૂંટણીઓ દરમિયાન ‘લઘુત્તમ આચાર સંહિતા’ શીર્ષક હેઠળ ચૂંટણી પંચ દ્વારા રજૂ કરવામાં આવી હતી.
- (A) ફક્ત I સાચું છે. (B) ફક્ત I અને II સાચા છે.
(C) ફક્ત I અને III સાચા છે. (D) બધા જ સાચા છે.
013. બંધારણનો કયો અનુચ્છેદ ચૂંટણીપંચને અન્ય બાબતોની સાથે સંસદ અને રાજ્ય વિધાનસભાની ચૂંટણીઓ કરાવવાનો આદેશ આપે છે?
- (A) અનુચ્છેદ 324 (B) અનુચ્છેદ 224
(C) અનુચ્છેદ 124 (D) અનુચ્છેદ 24
014. ભારતની બહાર કયા દેશમાં પ્રથમ વખત અમૂલનું તાજું દૂધ ઉપલબ્ધ થશે?
- (A) બાંગ્લાદેશ (B) શ્રીલંકા
(C) રશિયા (D) યુએસએ
015. ‘ઓપરેશન ઈન્દ્રાવતી’
- (A) 2022માં રશિયાના યુક્રેન પરના આક્રમણની શરૂઆતમાં પડોશી દેશોમાં અટવાયેલા લગભગ 18000 ભારતીયો, મોટાભાગે વિદ્યાર્થીઓનું સ્થળાંતર.
(B) ઈઝરાયેલ-પેલેસ્ટાઈન સંઘર્ષ વચ્ચે ફસાયેલા ભારતીયોને બચાવવા માટે ભારત સરકાર દ્વારા ઈવેક્યુએશન મિશન.
(C) સુદાનમાં ફસાયેલા લગભગ 3,900 ભારતીયોને બચાવવા માટે ભારત સરકાર દ્વારા ઈવેક્યુએશન મિશન.
(D) હૈતીથી ડોમિનિકન રિપબ્લિકમાં ભારતીયોને બચાવવા માટે ભારત સરકાર દ્વારા ઈવેક્યુએશન મિશન.
016. “એક્સસાઈઝ લેમિટી-2024” એ ભારત અને બીજા કયા દેશ વચ્ચે 10 દિવસની સંયુક્ત સૈન્ય કવાયત છે?
- (A) ઓસ્ટ્રેલિયા (B) સિંગાપોર
(C) યુએસએ (D) સેશેલ્સ

010. The Foot and Mouth Disease (FMD) is related to _____?
- (A) Bacterial disease of livestock
(B) Fungus disease of Birds
(C) Plant disease
 (D) Viral disease of cloven-hoofed animals
011. By 2024, Russian President Vladimir Putin has secured victory in the presidential elections for how many terms?
- (A) 3 terms (B) 4 terms
 (C) 5 terms (D) 6 terms
012. Which is/are correct regarding the Model Code of Conduct (MCC)?
- I. A set of guidelines issued by the Election Commission of India (EC) to regulate the conduct of political parties and candidates during elections.
II. The MCC is designed to ensure free and fair elections by maintaining a level playing field for all contestants and preventing the misuse of official machinery for electoral gains.
III. MCC was initially introduced by the Election Commission under the title of 'Minimum Code of Conduct' during the Mid-Term Elections in 1968-69.
- (A) Only I is correct (B) Only I and II are correct
(C) Only I and III are correct (D) All are correct
013. Which article of the Constitution mandates the Election Commission to conduct elections, among other things, to the Parliament and the State Legislatures?
- (A) Article 324 (B) Article 224
(C) Article 124 (D) Article 24
014. For the first time Amul fresh milk will be available in which country outside India?
- (A) Bangladesh (B) Sri Lanka
(C) Russia (D) USA
015. 'Operation Indravati' is _____.
- (A) Evacuation of around 18000 Indians, mostly students, who were stuck in neighboring countries at the onset of Russia's invasion of Ukraine in 2022.
(B) Evacuation mission by the Indian government to rescue Indians stranded amid the Israel-Palestine conflict.
(C) Evacuation mission by the Indian government to rescue around 3,900 Indians stranded in Sudan.
 (D) Evacuation mission by the Indian government to rescue Indians from Haiti to the Dominican Republic.
016. "EXERCISE LAMITIYE-2024" is a 10-day joint military exercise between India and which other country?
- (A) Australia (B) Singapore
(C) USA (D) Seychelles

017. દેશના ગ્રામીણ વિસ્તારોને પ્રાધાન્ય આપતા યુવા વિદ્યાર્થીઓને અવકાશ વિજ્ઞાન, અવકાશ તકનીક અને અવકાશ એપ્લિકેશન પર મૂળભૂત જ્ઞાન આપવા માટે ISROના 'ચંગ સાયન્ટિસ્ટ પ્રોગ્રામ'નું નામ શું છે?
- (A) નાવિકા (B) યુવિકા
(C) યુથિકા (D) ઈસરોકા
018. કયા દેશનું ઈ-સ્ટ્રટ પેમેન્ટ પ્લેટફોર્મ AANI ભારતના UPI સાથે જોડાયેલું છે?
- (A) યુએઈ (B) કતાર
(C) નેપાળ (D) ભૂતાન
019. ભારતનો સૌથી લાંબો કેબલ સ્ટેડ બ્રિજ, 'સુદર્શન સેતુ' ક્યાં રાજ્યમાં આવેલો છે?
- (A) જમ્મુ અને કાશ્મીર (B) ગુજરાત
(C) મહારાષ્ટ્ર (D) સિક્કિમ
020. ભારતના એઆઈ સુપર કોમ્પ્યુટરનું નામ શું છે, જેને જર્મનીમાં ઈન્ટરનેશનલ સુપર કોમ્પ્યુટિંગ કોન્ફરન્સ (ISC 2023)માં વિશ્વભરમાં 75મું સ્થાન આપવામાં આવ્યું છે?
- (A) અર્જુન (B) ગરુડ
(C) દ્રુત (D) ઐરાવત
021. ભારતમાં કૃત્રિમ બુદ્ધિમત્તા(AI)ને પ્રોત્સાહન આપવા માટે ઈલેક્ટ્રોનિક્સ અને માહિતી પ્રૌદ્યોગિકી મંત્રાલય(મિનિસ્ટ્રી ઓફ ઈલેક્ટ્રોનિક્સ એન્ડ ઈન્ફર્મેશન ટેલનોલોજી-MEITY) દ્વારા શરૂ કરવામાં આવેલ છત્ર કાર્યક્રમ(અંબ્રેલા પ્રોગ્રામ)નું નામ શું છે?
- (A) ઈન્ડિયા-એઆઈ (B) એઆઈ-ઈન્ડિયા
(C) ડિજિટલ ઈન્ડિયા (D) આર્ટ-ઈન્ટ-ઈન્ડ
022. નેત્રસ્તરદાહ રોગ (Conjunctivitis)ને તરીકે પણ ઓળખવામાં આવે છે.
- (A) ગ્લુકોમા (Glaucoma) (B) માયોપિયા (Myopia)
(C) આંખ આવવી (Pink Eye) (D) પ્રેસ્બાયોપિયા (Presbyopia)
023. ભારતે ક્યાં વર્ષ સુધીમાં 'શૂન્ય ઉત્સર્જન'નું લક્ષ્ય હાંસલ કરવાનું લક્ષ્ય રાખ્યું છે?
- (A) 2047 (B) 2050
(C) 2060 (D) 2070
024. 'ડિજિટલ કલ્ચર' – શબ્દો
- (A) જે રીતે કોમ્પ્યુટર, લેપટોપ અને મોબાઈલનો ઉપયોગ થાય છે, તેનો સંદર્ભ આપે છે.
(B) વર્તણૂકો, વ્યવહારો અને મૂલ્યો જે ડિજિટલ તકનીકોના ઉપયોગથી વિકસિત થાય છે, તેનો સંદર્ભ આપે છે.
(C) જે રીતે વિદ્યાર્થીઓ સ્માર્ટ ટેકનોલોજીમાંથી શીખે છે, તેનો સંદર્ભ આપે છે.
(D) જે રીતે લોકો દૃશ્ય-શ્રાવ્ય (ઓડિયો-વિઝ્યુઅલ) ટેકનોલોજી વડે પ્રત્યાયન કરે છે, તેનો સંદર્ભ આપે છે.
025. ભારતમાં સૌથી લાંબો મુખ્ય ભૂમિ દરિયાકિનારો કયા રાજ્ય પાસે છે?
- (A) આંધ્રપ્રદેશ (B) મહારાષ્ટ્ર
(C) તામિલનાડુ (D) ગુજરાત
026. નેશનલ એકેડેમી ઓફ કોસ્ટલ પોલીસિંગ (NACP)નું કાયમી મથક ક્યાં આવેલું છે?
- (A) દ્વારકા, ગુજરાત (B) ભુજ, ગુજરાત
(C) કચ્છ, ગુજરાત (D) સલાયા, ગુજરાત

017. What is the name of ISRO's 'Young Scientist Programme' to impart basic knowledge on space science, space technology, and space applications to the younger students with a preference to rural areas of the country?
- (A) NAVIKA (B) YUVIKA
(C) YUTHIKA (D) ISROKA
018. Which country's instant payment platform AANI has been linked with India's UPI?
- (A) UAE (B) Qatar
(C) Nepal (D) Bhutan
019. 'Sudarshan Setu', India's longest cable-stayed bridge, is located in which state?
- (A) Jammu and Kashmir (B) Gujarat
(C) Maharashtra (D) Sikkim
020. What is the name of India's AI Supercomputer that has been ranked No. 75 worldwide at the International Supercomputing Conference (ISC 2023) in Germany?
- (A) ARJUN (B) GARUDA
(C) DRUTA (D) AIRAWAT
021. What is the name of the umbrella programme launched by the Ministry of Electronics and Information Technology (MeitY) to promote artificial intelligence in India?
- (A) INDIAai (B) AI-INDIA
(C) Digital India (D) Art-Int-Ind
022. Conjunctivitis disease is also known as _____.
- (A) Glaucoma (B) Myopia
(C) Pink Eye (D) Presbyopia
023. India aims to achieve the target of 'net zero emissions' by the year _____.
- (A) 2047 (B) 2050
(C) 2060 (D) 2070
024. The phrase 'Digital Culture' refers to _____.
- (A) The way computers, laptops, and mobiles are used.
(B) The behaviours, practices, and values that develop from the use of digital technologies.
(C) The way students learn from smart technologies.
(D) The way people interact with audio-visual technology.
025. Which state has the longest mainland coastline in India?
- (A) Andhra Pradesh (B) Maharashtra
(C) Tamil Nadu (D) Gujarat
026. The permanent campus of the National Academy of Coastal Policing (NACP) is located in _____.
- (A) Dwarka, Gujarat (B) Bhuj, Gujarat
(C) Kutch, Gujarat (D) Salaya, Gujarat

027. ગુજરાતમાં ભારતીય જંગલી ગધેડાનું અભયારણ્ય
- (A) કચ્છના નાના રણમાં આવેલું છે.
 (B) વાંસદા રાષ્ટ્રીય ઉદ્યાન, નવસારીમાં આવેલું છે.
 (C) જાંબુઘોડા વન્યજીવ અભયારણ્ય, વડોદરામાં આવેલું છે.
 (D) વેળાવદર રાષ્ટ્રીય ઉદ્યાન, ભાવનગરમાં આવેલું છે.
028. કચ્છમાં આવેલું સુરકોટડા
- (A) સિંધુ ખીણની સંસ્કૃતિના અવશેષો માટે જાણીતું છે.
 (B) ભસતા હરણનું વન્યજીવ અભયારણ્ય માટે જાણીતું છે.
 (C) પર્લાઈટના ઉત્પાદન માટે જાણીતું છે.
 (D) શેલ ગેસના અનામત જથ્થા માટે જાણીતું છે.
029. લક્ષ્મી વિલાસ પેલેસ માટે વડોદરાના મહારાજા દ્વારા કયા પ્રખ્યાત કલાકાર પાસે ચિત્રો તૈયાર કરાવામાં આવ્યા હતા?
- (A) નટવરલાલ ભાવસાર (B) અબ્દુલ ગફૂર ખત્રી
 (C) રાજા રવિ વર્મા (D) રવિશંકર રાવળ
030. નવલખી વાવ
- (A) લક્ષ્મી વિલાસ પેલેસ વડોદરામાં આવેલી છે. (B) વિજય વિલાસ પેલેસ ભાવનગરમાં આવેલી છે.
 (C) પ્રાગ મહેલ કચ્છમાં આવેલી છે. (D) નીલમબાગ પેલેસ ભાવનગરમાં આવેલી છે.
031. પ્રસિદ્ધ હડપ્પીય મુદ્રા કે જેમાં પ્રાણીઓની રૂપરેખાઓ અને ચિહ્નો છે, તે પથ્થર કયાં નામે ઓળખાય છે?
- (A) સ્ટેટીટ્સ (B) ચૂનાનો પથ્થર
 (C) ટ્રાવર્ટાઈન (D) અગ્નિકૃત
032. હડપ્પીય લોકો ગુજરાતના કયા ભાગમાંથી હસ્તકલા ઉત્પાદન માટે કાર્નેલિયન પથ્થર જેવી સામગ્રી મેળવતા હતા?
- (A) ધોળાવીરા (B) ભરૂચ
 (C) લોથલ (D) સુરકોટડા
033. નીચેનામાંથી કયું અનાજ હડપ્પીય સ્થળોએ પ્રમાણમાં ભાગ્યે જ જોવા મળતું હતું?
- (A) ઘઉં અને જવ (B) તલ
 (C) બાજરી (D) ચોખા
034. 1918માં ગાંધીજી ગુજરાતમાં બે ચળવળમાં સામેલ હતા. એક અમદાવાદમાં મજૂર ચળવળ. જેમાં કાપડ મિલ કામદારો માટે કામ કરવાની સારી સ્થિતિની માંગ હતી. તેમની બીજી ચળવળ કઈ હતી?
- (A) ખેડામાં ખેડૂતો સાથે તેમની લણણીની નિષ્ફળતાને પગલે રાજ્યને કર માફી
 (B) ચંપારણમાં, ખેડૂતોના જમીન ભોગવટા હકની સુરક્ષા તેમજ તેમની પસંદગીના પાકની ખેતી કરવાની સ્વતંત્રતાની માંગણી
 (C) “રોલેટ એક્ટ” વિરુદ્ધ દેશવ્યાપી ઝુંબેશ
 (D) ઉપરનામાંથી એક પણ નહિ
035. 1930માં ગાંધીજીએ મીઠાના સત્યાગ્રહ માટે હાકલ કરી ત્યારે બ્રિટિશ વાઈસરોય કોણ હતા?
- (A) લોર્ડ ઈરવિન (B) લોર્ડ હાર્ડિન્જ
 (C) લોર્ડ રિપન (D) લોર્ડ માઉન્ટબેટન

027. The Indian Wild Ass Sanctuary in Gujarat is situated in _____.
- (A) Little Rann of Kutch
 (B) Vansda National Park in Navsari
 (C) Jambughoda Wildlife Sanctuary in Vadodara
 (D) Velavadar National Park in Bhavnagar
028. Surkotada in Kutch is known for _____.
- (A) Remnants of Indus Valley Civilization
 (B) Wildlife Sanctuary for barking deer
 (C) Perlite production
 (D) Shale Gas reserve
029. Paintings of which famous artist was commissioned by the Maharaja of Baroda for Laxmi Vilas Palace?
- (A) Natvar Bhavsar (B) Abdul Gafur Khatri
 (C) Raja Ravi Verma (D) Ravishankar Raval
030. Navlakhi Stepwell is located in _____
- (A) Laxmi Vilas Palace Boroda (B) Vijay Vilas Palace in Bhavnagar
 (C) Prag Mahal in Kutch (D) Nilambagh Palace in Bhavnagar
031. The famous Harappan Seal that contains animal motifs and signs was made of a stone called _____
- (A) Steatite (B) Limestone
 (C) Travertine (D) Igneous
032. The Harappans used to procure materials like Carnelian stone for craft production from which part of Gujarat?
- (A) Dholavira (B) Bharuch
 (C) Lothal (D) Surkotada
033. Which among the following grains was found relatively rarely at Harappan sites?
- (A) Wheat and barley (B) Sesame
 (C) Millets (D) Rice
034. In 1918, Gandhiji was involved in two campaigns in Gujarat. One was in a labour dispute in Ahmedabad, demanding better working conditions for the textile mill workers. What was his second campaign?
- (A) He joined peasants in Kheda in asking the state for the remission of taxes following the failure of their harvest.
 (B) In Champaran, demanding peasants' security of tenure as well as the freedom to cultivate the crops of their choice.
 (C) Called for a countrywide campaign against the "Rowlatt Act".
 (D) None of the above
035. Who was the British Viceroy when Gandhi gave the clarion call for the "Salt March" in 1930?
- (A) Lord Irwin (B) Lord Hardinge
 (C) Lord Ripon (D) Lord Mountbatten

036. ભારતના રૂપિયાના પ્રતીક (₹)ની ડિઝાઇન
- (A) 2010માં ભારતીય વિદ્વાન અને ડિઝાઇનર ઉદય કુમારે તૈયાર કરી હતી.
 (B) 2014માં ભારતીય વિદ્વાન અને ડિઝાઇનર પ્રભાત કુમારે તૈયાર કરી હતી.
 (C) 2015માં ભારતીય અર્થશાસ્ત્રી રઘુરામ રાજને તૈયાર કરી હતી.
 (D) 2013માં અમેરિકન ડિઝાઇનર કેનેથ ઈઝે તૈયાર કરી હતી.
037. ભારત મુખ્યત્વે નીચેનામાંથી કઈ કૃષિ પેદાશોની આયાત કરે છે?
- (A) તેલીબિયાં (B) ખાદતેલ
 (C) કઠોળ (D) ઘઉં
038. નીચેનામાંથી કયું “વસ્તી વિસ્ફોટ”ની ઘટના દેશની વસ્તી વિષયક પરિસ્થિતિ તરફ નિર્દેશ કરે છે?
- (A) જન્મદરમાં વધારો અને ઊંચો મૃત્યુઆંક
 (B) જન્મદરમાં વધારો અને મૃત્યુઆંકમાં ઘટાડો
 (C) નીચો જન્મઆંક અને મૃત્યુદરમાં વધારો
 (D) જન્મઆંકમાં ઘટાડો અને મૃત્યુદરમાં વધારો
039. ભારત વિશ્વમાં દૂધ ઉત્પાદનમાં ક્રમે છે.
- (A) પ્રથમ (B) બીજા
 (C) ત્રીજા (D) ચોથા
040. ‘પીએમ (PM) ગતિ શક્તિ’
- (A) રાષ્ટ્રીય ધોરીમાર્ગ (નેશનલ હાઈ-વે)ના બાંધકામ માટે રાષ્ટ્રીય બૃહદ યોજના (નેશનલ માસ્ટર પ્લાન) છે.
 (B) વંદે ભારત ટ્રેનોને ઝડપી બનાવવા માટે રાષ્ટ્રીય કાર્ય યોજના (નેશનલ એક્શન પ્લાન) છે.
 (C) મલ્ટી મોડલ કનેક્ટિવિટી માટે રાષ્ટ્રીય બૃહદ યોજના (નેશનલ માસ્ટર પ્લાન) છે.
 (D) નદીઓ જોડાણ માટે રાષ્ટ્રીય કાર્ય યોજના (નેશનલ એક્શન પ્લાન) છે.
041. “લોકશાહી રાજકીય સમાનતાના મૂળભૂત સિદ્ધાંત પર આધારિત છે.” આ વિધાનના આધારે નીચેનામાંથી કયું/કયાં નિવેદન/ નિવેદનો સાચું/સાચાં છે/છે?
- I. દરેક પુખ્ત નાગરિક પાસે એક મત હોવો જોઈએ અને દરેક મતનું એક મૂલ્ય હોવું જોઈએ.
 II. લોકશાહી મુક્ત અને નિષ્પક્ષ ચૂંટણી પર આધારિત હોવી જોઈએ.
 III. લોકશાહીમાં અંતિમ નિર્ણય લેવાની સત્તા લોકો દ્વારા ચૂંટાયેલા લોકો પાસે હોવી જોઈએ.
- (A) ફક્ત I (B) ફક્ત II
 (C) I અને II બંને (D) બધાં જ સાચાં છે.
042. કયા દેશની ચૂંટણી પ્રણાલીમાં સ્થાનિક લોકોના મતનું મૂલ્ય ભારતીય મૂળના નાગરિકો કરતાં વધુ છે?
- (A) શ્રીલંકા (B) ફિજી
 (C) માલદિવ્સ (D) મ્યાનમાર

036. The Rupee symbol (₹) of India was designed by _____
(A) The Indian academic and designer Udaya Kumar in 2010
(B) The Indian academic and designer Prabhat Kumar in 2014
(C) The Indian economist Raghuram Rajan in 2015
(D) The American designer Kenneth Ize in 2013
037. India mainly imports which among the following agricultural products?
(A) Oil seeds (B) Edible Oils
(C) Pulses (D) Wheat
038. The phenomenon of “population explosion” points towards which of the following situations in the demography of a country?
(A) Increased birth rate and high death count
(B) Increased birth rate and the decreased death count
(C) Low birth count and increased death rate
(D) Decreased birth count and increased death rate
039. India ranks _____ in milk production in the world.
(A) First (B) Second
(C) Third (D) Fourth
040. The ‘PM Gati Shakti’ is _____
(A) National Master Plan for National High-Way Construction
(B) National Action Plan for Expediting Vande Bharat Trains
(C) National Master Plan for Multi-Modal Connectivity
(D) National Action Plan for River Connectivity
041. “Democracy is based on a fundamental principle of political equality.” Based on this statement, which of the following assertions is/are correct?
I. Each adult citizen must have one vote and each vote must have one value.
II. A democracy must be based on a free and fair election.
III. In a democracy the final decision-making power must rest with those elected by the people.
(A) Only I (B) Only II
(C) Both I & II (D) All are correct
042. In which country’s electoral system does the indigenous people’s vote have more value than the citizens of Indian origin?
(A) Sri Lanka (B) Fiji
(C) Maldives (D) Myanmar

043. ભારતીય રાષ્ટ્રીય કોંગ્રેસના કયા અધિવેશનમાં સ્વતંત્ર ભારતનું બંધારણ કેવું હોવું જોઈએ તેના પર ચર્ચા થઈ હતી?
- (A) નાગપુર અધિવેશન 1920 (B) કાનપુર અધિવેશન 1925
(C) કરાંચી અધિવેશન 1931 (D) મુંબઈ અધિવેશન 1934
044. નીચેનામાંથી કોણ સી. રાજગોપાલાચારીની સાથે સ્વતંત્ર પાર્ટીના સ્થાપક હતા?
- (A) કનૈયાલાલ માણેકલાલ મુનશી (B) મીનુ મસાણી
(C) એન. જી. રંગા (D) દર્શન સિંગ
045. I (નેતાઓ)ને II (બંધારણના નિર્માણમાં ભૂમિકાઓ) સાથે યોગ્ય રીતે જોડો.

I

II

a. મોતીલાલ નેહરુ

i. બંધારણ સભાના પ્રમુખ

b. બી.આર. આંબેડકર

ii. બંધારણ સભાના સભ્ય

c. રાજેન્દ્ર પ્રસાદ

iii. મુસદ્દા સમિતિના અધ્યક્ષ

d. સરોજિની નાયડુ

iv. 1928માં ભારત માટે બંધારણનો મુસદ્દો તૈયાર કર્યો

(A) a - i, b - ii, c - iii, d - iv

(B) a - iii, b - iv, c - ii, d - i

(C) a - iv, b - iii, c - i, d - ii

(D) a - ii, b - i, c - iv, d - iii

046. I (બંધારણના માર્ગદર્શક મૂલ્યો)ને II (તેમના અર્થ) સાથે યોગ્ય રીતે જોડો.

I

II

a. સાર્વભૌમ

i. સરકાર કોઈ પણ ધર્મની તરફેણ કરશે નહીં.

b. પ્રજાસત્તાક

ii. લોકોને નિર્ણય લેવાનો સર્વોચ્ચ અધિકાર છે.

c. બંધુત્વ

iii. રાજ્યના વડા ચૂંટાયેલા વ્યક્તિ છે.

d. બિનસાંપ્રદાયિક

iv. લોકોએ ભાઈ-બહેનની જેમ જીવવું જોઈએ.

(A) a - ii, b - iii, c - iv, d - i

(B) a - i, b - ii, c - iii, d - iv

(C) a - iii, b - iv, c - ii, d - i

(D) a - iv, b - i, c - iii, d - ii

047. નીચેનામાંથી કયું/કયાં વિધાન/વિધાનો સાચું/સાચાં છે?

I. મહાત્મા ગાંધી બંધારણ સભાના સભ્ય ન હતા.

II. મહાત્મા ગાંધીના વિચારો, દ્રષ્ટિ અને દર્શન (ફિલસૂફી)ને બંધારણ સભાના ઘણા સભ્યો દ્વારા અનુસરવામાં આવ્યા હતા.

(A) ફક્ત I સાચું છે.

(B) I અને II બંને સાચાં છે.

(C) ફક્ત II સાચું છે.

(D) I અને II બંને સાચાં નથી.

048. નીચેનામાંથી કયું/કયાં વિધાન/વિધાનો સાચું/સાચાં છે?

I. બંધારણનું કાર્ય મૂળભૂત નિયમોને પ્રદાન કરવાનું છે અને સમાજમાં નિર્ણય લેવાની સત્તા કોની પાસે છે તે સ્પષ્ટ કરવાનું છે.

II. બંધારણનું કાર્ય એ છે કે સરકાર તેના નાગરિકો પર શું લાદી શકે તેની કેટલીક મર્યાદાઓ નિર્ધારિત કરવી અને સરકાર ક્યારેય તેમનું ઉલ્લંઘન ન કરી શકે.

(A) ફક્ત I સાચું છે.

(B) ફક્ત II સાચું છે.

(C) I અને II બંને સાચાં છે.

(D) I અને II બંને સાચાં નથી.

043. Which session of the Indian National Congress dwelt on how independent India's constitution should look like?
- (A) The Nagpur session 1920 (B) The Kanpur session 1925
 (C) The Karachi session 1931 (D) The Bombay session 1934
044. Beside C. Rajagopalachari, who among the following was the founder of the Swatantra Party?
- (A) Kanhaiyalal Maniklal Munshi (B) Minoo Masani
 (C) N.G. Ranga (D) Darshan Singh Pheruman
045. Match I (leaders) with II (roles in the making of the Constitution).
- | I | II |
|--------------------|--|
| a. Motilal Nehru | i. President of the Constituent Assembly |
| b. B.R. Ambedkar | ii. Member of the Constituent Assembly |
| c. Rajendra Prasad | iii. Chairman of the Drafting Committee |
| d. Sarojini Naidu | iv. Drafted a Constitution for India in 1928 |
- (A) a - i, b - ii, c - iii, d - iv (B) a - iii, b - iv, c - ii, d - i
 (C) a - iv, b - iii, c - i, d - ii (D) a - ii, b - i, c - iv, d - iii
046. Match I (guiding values of the Constitution) with II (their meaning).
- | I | II |
|---------------|---|
| a. Sovereign | i. The government will not favour any religion |
| b. Republic | ii. People have the supreme right to make decisions |
| c. Fraternity | iii. Head of the state is an elected person |
| d. Secular | iv. People should live like brothers and sisters |
- (A) a - ii, b - iii, c - iv, d - i (B) a - i, b - ii, c - iii, d - iv
 (C) a - iii, b - iv, c - ii, d - i (D) a - iv, b - i, c - iii, d - ii
047. Which statement(s) is/are correct?
- I. Mahatma Gandhi was not a member of the Constituent Assembly.
 II. Mahatma Gandhi's ideas, vision, and philosophy were followed by many members of the Constituent Assembly
- (A) Only I is correct (B) Both I and II are correct
 (C) Only II is correct (D) Both I and II are not correct
048. Which among the following statement(s) is/are correct?
- I. The function of a constitution is to provide a set of basic rules and specify who has the power to make decisions in a society.
 II. The function of a constitution is to set some limits on what a government can impose on its citizens and the government may never trespass them.
- (A) Only I is correct (B) Only II is correct
 (C) Both I and II are correct (D) Both I and II are incorrect

049. નીચેનામાંથી ભારતીય બંધારણની કઈ વિશેષતાઓ બ્રિટિશ બંધારણમાંથી અપનાવવામાં આવી નથી?
- (A) સરકારનું સંસદીય સ્વરૂપ
(B) કાયદાના શાસનનો વિચાર
(C) અધ્યક્ષનો હોદ્દો અને તેમની ભૂમિકા
(D) સ્વતંત્રતા, સમાનતા અને બંધુત્વના સિદ્ધાંતો
050. નીચેનામાંથી કયું/કયાં વિધાન/વિધાનો સાચું/સાચાં છે?
- I. દેશના બંધારણ દ્વારા મૂળભૂત અધિકારોનું રક્ષણ અને ખાતરી આપવામાં આવે છે.
II. મૂળભૂત અધિકાર ફક્ત બંધારણમાં સુધારો કરીને જ બદલી શકાય છે.
- (A) ફક્ત I સાચું છે. (B) ફક્ત II સાચું છે.
(C) I અને II બંને સાચાં છે. (D) I અને II બંને સાચાં નથી.
051. કેપ્ટન અને સૈનિકોનું 1200 વ્યક્તિઓનું જૂથ ટ્રેનમાં મુસાફરી કરી રહ્યું છે. દર 15 સૈનિકો માટે એક કેપ્ટન હોય છે. શુપમાં કેપ્ટનની સંખ્યા કેટલી છે?
- (A) 70 (B) 80
(C) 75 (D) 85
052. પોસ્ટ ઓફિસમાં, ત્રણ અલગ-અલગ મૂલ્યોના સ્ટેમ્પ. રૂા. 7, રૂા. 8 અને રૂા. 10 ના ઉપલબ્ધ છે. ચોક્કસ રકમ કે જેના માટે કોઈ સ્ટેમ્પ ખરીદી શકતું નથી ?
- (A) 29 (B) 20
(C) 23 (D) 19
053. ટોપલીમાં સફરજનની સંખ્યા દર મિનિટે બમણી થાય છે. જો ટોપલી એક કલાકમાં સફરજનથી ભરેલી હોય, તો ટોપલી ક્યારે અડધી ભરેલી હતી?
- (A) 55 મિનિટ (B) 38 મિનિટ
(C) 30 મિનિટ (D) 59 મિનિટ
054. મોહન પાસે બે ગણાં પથ્થર અને ત્રણ ગણાં સિક્કા થઈ ને કુલ 70 છે. જો મોહન પાસે ઓછામાં ઓછો એક પથ્થર અને ઓછામાં ઓછો એક સિક્કો હોય, તો મોહન પાસે રહેલા સિક્કાની સંખ્યા આમાંથી કઈ હોઈ શકે?
- (A) 11 (B) 12
(C) 13 (D) 15
055. શબ્દમાળાનો ટુકડો 40 સેન્ટિમીટર લાંબો છે. તે ત્રણ ટુકડાઓમાં કાપવામાં આવે છે. સૌથી લાંબો ટુકડો મધ્યમ કદના કરતા 3 ગણો લાંબો છે અને સૌથી નાનો ટુકડો સૌથી લાંબો ટુકડો કરતા 23 સેન્ટિમીટર નાનો છે. સૌથી ટૂંકા ભાગની લંબાઈ શોધો (સે.મી.માં).
- (A) 9 સે.મી. (B) 6 સે.મી.
(C) 27 સે.મી. (D) 4 સે.મી.
056. ભરવાડ પાસે 17 ઘેટાં છે. નવ સિવાય બધા મૃત્યુ પામ્યા. તેની સાથે કેટલાં ઘેટાં બચ્યાં?
- (A) 6 (B) 8
(C) 7 (D) 9

049. Which among the following features of the Indian Constitution is NOT adopted from the British Constitution?
- (A) Parliamentary Form of Government
(B) The idea of the rule of law
(C) Institution of the Speaker and her/his role
 (D) Principles of Liberty, Equality and Fraternity
050. Which statement(s) is/are correct?
- I. The Fundamental Rights are protected and guaranteed by the constitution of the country.
II. The Fundamental Right may only be changed by amending the Constitution itself.
- (A) Only I is correct
(B) Only II is correct
 (C) Both I and II are correct
(D) Both I and II are incorrect
051. A group of 1200 persons consisting of captains and soldiers is travelling in a train. For every 15 soldiers there is one captain. The number of captains in the group is?
- (A) 70
(B) 80
 (C) 75
(D) 85
052. In a post office, stamps of three different denominations of Rs. 7, Rs. 8 and Rs. 10 are available. The exact amount for which one cannot buy stamps is:
- (A) 29
(B) 20
(C) 23
 (D) 19
053. The number of apples in a basket doubles every minute. If the basket is full of apples in an hour, when was the basket half-filled?
- (A) 55 minutes
(B) 38 minutes
(C) 30 minutes
 (D) 59 minutes
054. Twice the number of stones and thrice the number of coins with Mohan are 70. If Mohan has at least one stone and at least one coin, then which of these could be the number of coins that Mohan has?
- (A) 11
(B) 12
(C) 13
(D) 15
055. A piece of string is 40 centimetres long. It is cut into three pieces. The longest piece is 3 times as long as the middle-sized and the shortest piece is 23 centimetres shorter than the longest piece. Find the length of the shortest piece (in cm).
- (A) 9 cm.
(B) 6 cm.
(C) 27 cm.
 (D) 4 cm.
056. A Shepherd has 17 sheep. All but nine died. How many sheep left with him?
- (A) 6
(B) 8
(C) 7
 (D) 9

057. છ અંકોની સૌથી મોટી વર્ગ સંખ્યા શું છે?
- (A) 988001 (B) 990901
(C) 998001 (D) 999001
058. 2359 ની નજીકની સંપૂર્ણ વર્ગ સંખ્યા શું છે?
- (A) 2348 (B) 2402
(C) 2304 (D) 2401
059. બે-અંકની સંખ્યા અને અંકોને બદલીને મેળવેલી સંખ્યા વચ્ચેનો તફાવત 63 છે. સંખ્યાના બે અંકો વચ્ચે શું તફાવત છે?
- (A) 6 (B) 7
(C) 8 (D) 9
060. એક પૂલ 30 મીટર લાંબો, 10 મી. પહોળો અને 5 મી. ઊંડો છે. તેના ફ્લોર અને દિવાલને સિમેન્ટ કરવાની કિંમત રૂ. 10 પ્રતિ ચોરસ મીટર ના દરે શોધો...
- (A) રૂ. 700 (B) રૂ. 7000
(C) રૂ. 1500 (D) રૂ. 15000
061. 50 વિદ્યાર્થીઓ સર્ગંગ બાજુમાં બેઠા છે. રામનું સ્થાન ડાબેથી 15મું અને જતિનનું જમણેથી 12મું સ્થાન છે. રમેશનું સ્થાન જતિનની ડાબી બાજુએ પાંચમું છે. રામ અને રમેશ વચ્ચે કેટલા વિદ્યાર્થીઓ છે?
- (A) 17 (B) 18
(C) 15 (D) 16
062. સાત મિત્રો મીશા, મિંશુ, મોહી, પ્રિયા, વીર, પરી અને કિષીમાંથી દરેકની ઊંચાઈ અલગ-અલગ છે. કૃષી માત્ર ત્રણ જણથી ઊંચી છે. પરી માત્ર વીર કરતા ઊંચી છે. મીશા મિંશુ કરતા ઊંચી છે પણ મોહીથી નથી. પ્રિયા મોહી કરતા ઊંચી છે. તેમની વચ્ચે કોણ સૌથી ઊંચું છે?
- (A) કૃષી (B) મોહી
(C) મિંશુ (D) પ્રિયા
063. નીચેનામાંથી અલગ પડતી સાંખ્યા કઈ છે?
- 3, 7, 13, 20, 31, 43, 57
- (A) 7 (B) 20
(C) 31 (D) 43
064. એક માણસે 7 કલાકમાં 80 કિમીનું અંતર કાપ્યું. અંશતઃ 8 કિમી/કલાક ના દરે ચાલવાથી. અને અંશતઃ સાયકલ પર 16 કિમી/કલાકની ઝડપે. ચાલવાથી અંતર શોધો?
- (A) 28 કિમી. (B) 30 કિમી.
(C) 32 કિમી. (D) 33 કિમી.
065. શાળાનો સેન્ટ્રલ હોલ 18 મીટર લાંબો અને 12.5 મીટર પહોળો છે. દિવાલોની નજીક 50 સે.મી. પહોળી પટ્ટીને ખુલ્લી રાખીને ફ્લોર પર કાર્પેટ નાખવાની છે. ખુલ્લા ભાગનું ક્ષેત્રફળ શોધો?
- (A) 5.5 ચોરસ મીટર (B) 6 ચોરસ મીટર
(C) 29.5 ચોરસ મીટર (D) 15 ચોરસ મીટર

057. What is the largest square number of six digits?
(A) 988001 (B) 990901
(C) 998001 (D) 999001
058. What is the nearest perfect square number to 2359?
(A) 2348 (B) 2402
(C) 2304 (D) 2401
059. The difference between two-digit number and the number obtained by interchanging the digits is 63. What is the difference between the two digits of the number?
(A) 6 (B) 7
(C) 8 (D) 9
060. A pool is 30 m. long, 10 m. broad and 5 m. deep. Find the cost of cementing its floor and its wall at the rate of Rs. 10 per square meter.
(A) Rs. 700 (B) Rs. 7000
(C) Rs. 1500 (D) Rs. 15000
061. 50 students are sitting side by side in a row. Ram's place is 15th from left and Jatin's 12th from right. Ramesh's place is fifth to the left of Jatin. How many students are there between Ram and Ramesh?
(A) 17 (B) 18
(C) 15 (D) 16
062. Each of the seven friends Misha, Minshu, Mohi, Priya, Veer, Pari and Krishi, has different height. Krishi is taller than only three people. Pari is taller than only Veer. Misha is taller than Minshu but not Mohi. Priya is taller than Mohi. Who is tallest among them?
(A) Krishi (B) Mohi
(C) Minshu (D) Priya
063. Find the odd one out:
3, 7, 13, 20, 31, 43, 57
(A) 7 (B) 20
(C) 31 (D) 43
064. A man travelled a distance of 80 km in 7 hrs. partly by walk at a rate of 8 km/h. and partly on bicycle at 16 km/h. find the distance travelled by walk?
(A) 28 km. (B) 30 km.
(C) 32 km. (D) 33 km.
065. The central hall of a school is 18m long and 12.5m wide. A carpet is to be laid on the floor leaving a strip 50 cm wide near the walls, uncovered. Find the area of the uncovered portion?
(A) 5.5 sq. m (B) 6 sq. m
(C) 29.5 sq. m (D) 15 sq. m

066. મનોજે એક પુસ્તકનો 2/8 ભાગ વાંચ્યો હતો. આજે તેણે 12 પાના વાંચ્યા. જો પુસ્તકનાં 72 પાનાં બાકી હોય તો તે પુસ્તકમાં કેટલાં પાનાં છે?
- (A) 222 (B) 112
(C) 132 (D) 114
067. આપેલ માહિતીનો કાળજીપૂર્વક અભ્યાસ કરો અને નીચેના પ્રશ્નનો જવાબ આપો.
8 સહપાઠીઓના જૂથ, 4 છોકરાઓ H, I, J અને K અને 4 છોકરીઓ D, E, F અને G એ લંચ બ્રેક દરમિયાન કોફી પીવા માટે રાઉન્ડ ટેબલ પર બેસવાનું નક્કી કર્યું. તેઓ એવી રીતે બેઠા છે કે:
1. તે બધા નું મુખ એકબીજાની સામે છે.
 2. કોઈ બે છોકરીઓ કે છોકરાઓ બાજુમાં બેઠા નથી.
 3. J એ D અને G વચ્ચે છે અને I ની સામે મુખ છે.
 4. E, જે K અને I વચ્ચે બેઠેલું છે, તે Dની સામે મુખ છે.
 5. H એ F નો તાત્કાલિક જમણી બાજુ છે.
- K ની સામે કોણ બેઠું છે?
- (A) D (B) H
(C) I (D) F
068. EMMULATE શબ્દના પ્રથમ, ત્રીજા, પાંચમા અને છઠ્ઠા અક્ષરો સાથે દરેક શબ્દમાં એક વાર દરેક અક્ષરનો ઉપયોગ કરીને કેટલા અર્થપૂર્ણ અંગ્રેજી શબ્દો બનાવી શકાય?
- (A) એક (B) ત્રણ
(C) ચાર (D) બે
069. નીચેના ચારમાંથી ત્રણ શબ્દો ચોક્કસ રીતે સરખા છે અને એક અલગ છે. અલગ શબ્દ પસંદ કરો.
- (A) ગોગલેસ (B) સ્પેક્ટેકલ્સ
(C) બાયફોકલ (D) ઓપ્ટિકલ રીડર
070. બીજી ટર્મ પ્રથમ ટર્મ સાથે સંબંધિત છે તેવી જ રીતે ત્રીજા પદ સાથે સંબંધિત વિકલ્પ પસંદ કરો.
IVORY : ZWSPJ :: CREAM : ?
- (A) NFDQB (B) SNFDB
(C) DSFCN (D) BQDZL
071. જો $(5x + 2) < (8x - 1)$ અને $(7x - 2) > 3(x + 6)$. x ($x \in \mathbb{N}$) નો સોલ્યુશન સેટ શું હશે
- (A) {2, 3, 4, 5} (B) N
(C) {5, 6, 7, 8} (D) {5, 6, 7, 8, ...}
072. યુનિવર્સિટીમાં ચાર મુખ્ય વિભાગો છે: એન્જિનિયરિંગ, માનવતા, વ્યવસાય અને વિજ્ઞાન. દરેક વિભાગનો પોતાનો સ્ટાફ હોય છે, જેનું વિતરણ નીચે મુજબ છે: એન્જિનિયરિંગ વિભાગ 1200 વ્યક્તિઓને રોજગારી આપે છે, જે યુનિવર્સિટીના કુલ સ્ટાફના 30% હિસ્સો ધરાવે છે. માનવતા વિભાગમાં કુલ સ્ટાફના 20%નો સમાવેશ થાય છે. નાના કદ માટે જાણીતા બિઝનેસ વિભાગમાં 800 સ્ટાફ સભ્યો છે. બાકીના કર્મચારીઓ વિજ્ઞાન વિભાગમાં કાર્યરત છે. એન્જિનિયરિંગ વિભાગમાં વિજ્ઞાન વિભાગમાં સ્ટાફના સભ્યોના ગુણોત્તરની ગણતરી કરો.
- (A) 1:1 (B) 2:3
(C) 3:2 (D) 1:2

066. Manoj had read $\frac{2}{8}$ of a book. Today he read 12 pages. If 72 pages of the book are left then how many pages are there in that book?
- (A) 222 (B) 112
(C) 132 (D) 114
067. Study the given information carefully and answer the question that follows.
A group of 8 classmates, 4 boys H, I, J and K and 4 girls D, E, F and G decided to sit at a round table to have coffee, during the lunch break. They are sitting in such a way that:
- All of them are facing each other.
 - No two girls or boys are sitting side by side.
 - J is between D and G and is facing I.
 - E, who is sitting between K and I, is facing D.
 - H is the immediate right of F.
- Who is sitting in front of K?
- (A) D (B) H
(C) I (D) F
068. How many meaningful English words can be formed with the first, the third, the fifth and the sixth letters of the word EMMULATE, using each letter once in each word?
- (A) One (B) Three
(C) Four (D) Two
069. Three of the following four words are alike in a certain way and one is different. Select the odd one.
- (A) Goggles (B) Spectacles
(C) Bifocal (D) Optical Reader
070. Select the option that is related to the third term in the same way as the second term is related to the first term.
IVORY : ZWSPJ :: CREAM : ?
- (A) NFDQB (B) SNFDB
(C) DSFCN (D) BQDZL
071. If $(5x + 2) < (8x - 1)$ and $(7x - 2) > 3(x + 6)$. What will be solution set of x ($x \in \mathbb{N}$)
- (A) {2, 3, 4, 5} (B) \mathbb{N}
(C) {5, 6, 7, 8} (D) {5, 6, 7, 8, ...}
072. A university has four major departments: Engineering, Humanities, Business, and Science. Each department has its own staff, distributed as follows: The engineering department employs 1200 individuals, which account for 30% of the university's total staff. The humanities department comprise of 20% of the total staff. The business department, known for its smaller size, has 800 staff members. The remaining staff members are employed in science department. Calculate the ratio of staff members in the engineering department to those in the science department.
- (A) 1:1 (B) 2:3
(C) 3:2 (D) 1:2

073. એક કંપનીમાં કામ કરતા 10 કર્મચારીઓનો સરેરાશ માસિક પગાર રૂ. 6835 અને તેમાંથી 3 મહિલા કર્મચારીઓનો સરેરાશ માસિક પગાર રૂ. 5428. બાકીના 7 કર્મચારીઓનો સરેરાશ માસિક પગાર કેટલો છે?
- (A) 6550 (B) 6845
(C) 7238 (D) 7438
074. જો બે અનભીનત છ બાજુ વાળી ડાઈસ ફેંકવામાં આવે તો, બંને ડાઈસ પરની સંખ્યાઓનો સરવાળો એ 5 કરતા મોટી અવિભાજ્ય સંખ્યા હોવાની સંભાવના કેટલી છે?
- (A) 2/9 (B) 1/9
(C) 1/3 (D) 15/36
075. લંબચોરસ ટબનો કર્ણ 25 ફૂટ છે. જો ટૂંકી બાજુ 15 ફૂટ હોય, તો ટબનો વિસ્તાર શોધો.
- (A) 420 ચોરસ ફૂટ (B) 300 ચોરસ ફૂટ
(C) 360 ચોરસ ફૂટ (D) 240 ચોરસ ફૂટ
076. અનભીનત ન હોય તેવી ડાઈસમાં તેના પર 1 થી 6 સુધીની સંખ્યાઓ લખેલી હોય છે. જ્યારે આ ડાઈસ ફેંકવામાં આવે ત્યારે 1 ની ઘટનાની સંભાવના બિન-ધન સંખ્યા છે. માટે 2 થી 6 સુધીની આ 5 નંબરો ની સંભાવના સમાન છે. આ ડાઈસ એકવાર ફેંકવામાં આવે છે. ડાઈસ પર એકી સંખ્યા દેખાય તેવી સંભાવના કેટલી છે?
- (A) 1/5 (B) 2/5
(C) 1/2 (D) 2/3
077. AP 25, 20, 15, ... નો કયો પદ પ્રથમ ઋણ શબ્દ છે?
- (A) 9મી (B) 8મી
(C) 7મી (D) 10મી
078. જો $1.2:3.9 :: 2:a$, તો a ની કિંમત શોધો.
- (A) 6.5 (B) 6.9
(C) 6.3 (D) 6.1
079. ત્રણ સંખ્યાઓનો સરવાળો 106 છે. પ્રથમથી બીજાનો ગુણોત્તર 5:6 છે અને બીજાથી ત્રીજાનો ગુણોત્તર 9:10 છે. બીજો નંબર શોધો.
- (A) 54 (B) 27
(C) 18 (D) 36
080. જો મુદ્દલ રૂ. 5000/- 8 વર્ષમાં રૂ. 10000/- બને છે. તો બેંકમાં સાદા વ્યાજનો દર શું છે?
- (A) 12.5% (B) 20%
(C) 15% (D) 10%

073. The average monthly salary of 10 employees working in a company is Rs. 6835 and the average monthly salary of 3 women employees among them is Rs. 5428. What is the average monthly salary of the rest 7 employees?
- (A) 6550 (B) 6845
(C) 7238 (D) 7438
074. If two unbiased six face dice are thrown, what is the probability that the sum of the numbers on both the faces turned up, is a prime number greater than 5?
- (A) $\frac{2}{9}$ (B) $\frac{1}{9}$
(C) $\frac{1}{3}$ (D) $\frac{15}{36}$
075. The diagonal of a rectangular tub is 25 feet. If the shorter side is 15 feet, then find the area of the tub.
- (A) 420 sq feet (B) 300 sq. feet
(C) 360 sq. feet (D) 240 sq. feet
076. A biased dice has numbers from 1 to 6 written on its faces. The probability of occurrence of 1 when this dice is thrown is a non-positive number. The probability of occurrence of numbers from 2 to 6 is same for these 5 numbers. This dice is thrown once. What is the probability that an odd number appears on the dice?
- (A) $\frac{1}{5}$ (B) $\frac{2}{5}$
(C) $\frac{1}{2}$ (D) $\frac{2}{3}$
077. Which term of the AP 25, 20, 15, ... is the first negative term?
- (A) 9th (B) 8th
(C) 7th (D) 10th
078. If $1.2 : 3.9 :: 2 : a$, then find the value of a.
- (A) 6.5 (B) 6.9
(C) 6.3 (D) 6.1
079. The sum of three numbers is 106. The ratio of the first to second is 5:6 and that of second to third is 9:10. Find the second number.
- (A) 54 (B) 27
(C) 18 (D) 36
080. What is the rate of simple interest in a bank if the principal amount of Rs. 5000 becomes Rs. 10000 in 8 years?
- (A) 12.5% (B) 20%
(C) 15% (D) 10%

081. બધી જોડણી સાચી હોય તેવો વિકલ્પ પસંદ કરો.

1. કસિદો, કૌસલ્યા, ગ્રંથાવલી, ટેટું, વીચી
2. કસીદો, કૌશલ્યા, ગ્રંથાવલી, ટેટું, વિચી
3. કશિદો, કૌશલ્યા, ગ્રંથાવણિ, ટેટે, વીચી
4. કશીદો, કૌસલ્યા, ગ્રંથાવલિ, ટેટું, વિચિ

(A) ફક્ત 1 સાચું છે.

(B) ફક્ત 2 સાચું છે.

(C) ફક્ત 2 અને 4 સાચા છે.

(D) ફક્ત 2 અને 3 સાચા છે.

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

1. વિરાવ, ધ્વનિ, અવાજ, ઘોષ
2. એકાંત, વિવિક્ત, એકાકી, એકલું
3. વિતથ, વિદથ, આવડત, જ્ઞાન
4. વિભા, કિરણ, રશ્મિ, મરીચી

(A) ફક્ત 1 અને 2 યોગ્ય છે.

(B) ફક્ત 3 અને 4 યોગ્ય છે.

(C) ફક્ત 1, 3 અને 4 યોગ્ય છે.

(D) 1, 2, 3 અને 4 યોગ્ય છે.

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

1. વિવૃત્ત × સંકુચિત
2. ધ્વાંત × ઉજાશ
3. નિતાંત × ધ્વાંત
4. ન્યૂનતા × ઉચ્ચતા

(A) ફક્ત 1 યોગ્ય છે.

(B) ફક્ત 1 અને 2 યોગ્ય છે.

(C) ફક્ત 1, 3 અને 4 યોગ્ય છે.

(D) ફક્ત 1 અને 4 યોગ્ય છે.

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

રૂઢિપ્રયોગ

અર્થ

1. અખાડા કરવા = વાત ધ્યાનમાં ન લેવી
2. આંખ આડા કાન કરવા = વાત ધ્યાનમાં ન લેવી
3. કાન તળે કાઢવું = વાત ધ્યાનમાં ન લેવી
4. કાને ન ધરવું = વાત ધ્યાનમાં ન લેવી

(A) ફક્ત 1,2 અને 4 યોગ્ય છે.

(B) ફક્ત 2 અને 3 યોગ્ય છે.

(C) ફક્ત 2, 3 અને 4 યોગ્ય છે.

(D) 1, 2, 3 અને 4 બધા જ યોગ્ય છે.

085. નીચે આપેલી કહેવતોને ધ્યાને લઈ તેના વિશે સાચો વિકલ્પ પસંદ કરો.

1. મન હોય તો માળવે જવાય
2. ઘરડાં ગાડાં વાળે
3. સાઠી બુદ્ધિ નાઠી
4. પાકે ઘડે કાંઠા ન ચડે

(A) 3 અને 4 સમાનાર્થી કહેવતો છે, 1 અને 4 વિરુદ્ધાર્થી કહેવતો છે.

(B) 1 અને 2 સમાનાર્થી કહેવતો છે, 2 અને 4 વિરુદ્ધાર્થી કહેવતો છે.

(C) 1 અને 4 સમાનાર્થી કહેવતો છે, 2 અને 3 વિરુદ્ધાર્થી કહેવતો છે.

(D) 1 અને 3 સમાનાર્થી કહેવતો છે, 1 અને 2 વિરુદ્ધાર્થી કહેવતો છે.

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

સામાસિક શબ્દ - પ્રકાર

1. નીલોપલ - કર્મધારય સમાસ
2. તળિયાઝાટક - મધ્યમપદલોપી સમાસ
3. વીસનહોરી - બહુવ્રીહિ સમાસ
4. નવનિર્માણ - દ્વિગુ સમાસ

(A) ફક્ત 1 અને 3 યોગ્ય છે.

(B) ફક્ત 2 અને 3 યોગ્ય છે.

(C) ફક્ત 1, 2, અને 3 યોગ્ય છે.

(D) 1, 2, 3 અને 4 બધા જ યોગ્ય છે.

087. નીચે આપેલી સંધિ વિશે સાચો વિકલ્પ પસંદ કરો.

1. જગત્ + જનની = જગજનની
2. જગત્ + માતા = જગન્માતા
3. તનુ + અંગી = તન્વંગી
4. જગત્ + નાથ = જગન્નાથ

(A) ફક્ત 1 અને 2 સાચા છે.

(B) ફક્ત 1 અને 3 સાચા છે.

(C) 1, 2, 3 અને 4 બધા જ સાચા છે.

(D) 1, 2, 3 અને 4 બધા જ ખોટા છે.

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

1. 'ભૂખ્યાં-જનોનો જઠરાગ્નિ જાગશે,
ખંડેરની ભસ્મકણી ન લાધશે.'
2. 'કદી અભિમાન કરે જન કોય,
હજાર વસા હલકો બહુ હોય.'
3. 'શ્યામ ચરણ સ્મરણ મિત્ર, સરસ રીત સાચી;
તે વિના ત્રિલોક મધ્ય, કોડ વાત કાચી.'
4. 'દીઠો તને હંસની હાર માંહે,
દીઠો અષાઢી જલધાર માંહે.'

(A) 1. ઈન્દ્રવજ્રા, 2. મોતીદામ, 3. મહીદીપ, 4. ઈન્દ્રવંશા

(B) 1. ઈન્દ્રવંશા, 2. મોતીદામ, 3. મહીદીપ, 4. ઈન્દ્રવજ્રા

(C) 1. ઈન્દ્રવંશા, 2. મહીદીપ, 3. મોતીદામ, 4. ઈન્દ્રવજ્રા

(D) 1. ઈન્દ્રવજ્રા, 2. મોતીદામ, 3. મહીદીપ, 4. ઉપેન્દ્રવજ્રા

089. નીચે આપેલી કાવ્ય-પંક્તિને ધ્યાને લઈ એના અલંકારના પ્રકાર માટે યોગ્ય વિકલ્પ પસંદ કરો.

1. 'કાયા કંચન સમી બચપણથી દીકરા માએ જે ઘણી સંભાળી.'
2. 'મારા જીવનની વાડીમાં ફૂલો ખિલતાં,
એ તો દુઃખો કેરા તડકા નિત્યે ઝીલતાં.'
3. 'આ આત્મા એક દિન લેવાશે,
એ રાખ્યો કોઈનો નહીં રહેશે,
હે.. તારી ભાડાની કોટડી ખાલી થશે.'
4. 'તારી જેવી એક તું જ હે જનની!'

- (A) 1. ઉપમા, 2. રૂપક, 3. અતિશયોક્તિ, 4. ઉપમા
(B) 1. ઉપમા, 2. અતિશયોક્તિ, 3. રૂપક, 4. અનન્વય
(C) 1. ઉપમા, 2. રૂપક, 3. અતિશયોક્તિ, 4. અનન્વય
(D) 1. ઉપમા, 2. શ્લેષ, 3. રૂપક, 4. ઉપમા

090. નીચેની વિગતોને ધ્યાને લઈ યોગ્ય વિકલ્પ પસંદ કરો.

1. સંધિ : ભિષજૂ + રાજ = ભિષગ્રાજ
2. કર્મધારય સમાસ - ખડમોસાળ
3. સજીવારોપણ અલંકાર - મનુષ્યમાં ધનનો તૃષ્ણા વાયુ બહેકી રહ્યો છે.
4. રૂઢિપ્રયોગના અર્થનો અર્થ : મોટે પાટલે બેસવું = ઊંચા પટે બેસવું

- (A) ફક્ત 1 અને 2 સાચા છે. (B) ફક્ત 1, 2 અને 3 સાચા છે.
(C) ફક્ત 2 અને 4 સાચા છે. (D) ફક્ત 4 સાચું છે.

091. _____ Ganga is _____ sacred river.

- (A) No article / the (B) The / the
(C) The / a (D) No article / No article

092. Either the manager or his assistant failed in _____ duty.

- (A) his (B) their
(C) her (D) the




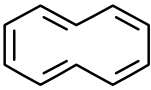
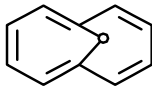
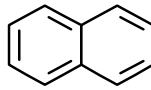
093. In course _____ time he realised his mistake.
- (A) of (B) to
(C) off (D) on
094. This is the house _____ Jack built.
- (A) which (B) whom
(C) what (D) that
095. I shall wait till you _____ your lunch.
- (A) finished (B) finish
(C) have finished (D) will finish
096. _____ you lend me your scooter, please?
- (A) Would (B) Shall
(C) Will (D) Can
097. They made him king. (Change the voice)
- (A) King made by them (B) He was made king
(C) He has been made king (D) King has been made by them
098. Had you not informed me, I _____ missed the flight.
- (A) will have (B) would have
(C) shall have (D) could have
099. I saw the lion _____ the prey.
- (A) catching (B) catches
(C) caught (D) had caught
100. There is only _____ sugar in the jar.
- (A) little (B) a few
(C) a little (D) few

101. Lindlar's catalyst is
 (A) Platinum in ethanol (B) Nickel in ethanol
 (C) Palladium with barium sulphate (D) Sodium in liquid ammonia
102. For a reaction,

$$\text{ph} - \text{C} \equiv \text{C} - \text{ph} \rightarrow \begin{array}{c} \text{ph} \quad \quad \text{h} \\ \diagdown \quad \diagup \\ \text{C} - \text{C} \\ \diagup \quad \diagdown \\ \text{h} \quad \quad \text{ph} \end{array}$$

 The required reagent is at _____ the following.
 (A) LiAlH_4 (B) Li/NH_3
 (C) H_2/Ni (D) H_2/Zn
103. Lucas reagent is _____
 (A) Anhydrous AlCl_3 with Con. HCl (B) Anhydrous ZnCl_2 with K_2SO_4
 (C) Anhydrous ZnCl_2 with HCl (D) Anhydrous CaCl_2 with HCl
104. Tischenko reaction is a modification of _____
 (A) Aldol condensation (B) Cannizaro reaction
 (C) Claisen condensation (D) Reimer-Tieman reaction
105. Ozonolysis at, which of the following defines give propanone as one product?
 (A) Propene (B) 2-Methyl -1-butene
 (C) 2,3-Dimethyl but-2-ene (D) 1-Butene
106. Which one of the following is not Chiral?
 (A) 2-Chloropentane (B) 1-Chloropentane
 (C) 1-Chloro-2-Methyl pentane (D) 3-Chloro-2-Methyl pentane
107. Which one of the following statement is not correct?
 (A) Reactivity order at halogen towards alkane is $\text{F}_2 > \text{Cl}_2 > \text{Br}_2$
 (B) Oxygen acts as inhibitor in reaction between CH_4 and Cl_2
 (C) Iodine does not react with CH_4 at all
 (D) The reaction at Cl_2 and CH_4 proceeds via ionic mechanism
108. During the addition Polymerization, the reaction proceeds via _____
 (A) Free radical chain reaction (B) Step-Growth process
 (C) Addition reaction (D) Cascade process
109. The number-average molar mass (M_n) and weight average molar mass (M_w) of a polymer are obtained respectively by _____
 (A) Osmometry and Viscosity (B) Light scattering and sedimentation
 (C) Viscosity and Light scattering (D) Osmometry and Light scattering
110. The intrinsic Viscosity depends on the molar mass ($n = km^a$), the empirical Constant k and a are dependent on _____
 (A) Polymer-Polymer interaction (B) Polymer-Solvent pair
 (C) Polymer only (D) Solvent only

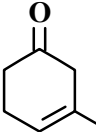
111. For the reaction,
 $2\text{N}_2\text{O}_5 \rightarrow 4\text{NO}_2 + \text{O}_2$
 Rate at reaction is _____
- (A) $\frac{1}{2} \frac{d}{dt}(\text{N}_2\text{O}_5)$ (B) $2 \frac{d}{dt}(\text{N}_2\text{O}_5)$
 (C) $\frac{1}{4} \frac{d}{dt}(\text{NO}_2)$ (D) $4 \frac{d}{dt}(\text{NO}_2)$
112. Which one of the following intermediate is involved in witting reaction?
 (A) Carbocation (B) Carbanion
 (C) Ylide (D) Free radical
113. Bond enthalpy of $\text{C} \equiv \text{C}$ bond is _____
 (A) 823 KJ/mol (B) 463 KJ/mol
 (C) 375 KJ/mol (D) 288 KJ/mol
114. Methane on heating with a regular supply at dioxygen at high pressure in presence of MO_2O_3 gives _____.
 (A) Methanal (B) Methanol
 (C) Methanoic acid (D) Dimethyl ether
115. Number of isomers possible for C_6H_{14} is _____.
 (A) 3 (B) 4
 (C) 5 (D) 6
116. Molecular formulae of compound used in welding is _____.
 (A) $\text{C}_3\text{H}_5\text{N}$ (B) C_2H_2
 (C) C_2H_6 (D) $\text{C}_3\text{H}_6\text{O}$
117. Half-life at first order reaction is 10 min. _____% at reaction will be completed in 100 min.
 (A) 99.9 (B) 75
 (C) 80 (D) 25
118. According to Arhenious equation, rate constant of chemical reaction is equal to _____ of the following?
 (A) $\text{Ae}^{-\text{Ea}/\text{RT}}$ (B) $\text{Ae}^{\text{Ea}/\text{RT}}$
 (C) $\text{Ae}^{\text{RT}/\text{Ea}}$ (D) $\text{Ae}^{-\text{RT}/\text{Ea}}$
119. For a reaction,
 $\text{CH}_3\text{COO}_2\text{CH}_5 + \text{H}_2\text{O} \xrightarrow{\text{H}^+} \text{CH}_3\text{COOH} + \text{C}_2\text{H}_5\text{OH}$
 Order of reaction is _____
 (A) First (B) Second
 (C) Third (D) Zero
120. pH of aqueous solution of 0.02 M acetic acid is _____ Where, $ka = (1.7 \times 10^{-5})$
 (A) 5.6 (B) 1.9
 (C) 2.1 (D) 3.2
121. The member of unpaired electrons in ground state of Al is (Where, $z = 13$)
 (A) 1 (B) 2
 (C) 3 (D) 4

122. Degree of ionisation does not depend on _____
 (A) Dilution (B) Molecular mass of the electrolyte
 (C) Nature at electrolyte (D) Nature at the solvent
123. The potential at hydrogen electrode at pH¹ is _____
 (A) 0.59 V (B) 0.059 V
 (C) 0 V (D) - 0.059 V
124. Which one of the following is not correct representation for a cell?
 (A) $\epsilon^\circ_{\text{cell}} = \text{Reduction potential of Cathode} + \text{Oxidation potential of anode}$
 (B) $\epsilon^\circ_{\text{cell}} = \text{Oxidation potential of Cathode} + \text{Oxidation potential of anode}$
 (C) $\epsilon^\circ_{\text{cell}} = \text{Reduction potential of cathode} - \text{Oxidation potential of anode}$
 (D) $\epsilon^\circ_{\text{cell}} = \text{Reduction potential of Cathode} - \text{Reduction potential of anode}$
125. The value at k_a for HCN is 4.0×10^{-10} . What will be the value at P_{k_b} for CN^- ?
 (A) 2.2 (B) 4.6
 (C) 1.3 (D) 6.8
126. What will be the EMF of cell for
 $\text{Ni}/\text{Ni}^{+2} (1.0\text{M}) \parallel \text{Au}^{+3} (1\text{M})/\text{Au}$
 Where E° for $\text{Ni}^{+2}/\text{Ni} = -0.25 \text{ V}$,
 $\text{Au}^{+3}/\text{Au} = 1.5 \text{ V}$
 (A) +1.25 V (B) +1.75 V
 (C) -1.25 (D) -1.75 V
127. The rusting at iron is catalysed by which of the following?
 (A) H^+ (B) Zn
 (C) O_2 (D) Fe
128. Correctly matched Carbonyl stretching frequency for the following is
 (P)  (x) 1750 cm^{-1}
 (Q)  (y) 1770 cm^{-1}
 (R)  (z) 1800 cm^{-1}
 (A) P - y, Q - z, R - x (B) P - y, Q - x, R - z
 (C) P - z, Q - y, R - x (D) P - x, Q - z, R - y
129. Among A - C, aromatic compounds are _____ of the following.
  
 (A) A, B and C (B) A and B only
 (C) B and C only (D) A and C only
130. Correct order at basicity is _____.
 (A) $\text{NH}_3 < \text{NMe}_3 < \text{NF}_3$ (B) $\text{NF}_3 < \text{NMe}_3 < \text{NH}_3$
 (C) $\text{NH}_3 < \text{NF}_3 < \text{NMe}_3$ (D) $\text{NF}_3 < \text{NH}_3 < \text{NMe}_3$

131. Which one among the following is strongest conjugate base?
 (A) OAc^- (B) NO_2^-
 (C) OCl^- (D) F^-
132. Activity co-efficient calculated using Debye-Huckel law are always
 (A) Greater than one (B) Lesser than one
 (C) Equal to one (D) Less than zero
133. The ionic strength at 0.01 M K_2SO_4 is _____.
 (A) 0.01 (B) 0.02
 (C) 0.03 (D) 0.04
134. Reaction at ethelene with 1% alkaline KMnO_4 produces _____.
 (A) Formaldehyde (B) Acetic acid
 (C) Acetone (D) Ethelene glycol
135. Choose the Correct order at ionic radii among the following
 (A) $\text{Cl}^- > \text{I}^- > \text{Te}^{-2} > \text{Ar}^+$ (B) $\text{Te}^{-2} > \text{I}^- > \text{Cl}^- > \text{Ar}^+$
 (C) $\text{I}^- > \text{Te}^{-2} > \text{Cl}^- > \text{Ar}^+$ (D) $\text{I}^- > \text{Cl}^- > \text{Ar}^+ > \text{Te}^{-2}$
136. Choose incorrect order for acidic strength.
 (A) $\text{SiO}_2 > \text{CO}_2$ (B) $\text{CO}_2 > \text{CO}$
 (C) $\text{HClO}_2 > \text{HOCl}$ (D) $\text{SO}_2 < \text{SO}_3$
137. Which one of the following species has maximum number of lone pair on central atom?
 (A) BrF_4^- (B) SO_4^{-2}
 (C) CO_3^{-2} (D) XeF_3^+
138. Highest carbon content is in _____ form of iron.
 (A) Pig iron (B) Wrought iron
 (C) Steel (D) Cast iron
139. Which one of the following is not an ore of copper?
 (A) Atacamite (B) Copper Glance
 (C) Cerrysite (D) Chalcopyrite
140. Which one of the following is used for making mirrors?
 (A) Tin amalgam (B) zinc amalgam
 (C) Pure tin (D) Pure mercury
141. The Purest Variety of iron is called _____.
 (A) Pig iron (B) Steel
 (C) Wrought iron (D) Cemeritite
142. Identify M & N in the following reaction.
 Copper Glance $\xrightarrow[\text{in presence of air}]{\text{Controlled heating}}$ M + SO_2

$$\text{M} \xrightarrow{\text{N}} \text{Cu} + \text{SO}_2 \uparrow$$

 (A) M = Cu_2O , N = self reduction (B) M = $\text{Cu}_2\text{O} + \text{Cu}_2\text{S}$, N = only heating
 (C) M = Cu_2O , N = Carbon reduction (D) M = Cu_2O , N = Electrolytic reduction
143. Which of the following ores can be considered as an ore of both Ca and Mg?
 (A) Dolomite (B) Cacite
 (C) Magnesite (D) Magnetite

144. Sodium nitroprusside solution is used to detect _____ of the following ions.
 (A) S^{-2} (B) $S_2O_3^{-2}$
 (C) Cu^{+2} (D) Al^{+3}
145. Choose the correct solubility order for the following.
 (A) $Sb_2S_3 < BaS < MnS < K_2S$ (B) $Sb_2S_3 < MnS < BaS < K_2S$
 (C) $BaS < MnS < Sb_2S_3 < K_2S$ (D) $K_2S < MnS < Sb_2S_3 < BaS$
146. The aqueous solution of a salt having cation gives precipitates on treatment with $(NH_4)_2S$, which is soluble in acetic acid. The cation will be _____.
 (A) Mn^{+2} (B) Zn^{+2}
 (C) Ni^{+2} (D) Hg^{+2}
147. Correct ionization energy order among the following is _____.
 (A) $Sc > y > La$ (B) $Sc > y = La$
 (C) $Sc < y < La$ (D) $Sc > La > y$
148. IUPAC name of the following compound is _____.

 (A) 3-Methyl-cyclohex-3-en-1-one (B) 5-Methyl-1-cyclohex-4-en-1-one
 (C) 1-methyl-cyclohex-1-en-5-one (D) 2-methyl-cyclohex-1-en-4-one
149. Which one of the following pair is not "Hard acid"
 (A) H^+K^+ (B) H^+Tl^+
 (C) H^+Li^+ (D) H^+Be^+
150. On a 100 MHz spectrometer, what is the shift difference in H_2 between signal appearing in the spectrum at 81.5 PPM and 2.6 PPM
 (A) 100 Hz (B) 110 Hz
 (C) 120 Hz (D) 150 Hz
151. Which one of the following statement correctly describes the formation of fumes?
 (A) Fumes are liquid particles formed by condensation
 (B) Fumes are gaseous particles formed by sublimation
 (C) Fumes are solid Particles formed by condensation at vapors
 (D) Fumes are liquid particles formed by distillation
152. A clean filter is found to weigh 10.00 g. After 24 h in high volume, the filter plus dust weighs 10.10 g. The air flows at the start and end of the test are 60 and 40 cfm respectively. What will be Particulate concentration?
 (A) 50 wg/m^3 (B) 49 wg/m^3
 (C) 52 wg/m^3 (D) 51 wg/m^3
153. Which is the correct reaction, when sulfurous acid (H_2SO_3) donates a Proton to a water molecule?
 (A) $H_2SO_{3(aq)} + H_2O_{(l)} \rightleftharpoons SO_{3(aq)}^- + 2H_3O_{(aq)}^+$
 (B) $H_2SO_{3(aq)} + H_2O_{(l)} \rightleftharpoons HSO_{4(aq)}^- + H_3O_{(aq)}^+$
 (C) $H_2SO_{3(aq)} + H_2O_{(l)} \rightleftharpoons HSO_{3(aq)}^- + H_3O_{(aq)}^+$
 (D) $H_2SO_{3(aq)} + H_2O_{(l)} \rightleftharpoons H_2SO_{4(aq)} + H_{2(g)}$

154. For the following reaction,

$$\text{CO}_3^{2-}(\text{aq}) + \text{H}_3\text{O}^+(\text{aq}) \rightleftharpoons \text{HCO}_3^+(\text{aq}) + \text{H}_2\text{O}(\text{l})$$
Which species acts as the Bronstedlowry base?
(A) HCO_3^- (B) H_2O
(C) H_3O^+ (D) CO_3^{2-}
155. Which of the following best describes the impact of cultural eutrophication on the marine food web in the Gulf of Mexico?
(A) Decreased primary productivity of all trophic levels
(B) Reduced oxygen levels leading to fish kills and decreased biodiversity
(C) Stabilization of predator-Prey relationships
(D) Reduced oxygen level resulting in growth inhibition of all aquatic organisms
156. What will be the theoretical oxygen demand in mg/L for a 1.67×10^{-3} molar solution of glucose ($\text{C}_6\text{H}_{12}\text{O}_6$) to decompose completely?
(A) 221 (B) 321
(C) 421 (D) 521
157. In soils containing manganese, which oxidation state of chromium can be transformed in to more toxic form?
(A) Cr (II) to Cr (III) (B) Cr (II) to Cr (VI)
(C) Cr (III) to Cr (VI) (D) Cr (VI) to Cr (III)
158. Under which soil conditions, dimethyl mercury is most likely generated?
(A) Highly reducing conditions (B) Highly oxidizing conditions
(C) Highly salinity conditions (D) Neutral pH conditions
159. Which soil property has the most significant impact on the mobility of heavy metals like lead in polluted soils?
(A) Soil texture (B) Cation Exchange Capacity (CEC)
(C) Organic matter content (D) Soil PH
160. In geothermal areas, which Primary form of sulfur is released by geysers and hot springs?
(A) Hydrogen sulfide (H_2S) (B) Sulfur dioxide (SO_2)
(C) Carbon disulfide (CS_2) (D) Sulfuric acid (H_2SO_4)
161. One of the following fluxes in the atmosphere, has the smallest sulfur cycle when ____:
(A) Sulfur species washed out in rainfall over land
(B) Sulfates entering the atmosphere as “sea salt”
(C) Sulfur species entering the atmosphere from volcanoes
(D) Sulfur species entering the atmosphere from fossile fuels
162. Which one of the following reaction is responsible for the formation of nitrogen dioxide (NO_2) in atmosphere?
(A) $\text{N}_2 + \text{O}_2 \rightarrow 2\text{NO}$ (B) $\text{NO} + \text{O}_2 \rightarrow \text{NO}_2$
(C) $\text{NO}_2 + \text{O}_2 \rightarrow \text{NO}_3$ (D) $\text{NO} + \text{O}_3 \rightarrow \text{NO}_2 + \text{O}_2$

163. At what wave length of light does nitrogen dioxide (NO_2), when it photochemically dissociate to produce reactive oxygen atoms?
(A) ~ 430 nm (B) < 430 nm
(C) > 430 nm (D) > 530 nm
164. Which one of the following statement is not true regarding carbon monoxide in the atmosphere?
(A) At its average concentration in the global atmosphere, it is probably a threat to human
(B) It is removed from the atmosphere largely by reaction with hydroxyl radical
(C) It is removed from the atmosphere in part by its being metabolized in soil microorganisms
(D) It has some neutral as well as pollutant sources
165. Which among the following is correct, for affinity of human haemoglobin (Hb) for carbon monoxide compared to its affinity for O_2 is _____.
(A) 110 times greater (B) 10 times greater
(C) 210 times greater (D) 310 times greater
166. _____ of the following best describes the role at *Desulfovibrio* bacteria in the reduction of inorganic sulfate ion to hydrogen sulfide (H_2S)
(A) They utilize sulfate as an electron acceptor in the oxidation of organic matter
(B) They use sulfate as an electron donor in the oxidation of organic matter
(C) They oxidize sulfate to produce hydrogen sulfide as a byproduct
(D) They use hydrogen sulfide as an electron donor in the reduction of sulfate
167. Which one of the following gases is known as a natural product of bacterial action on cysteine?
(A) Methane (B) Sulfur dioxide
(C) Sulfur trioxide (D) Hydrogen sulfide
168. Which specific pollutant is primarily responsible for the blackening of stone monuments and buildings, often referred as “soiling”?
(A) Sulfur dioxide (B) Particulate matter
(C) Nitrogen oxides (D) Ozone
169. Which one of the following pollutant is most responsible for deterioration of stained-glass windows in historic buildings?
(A) Ammonia (B) Sulfur dioxide
(C) Nitrogen oxides (D) Ozone
170. Which primary material was used in the construction of Great Stupa at Sanchi?
(A) Sandstone (B) Granite
(C) Marble (D) Limestone
171. The preservation of manuscripts found in the Bamiyan caves can be attributed to which of the following material Property?
(A) Chemical stability (B) Physical strength
(C) Reflectivity (D) Thermal conductivity
172. Which type of biological deterioration causes significant damage to the wooden structures in the ancient city at Pompeii?
(A) Insect infection (B) Termite’s infection
(C) Fungal decay (D) Rodent gnawing

173. Which one of the following factor is least likely to contribute the deterioration of frescoes in ancient Roman Villas?
- (A) Stable temperature (B) Light exposure
(C) Air pollution (D) Humidity fluctuation
174. Which one at the ancient city suffered significant damage due to a series of earthquakes in 62 AD, leading to subsequent restoration efforts that were incomplete before its destruction in 79 AD?
- (A) Ephesus (B) Pompeii
(C) Carthage (D) Herculaneum
175. Which of the following has the most immediate effect of arson on organic archaeological materials?
- (A) Microbial growth (B) Char formation
(C) Oxidative weathering (D) Hydrolytic degradation
176. The site known for its terracotta army, faced severe water logging issues after flooding in 1976 is at _____.
- (A) Xi'an (B) Petra
(C) Machu Picchu (D) Angkor Wat
177. Main focus of the Venice Charter (1964) in context to conservation policy is _____.
- (A) Economic assessment of heritage sites
(B) Preservation and restoration at historic buildings
(C) Technological innovations in conservation
(D) Community engagement in conservation efforts
178. According to the International Council of Monuments and Sites (ICOMOS), ethical principles, the primary ethical responsibility at conservators is _____.
- (A) Modernizing heritage sites (B) Ensuring the authenticity of heritage
(C) Maximizing tourism revenue (D) Expanding the use at synthetic materials
179. Which one of the following best defines preventive conservation in context of cultural heritage?
- (A) Complete restoration to the original state
(B) Direct intervention to repair damage
(C) Actions aimed at avoiding and minimizing future deterioration
(D) Replacement of damaged parts with new materials
180. Which one of the following is true for “Primary difference between preventive and remedial conservation”?
- (A) Preventive conservation involves minimal intervention, while remedial conservation involves active treatment
(B) Preventive conservation is more costly than remedial conservation
(C) Preventive conservation is reactive, while remedial conservation is proactive
(D) Preventive conservation is only for movable objects, while remedial conservation is for immovable heritage
181. Which one of the following tools for analysis is must required for a well-equipped conservation laboratory?
- (A) Spectrophotometer (B) Typewriters
(C) Large printing press (D) Water colour sets

182. Which one of the following international institutions offers a comprehensive conservation programme?
 (A) British Library, UK
 (B) American Institute for Conservation, USA
 (C) The Getty Conservation Institute, USA
 (D) Louvre Museum, France
183. The International Institute of Conservation of historic and artistic works (IIC) focuses on:
 (A) Legal Protection of heritage sites
 (B) Scientific research and practice in conservation
 (C) Community engagement in heritage conservation
 (D) Economic valuation of cultural properties health for conservation
184. Match the following terms with their corresponding headquarters :

List I	List II
(a) ICOMOS	(i) Gland, Switzerland
(b) IUCN	(ii) Charenton-Le-Pont, France
(c) ICCROM	(iii) Rome, Italy
(A) (a) - (ii), (b) - (i), (c) - (iii)	(B) (a) - (i), (b) - (ii), (c) - (iii)
(C) (a) - (iii), (b) - (i), (c) - (ii)	(D) (a) - (i), (b) - (iii), (c) - (ii)
185. Which one of the following is a characteristic property of organic materials used in archaeological collections?
 (A) Susceptibility to biodegradation
 (B) High thermal conductivity
 (C) Inertness to chemical reactions
 (D) High melting point
186. Which one of the following materials is most susceptible to acid hydrolysis leading significant decay in archaeological collections?
 (A) Marble
 (B) Iron
 (C) Parchment
 (D) Ceramic
187. Which type of environmental aggressor is commonly responsible for the accelerated decay of paper based artifacts in archaeological collections?
 (A) Fluctuating humidity levels
 (B) High UV exposure
 (C) Higher temperatures
 (D) Enhanced biological growth
188. Which type of material is most susceptible to photochemical degradation due to UV light exposure?
 (A) Bronze
 (B) Cotton textiles
 (C) Granite
 (D) Bone
189. Why is the conservation of protective and technologically informative surface finishes on metals, when aluminium is considered important?
 (A) Because it improves the structural strength of the metal
 (B) Because it prevents the metal from tarnishing
 (C) Because it provides historical and technological information
 (D) Because it enhances the aesthetic appeal of the metal

190. The purpose of oddy test in context to museum collection is _____.
- (A) To determine the mechanical strength of metals
 - (B) To test the thermal conductivity of construction materials
 - (C) To identify gas pollutants that can cause corrosion in metals
 - (D) To measure the density at different metal alloys
191. Which one of the following materials is known to cause corrosion on aluminium and its alloys when kept in museum environments?
- (A) Formic acid
 - (B) Nitric acid
 - (C) Sulfur compounds
 - (D) Carbonyl pollutants
192. What is the common source of corrosion on zinc coins and Indian Bidri Ware in museum collections?
- (A) High humidity levels
 - (B) Handling by people
 - (C) Improper temperature Control
 - (D) Exposure to sulfur compounds in the air
193. Without electronic devices which traditional method is used to control relative humidity in a storage to maintain environment?
- (A) Silica gel packets
 - (B) Dehumidifiers
 - (C) HVAC systems
 - (D) Thermoelectric coolers
194. Which modern technology is used for non-destructive analysis at materials to assess the impact of environmental factors?
- (A) Polarized Light Microscopy
 - (B) X-ray Fluorescence (XRF)
 - (C) Atomic Absorption Spectroscopy (AAS)
 - (D) Acid-base Titration
195. The primary goal of IPM incultural heritage conservation is _____
- (A) To minimize the impact of pests on cultural objects
 - (B) To eradicate all pests completely
 - (C) To eliminate the need for pest control measures
 - (D) To preserve cultural heritage without any interventions
196. What is the recommended temperature range for freezing objects to control pest infestations ?
- (A) Below -10°C
 - (B) 5°C to 10°C
 - (C) 0°C to 5°C
 - (D) Above 10°C
197. Which type of fungicide is commonly used in IPM for controlling fungal growth on wooden objects?
- (A) Ethelene oxide
 - (B) Chlorinated hydrocarbons
 - (C) Triazole derivatives
 - (D) Organo phosphates
198. The primary principle used to control atmospheres in IPM is _____.
- (A) To create anoxic conditions
 - (B) To introduce humidity levels
 - (C) To introduce pests in natural environments
 - (D) To reduce temperature fluctuations

199. What is the first step in disaster preparedness process for cultural heritage institutions?
- (A) Risk assessment (B) Public awareness
(C) Recovery planning (D) Securing funds
200. In disaster management the term “mitigation” specifically refers to _____.
- (A) Financial compensation for loses
(B) Efforts to reduce disaster risk
(C) Efforts to prevent disaster from happening
(D) Immediate response efforts
201. Which one of the following measures is not typical Part of disaster recovery for cultural heritage sites?
- (A) Documentation of damage
(B) Salvage and conservation of artifacts
(C) Structural repairs and stabilization
(D) Development at a disaster response plan
202. In context to disaster management the term “Preparedness” includes _____.
- (A) Post-disaster rebuilding
(B) Emergency response exercises
(C) Analysis of past disasters
(D) Assessment of long-term climate impacts
203. Which disaster management strategy involves creating detailed plans for the continuity at operations during and after a disaster?
- (A) Mitigation (B) Preplanning
(C) Preparedness (D) Response
204. During packing of archaeological materials for transportation, which one of the following material is recommended to prevent physical damage?
- (A) Polyethylene foam and acid-free tissue paper
(B) Cardboard boxes without padding
(C) Newspaper and standard plastic wrap
(D) Metal containers with no padding
205. Key consideration, when transporting archaeological materials to ensure their safety is _____.
- (A) speed of transport
(B) cost-effectiveness
(C) climate control and shock absorption
(D) number of items transported at once
206. Which of the following is a fundamental rule for handling archaeological material to Prevent damage?
- (A) Minimizing handling and using appropriate gloves
(B) Storing objects on open shelves for easy access
(C) Using bare hands to enhance tactile feedback
(D) Handling objects as frequently as possible to assess condition

207. During excavation, which one of the following approach is recommended for accurate archaeological finding?
(A) Digital photography and 3D scanning
(B) Sketching by hand only
(C) Relying solely on memory and written notes
(D) Drawing plans without any measurement
208. Which one of the following is crucial for ensuring the stability of fragile objects during transportation?
(A) Regular office tape
(B) Standard plastic fags
(C) Acid-free storage boxes with foam inserts
(D) Metal crates without padding
209. Which of the conservation issue is most likely affect organic materials during excavation?
(A) Abrasion from handling
(B) Corrosion
(C) Chemical reactions with modern pollutants
(D) Desiccation and microbial decay
210. Without causing damage which one of the following technique is commonly used to examine the internal structure at artifacts?
(A) Chemical etching
(B) Micro-drilling
(C) Ultrasonic testing
(D) X-ray radiography
211. While diagnosing the type and extent of decay in wooden artifacts, which one of the following factor is crucial for identifying biological deterioration?
(A) Chemical composition
(B) Weight loss Percentage
(C) Presence of moisture
(D) Surface abrasion
212. The primary purpose of documentation, where the condition at an artifact maintained before commencing treatment is _____.
(A) To establish a baseline for evaluating treatment efficacy
(B) To assess the artifact's aesthetic appeal
(C) To determine the market value of the artifact
(D) To record the artifact's historical significance
213. In testing probable treatments for metal artifacts, which one of the following method is used to evaluate the corrosion resistance of applied coatings?
(A) Thermal cycling
(B) Tensile strength testing
(C) Hardness testing
(D) Salt spray testing
214. Which one of the following material is commonly used in the treatment of paper artifacts to consolidate weakened areas without altering the appearance?
(A) Paraloid B-72
(B) Polyvinyl acetate (PVA)
(C) Methyl cellulose
(D) Gelatin

215. A technique recommended for testing the suitability of cleaning method on a fragile ceramic object is _____.
- (A) Applying the cleaning agent to a hidden area
 - (B) Conducting a full-scale cleaning trial
 - (C) Using mechanical cleaning tools
 - (D) Immersing the object in the cleaning solution
216. Which one of the following environmental parameter is most critical to control in storage areas to prevent decay of organic materials?
- (A) Airflow
 - (B) Temperature fluctuations
 - (C) Relative humidity
 - (D) Light exposure
217. The solvent which is most commonly used to remove varnish layers from oil paintings on canvas without damaging the underlying paint is _____.
- (A) Xylene
 - (B) Toluene
 - (C) Ethanol
 - (D) Acetone
218. The technique recommended for the consolidation of flaking point on wall paintings is _____.
- (A) Application of a thick varnish layer
 - (B) Injection of adhesive behind the flakes
 - (C) Mechanical reattachment using nails
 - (D) Surface cleaning with abrasive materials
219. For conserving textiles and costumes, which one of the following materials is commonly used as a supportive backing fabric?
- (A) Polyester
 - (B) Nylon
 - (C) Cotton muslin
 - (D) Silk crepe line
220. Which one of the following method is most effective for treating fungal growth on palm leaf manuscripts?
- (A) Immersion in water
 - (B) Direct sunlight exposure
 - (C) Application of ethylene oxide gas
 - (D) Spraying with bleach solution
221. The chemical, frequently used to remove corrosion from bronze artifacts is _____.
- (A) Sodium hydroxide
 - (B) Hydrochloric acid
 - (C) Ammonium citrate
 - (D) Benzotriazole (BTA)
222. Which one of the following adhesive is most suitable for the consolidation of fractured ceramic objects?
- (A) Cyanoacrylate
 - (B) Polyvinyl acetate (PVA)
 - (C) Silicone adhesive
 - (D) Epoxy resin
223. Section 14 of the Ancient Monuments and Archaeological Sites and Remains Act 1958 mandate the central government relates to _____ of the following.
- (A) To maintain every monument acquired under the Act
 - (B) To protect sculptures and carvings
 - (C) To regulate archaeological excavations
 - (D) To disburse sculptures and carvings

224. The amendment Passed in 2010 regarding the Ancient Monuments and Archaeological sites and Remains act is related to _____ of the following.
- (A) AMASRA Rules, 1959
 - (B) The Antiquities and Art Treasures Act, 1972
 - (C) AMASRA Amendment and Validation Act, 2010
 - (D) National Mounement Authority Act, 2010
225. The act repealed the 1947 act and deals with the prevention of smuggling and fraudulent dealings in antiquities and art treasures is _____.
- (A) National Monument Authority Act, 2010
 - (B) The Antiquities and Art Treasures Act, 1972
 - (C) Ancient Monument and Archaeological sites and Remains Act, 1958
 - (D) AMASRA Amendment and Validation Act, 2010
226. _____ is the first head or the Archaeological Survey of India, when established in 1861.
- (A) Sir John Marshall
 - (B) Government of Bengal
 - (C) Alexander Cunningham
 - (D) Local officers
227. Which one of the following act promulgated in 1878, enabled leading museums in India to acquire numerous antiquities?
- (A) Indian Treasure Trove Act
 - (B) Ancient Monuments Conservation Act
 - (C) Ancient Monuments Preservation Act
 - (D) Archaeological Survey of India Act
228. The concept evolved during the era at Sir John Marshall in context to conservation is _____.
- (A) Enactment of the Indian Treasure Trove Act
 - (B) Establishment of archaeological site museums
 - (C) Codification of conservation manuals
 - (D) Excavation of archaeological sites
229. In which one of the following cases the Ancient Monuments Preservation Act (AMPA) is applied?
- (A) To all ancient monuments in India
 - (B) To objects of archaeological, historical or artistic interest
 - (C) It is not applicable in any state due to their own **legistations**
 - (D) Only to ancient monuments of national importance
230. Which of the following Act governs the protection and preservation of ancient monuments and archaeological sites in Gujarat?
- (A) The Antiquities and Art Treasures Act, 1972
 - (B) Gujarat Ancient Monuments and Archaeological Sites and Remains Act, 1965
 - (C) Gujarat Ancient Monuments and Archaeological Sites and Remains Act, 1975
 - (D) Indian Treasure Trove Act, 1878

231. Which monument in Gujarat is known for its unique Blend of Hindu and Islamic architectural styles, particularly seen in its elaborate carvings and jharokhas (overlapping balconies)?
 (A) Sarkhej Roza (B) Jama Masjid
 (C) Sun Temple (D) Rani Ki Vav
232. The ancient city of Lothal in Gujarat is significant for its _____.
 (A) Advanced urban planning and dockyard
 (B) Stepwells
 (C) Rock-cut temples
 (D) Buddhist caves
233. Which of the following monument is referred to as the “Queen’s stepwell” and is a UNESCO world heritage site known for its intricate sculptures and architecture?
 (A) Rani Ki Vav (B) Adalaj stepwell
 (C) Dholavira (D) Champaner-Pavagadh
 Archaeological Park
234. The Sun Temple of Modhera is particularly renowned for _____.
 (A) Its grand entrance gateways
 (B) Its underground water storage system
 (C) Its sanctum sanctorum alignment with the equinoxes
 (D) Its marble carvings
235. Which ancient site in Gujarat is noted for its well-preserved and remains of the Harappan civilization, including reservoirs and series of reservoirs?
 (A) Dholavira (B) Vadnagar
 (C) GOP (D) Ghumli
236. The Champaner-Pavagadh Archaeological Park is recognized for its _____.
 (A) Buddhist stupas
 (B) Jain temples
 (C) Fortified city and Islamic architecture
 (D) Prehistoric cave paintings
237. Which one of the following monument in Gujarat was built by Sultan Mahmud Begada and is known for its grand structure and fortified walls?
 (A) Uparkot Fort (B) Bhadra Fort
 (C) Junagadh Fort (D) Champaner Fort
238. The Buddhist caves at Talaja are significant for their _____.
 (A) Rock-cut Chaityas and Vihars (B) Stupas and inscriptions
 (C) Monolithic temples (D) Frescoes and mural paintings
239. Which site in Gujarat features one at the oldest continuously inhabited urban settlements, dating back to the Mauryan period?
 (A) Patan (B) Junagadh
 (C) Vadnagar (D) Bhavnagar

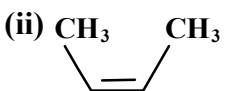
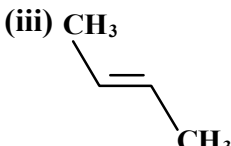
240. The Jama Masjid in Ahmedavad was built by Ahmed Shah I and is noted for its _____ of the following.
- (A) Latticework screens and 260 columns
 - (B) Large courtyard and central dome
 - (C) Symmetrical layout and Persian inscriptions
 - (D) Minarets and calligraphy
241. Under the UNESCO world heritage convention 1972, which one of the following criterion is used to assess a site's "outstanding universal value" for cultural heritage?
- (A) Criterion (ii)
 - (B) Criterion (vii)
 - (C) Criterion (iv)
 - (D) Criterion (v)
242. Which one of the following Article of UNESCO World Heritage Convention outlines the responsibilities of state parties regarding the protection of their own heritage?
- (A) Article 2
 - (B) Article 10
 - (C) Article 8
 - (D) Article 5
243. According to the UNESCO World Heritage Convention, how often must the world Heritage Committee meet?
- (A) Biennially
 - (B) Quarterly
 - (C) Every five years
 - (D) Annually
244. Under the CITES 1973, what is the primary purpose at Appendix I?
- (A) To list species that are extinct in the wild
 - (B) To list species that are threatened with extinction and are affected by trade
 - (C) To list species that are overpopulated and require controlled trade
 - (D) To regulate trade in species that are not necessarily threatened with extinction
245. Which one of the following is not a criterion for inclusion in the CITES Appendix II?
- (A) The species may become threatened with extinction unless trade is regulated
 - (B) The species is capable at surviving in captivity
 - (C) The species must be monitored to avoid utilization incompatible with its survival
 - (D) The species is not necessarily threatened with extinction
246. Which Article of the UNESCO World Heritage Convention specifies the creation at a world Heritage Fund?
- (A) Article-4
 - (B) Article-7
 - (C) Article-15
 - (D) Article-20
247. According to CITES, 1973, which one of the following body is responsible for ensuring the enforcement of the convention at the national level?
- (A) The CITES secretariat
 - (B) The International Union for Conservation of Nature (IUCN)
 - (C) The National Management Authority
 - (D) The National Wildlife Federation

256. According to Burra Charter 1979, Conservation should be based on _____.
(A) Documented evidence and research (B) Aesthetic Preferences
(C) Popular opinion (D) Financial feasibility
257. Which one of the following Article of Burra Charter, 1979 emphasizes the need for a cautious approach to change, advocating for minimal intervention?
(A) Article-2 (B) Article-3
(C) Article-7 (D) Article-9
258. The UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage, 2003, includes a mechanism for international cooperation. The mechanism is referred as _____.
(A) The Intangible Cultural Heritage Fund
(B) The International Cultural Heritage Committee
(C) The World Heritage Assistance Programm
(D) The representative list of the Intangible, Cultural Heritage at Humanity
259. The Venice Charter, 1964, Article 6, discusses the importance of maintaining a sites of _____.
(A) Historical authenticity and context (B) Structural stability
(C) Architectural style (D) Tourist accessibility
260. Which one of the following indoor pollutants is most commonly associated with the deterioration of paper artifacts in museums?
(A) Ozone (O₃) (B) Nitrogen dioxide (NO₂)
(C) Formaldehyde (HCHO) (D) Sulfur dioxide (SO₂)
261. Which one of the following is the primary source at acetic acid emissions, responsible for the degradation of metal artifacts in museums?
(A) Visitor clothing (B) Cleaning products
(C) Wooden display cases (D) HVAC systems
262. In terms at indoor air quality management in museums, the recommended relative humidity to prevent mold growth on organic artifacts is in the range _____ of the following
(A) 30-50% (B) 20-30%
(C) 50-70% (D) 70-90%
263. Which one of the indoor pollutant is particularly harmful to oil Paintings due to its ability to cause fadding and discoloration?
(A) Ammonia (B) Carbon monoxide
(C) Ozone (D) Particulate matter
264. The technique which found most effective for detecting volatile organic compounds (VOCs), this Pose a risk to artifacts in museum environment is known as _____.
(A) Passive diffusion samplers
(B) Laser Particle counters
(C) Gras chromatography-mass spectrometry (GC-MS)
(D) Electrochemical sensors

265. Formaldehyde, as an indoor pollutant, primarily affect museum textiles, works on which one of the following?
 (A) Attracts Pests
 (B) Leads to fungal growth
 (C) Induces chemical reactions leading to discoloration
 (D) Causes mechanical damage
266. Which one type at following indoor lighting is most likely contribute the photochemical degradation at artifacts?
 (A) LED Lighting
 (B) Fluorescent lighting
 (C) Incandescent Lighting
 (D) Halogen lighting
267. What is the primary concern with particulate matter in the indoor environment at museums?
 (A) Physical abrasion at surfaces
 (B) Chemical interaction with surfaces
 (C) Both (A) and (B)
 (D) Neither (A) and (B)
268. Which of the following pollutant is known to cause “Silver tarnish” on photographic plates and silver artifacts in museum collections?
 (A) Hydrogen sulfide
 (B) Ozone
 (C) Nitrogen dioxide
 (D) Ammonia
269. Which one of the following pollutants is most likely to cause embrittlement of leather artifacts in museums?
 (A) Ozone
 (B) Sulfur dioxide
 (C) Nitrogen oxide
 (D) Formaldehyde
270. Which one of the following indoor pollutant is a significant contributor to the “bronze disease”, which affects bronze artifacts in museums?
 (A) Hydrochloric acid
 (B) Hydrogen sulfide
 (C) Ammonia
 (D) Sulfur dioxide
271. Which among the following igneous rocks is characterized by a high silica content and a Predominance of quartz and feldspar minerals?
 (A) Gabbro
 (B) Rhyolite
 (C) Basalt
 (D) Andesite
272. The transformation of shale into slate is an example of which one type of following metamorphic Process?
 (A) Regional metamorphism
 (B) Contact metamorphism
 (C) Hydrothermal metamorphism
 (D) Shock metamorphism
273. Which among the following is primary distinguishing feature of elastic sedimentary rocks?
 (A) They are primarily composed of carbonate minerals
 (B) They are composed of organic material
 (C) They consist of fragments of pre-existing rocks
 (D) They are formed from chemical Precipitation
274. Which among the following minerals is most commonly found in ultramatic igneous rocks?
 (A) Olivine
 (B) Muscovite
 (C) Quartz
 (D) Feldspar

275. The foliation observed in metamorphic rocks is primarily due to _____.
- (A) The presence at fossils
 (B) The cooling rate of magma
 (C) Chemical sedimentation
 (D) Differential stress during metamorphism
276. Limestone, a common sedimentary rock, is primarily composed at _____ mineral.
- (A) Calcite (B) Quartz
 (C) Feldspar (D) Dolomite
277. Which one type of following igneous rock texture is characterized by large crystals set in a fine-grained groundmass?
- (A) Phaneritic (B) Porphyritic
 (C) Aphanitic (D) Glassy
278. The parent rock of marble in metamorphic rock cycle is _____.
- (A) Shale (B) Sandstone
 (C) Limestone (D) Granite
279. Which one of the following processes is primarily responsible for the formation of sedimentary rock structures such as cross – bedding?
- (A) Biological activity (B) Water or wind deposition
 (C) Chemical precipitation (D) Contact metamorphism
280. Which type of metamorphic rock is known for containing large, well-formed crystals of minerals such as Garnet, Staurolite and Kyanite typically set in a fine-grained matrix?
- (A) Gneiss (B) Schist
 (C) Slate (D) Phyllite
281. Which one of the following igneous rock is commonly used in the construction of the Brihadeeswarar Temple in Tamilnadu?
- (A) Basalt (B) Dolerite
 (C) Gabbro (D) Granite
282. What type at Igneous rock is commonly found in the sculptural works of the Khajuraho temples?
- (A) Obsidian (B) Diorite
 (C) Andesite (D) Granite
283. What type at Igneous rock is commonly seen in the architectural elements of the Sun Temple at Modhera in Gujarat?
- (A) Granite (B) Basalt
 (C) Diorite (D) Rhyolite
284. Which sedimentary rock is commonly used in the construction of the Elephanta Caves in Maharashtra?
- (A) Sandstone (B) Limestone
 (C) Conglomerate (D) Shale
285. What type of sedimentary rock is predominantly used in the construction of the Red Fort in Delhi?
- (A) Sandstone (B) Shale
 (C) Limestone (D) Conglomerate

286. What type of Sedimentary rock is commonly used in the construction of the Jaisalmer Fort in Rajasthan?
(A) Mudstone (B) Sandstone
(C) Conglomerate (D) Limestone
287. During qualitative analysis of cations, _____ group of cations forms precipitates with dilute HCl.
(A) Group I cations (B) Transition metals
(C) Alkali metals (D) Alkaline earth metals
288. In quantitative gravimetric analysis, the purity of a Precipitate can be affected by _____.
(A) Slow Precipitation (B) Fast Precipitation
(C) Avoiding digestion (D) Washing with cold water
289. The selectivity coefficient in ion-selective electrode (ISE) analysis is defined as
(A) The total concentration of ions in the solution
(B) The electrical potential difference across the electrode
(C) The rate at ion diffusion to the electrode surface
(D) The ability of the electrode, respond to one ion in the presence of others
290. The Key Principle of Integrated Pest Management, which differentiates it from traditional Pest control methods is _____.
(A) Emphasis on ecosystem-based strategy
(B) Exclusive use of biological agents
(C) Use of synthetic pesticides
(D) Reliance on chemical controls
291. Which of the following monitoring technique is most effective for detecting early infestations of codling moth in apple orchards under IPM?
(A) Light traps (B) Yellow sticky traps
(C) Sweep nets (D) Pheromone traps
292. In IPM, the Economic Threshold Level (ETL) is defined as _____.
(A) The pest density at which control measures are not required
(B) The pest density at which control measures should be applied to prevent economic loss
(C) The level of pest infestation causing no economic damage
(D) The maximum pest density that can be tolerated without significant damage
293. Which one of the following cultural control practice is used in IPM to reduce the habitat suitability for pests?
(A) Crop rotation (B) Application of herbicides
(C) Use of synthetic fertilizers (D) Genetic modification
294. Which one of the following analytical techniques is most commonly used for provenance studies of obsidian artifacts?
(A) Neutron Activation Analysis
(B) Fourier Transform Infrared Spectroscopy
(C) Gas Chromatography-mass Spectrometry
(D) Raman Spectroscopy

295. Which one of the following isotopic ratio is most commonly used to distinguish marine and terrestrial Protein sources in human?
 (A) $^{13}\text{C}/^{12}\text{C}$ (B) $^{18}\text{O}/^{16}\text{O}$
 (C) $^{15}\text{N}/^{14}\text{N}$ (D) $^{34}\text{S}/^{32}\text{S}$
296. The application of Portable X-Ray Fluorescence (PXRF) in archaeological chemistry primarily allows for _____.
 (A) Analysis of organic residues
 (B) Non-destructive analysis of element composition
 (C) Detailed molecular structure determination
 (D) Radio carbon dating
297. Which one of the following methods is considered the best for analysis of ancient organic residues by allowing the identifications of Liquids, Proteins and DNA?
 (A) Liquid chromatography-mass spectrometry
 (B) X-ray diffraction
 (C) Thermal ionization mass spectroscopy
 (D) Inductively coupled plasma mass spectrometry
298. Main Purpose behind luminescence dating technique is _____.
 (A) To measure decay of radioactive isotopes
 (B) Measurement of radiation – induced luminescence in minerals
 (C) To measure absorption of infrared light
 (D) To measure emission of visible light under UV excitation
299. Which one of the following advancements in archaeological chemistry has significantly contributed in understanding the trade routes of ancient civilizations through the analysis of trace elements in metal artifacts?
 (A) Nuclear magnetic resonance spectroscopy
 (B) Differential scanning calorimetry
 (C) Scanning electron microscopy
 (D) Laser ablation inductively coupled plasma mass spectrometry
300. The correct order of heat at hydrogenation for the following is _____.
 (i) $\text{CH}_3 - \text{CH}_2 - \text{CH} = \text{CH}_2$
 (ii) 
 (iii) 
- (A) i > ii > iii (B) iii > i > ii
 (C) ii > i > iii (D) i > iii > ii