

# GAT NDA FLT 2

## ENGLISH

### Fill In The Blanks

Directions: Each item in this section consists of a sentence with a blank followed by four words. Select the option that aptly fits in the given blank and mark your response on your Answer Sheet accordingly.

Q1) The plot of the story thickens when the main character's \_\_\_\_\_ turns out to be a wanted criminal.

- a) lugubrious                      b) doppelganger  
c) lovelorn                         d) woeful

Q2) "I'm not willing to \_\_\_\_\_ my friendship with Camille by lying to her," said Luis.

- a) jeopardize                      b) dismayed  
c) distraught                      d) wriggle

Q3) Any insect unlucky enough to land on the mouth-like leaves of an Australian pitcher plant will meet a \_\_\_\_\_ end.

- a) teary-eyed    b) mewling    c) grisly    d) grizzly

Q4) A number of serious disorders, such as sickle cell anemia and Huntington's disease are caused by genetic \_\_\_\_\_.

- a) anomalies                      b) eccentricity  
c) ebullience                      d) ecclesiastics

Q5) At an early age, when grammar school teachers were struggling to \_\_\_\_\_ the lesson that effort was the main key to success in school.

- a) evade    b) dubious    c) quaint    d) inculcate

Q6) She gave him her most \_\_\_\_\_ smile and stepped out of the hallway.

- a) surprising    b) fetching    c) irritated    d) confused

Q7) It's an \_\_\_\_\_ cloud, a phenomenon occurring right in our own atmosphere.

- a) iridescent    b) azure    c) seaweed    d) pandemic

Q8) Famed actor Phylicia Rashad is returning to her \_\_\_\_\_ as the new dean of the Howard University College of Fine Arts.

- a) alumni    b) pagan    c) baroque    d) alma mater

Q9) As people grow older, they begin to \_\_\_\_\_ on the uncertainty of life.

- a) ruminate    b) vivid    c) daunt    d) fiasco

Q10) He seemed burdened with \_\_\_\_\_ thoughts and dark visions as he wrestled with his pursuing demons.

- a) heterodox    b) sonorous    c) melancholic    d) wacky

### Jumbled Sentences

Given below are four jumbled sentences. Pick the option that gives their correct order.

Q11) A) At first sight, all I could perceive was a massive stone table running down its length.

B) This apartment was not well lighted as the vast stalactite ante cave.

C) I stared down the passage and found myself in a dark apartment some 20 feet long, which in some past age had been hollowed out by hand out of the mountain.

D) Next, discovered a brown thing seated on the table in the centre.

- a) BADC    b) CBAD    c) DABC    d) ABDC

Q12) A) get some peace

B) he left home

C) his parents could

D) in order that

- a) BDCA    b) CBDA    c) DCAB    d) ADCB

Q13) A) try to use the camera

B) carefully

C) before you

D) read the manual

- a) BDCA    b) DCAB    c) ACBD    d) CADB

Q14) A) has only spread to other parts of the world recently

B) mango has been commercially cultivated

C) for many years, although its cultivation

D) in the Indo Burma Malayan region of southeast Asia

- a) ADBC    b) DACB    c) BDCA    d) BADC

Q15) A) for some time

B) which is troublesome

C) the weather becomes cool and pleasant

D) though there is humidity in it

- a) DBAC    b) ACBD    c) CBAD    d) CADB

### Comprehension

Given below is a short passage. After the passage, you will find some items based on the passage. First, read a passage and answer the

# GAT NDA FLT 2

items based on it. You are required to select your answers based on the contents of the passage and opinion of the author only.

Over-population is the most pressing of India's numerous and multifaceted problems. In fact it has caused equally complex problems such as poverty, under-nourishment, unemployment and excessive fragmentation of land. Indisputably, this country has been facing a population explosion of crisis dimensions. It has largely diluted the fruits of the remarkable economic progress that the nation has made during the last four decades or so. The entire battle against poverty is thwarted by the rapid increase in the population. The tragedy is that while overpopulation accentuates poverty, the country's stark poverty itself is in many areas a major cause of over-population.

Q16) What is the irony behind the over-population of India?

- a) Over-population gives birth to poverty, which (poverty) itself is the cause of over-population
- b) Under nourishment and unemployment are outcomes of flawed economic progress
- c) Fragmentation of land is leading to over-population
- d) Fruits of the remarkable economic progress are trickling down to the Poor

Q17) What is the general tone of the passage?

- a) funny/ humourous      b) sombre
- c) didactic                      d) tragic

Q18) What, in the author's view, severely affects the economic growth of our country?

- a) poverty                      b) illiteracy
- c) over-population              d) None of the above

Q19) What, according to the author, is the biggest reason behind overpopulation?

- a) under-nourishment      b) unemployment
- c) excessive fragmentation of land      d) poverty

Q20) "It has largely diluted the fruits of the remarkable economic progress". Find antonym of the underlined word

- a) coalesced                      b) compounded
- c) cheapened                      d) consolidated

## Spotting Error

Q21) Today, all students of my class are (A)/invited to dinner (B)/given to bid farewell to the out-going students.(C)/No error(D)

Q22) Only few (A)/customers come regularly (B)/to my shop. (C)/No error (D)

Q23) After having failed to revive a flagging Nano, (A)/ Tata Motors has demanded afresh last week that the enviable sops be extended to other car models (B) /it plans to manufacture from Sanand.(C) / No error (D)

Q24) She was be asked to (A)/ write a report about the meeting that (B)/she attended yesterday.(C) /No error (D)

Q25) There will be several (A) /new visa application centers opened in metros across the country (B) /to easy the pressure on embassies. (C)/No Error (D)

Q26) Since the online education system has been poorly designed, (A)/there are not many institute (B) /that offer this facility. (C)/ No error (D)

Q27) After careful scrutiny of the report (A) /variety mistakes that has been (B) /made by the research department were found.(C)/No error (D)

Q28) His industrious nature and calm temperament (A) /have endeared him (B) /to one's colleagues and superiors.(C)/ No error (D)

Q29) Since the tenant failed to pay his rent on time (A) /the landlord denied him (B) /access to the premise.(C)/ No error (D)

Q30) Today most employees complain (A)/ of suffering for the stress (B) /of attending to rude customers all day.(C)/ No error (D)

## Synonyms

Q31) LAUD

- a) Lord      b) Eulogy      c) Praise      d) Extolled

Q32) REPERCUSSION

- a) Clever reply      b) Recollection
- c) Remuneration      d) Consequence

Q33) IMPROMPTU

# GAT NDA FLT 2

a) Offhand b) Unimportant c) Unreal d) Effective

Q34) STRINGENT

a) Tense b) Stringly c) Strict d) Causing to Shrink

Q35) INSOMNIA

a) Lethargy b) Sleeplessness  
c) Drunkenness d) Unconsciousness

## Idioms

**Q36) Take a cue from someone**

a) be strongly influenced by someone  
b) wait patiently to listen to someone  
c) take someone's position in the queue  
d) treat someone as very important

**Q37) In the line of duty**

a) to be somewhere  
b) while doing one's job  
c) doing something after completing one's tenure  
d) to go to ground

**Q38) Keep someone at arm's length**

a) Restrict someone to a small space to stand  
b) Allow someone to talk only from a distance  
c) Make someone stay outside  
d) Avoid being friendly with someone

**Q39) A fly on the wall**

a) A vigilant security guard  
b) An unperceived observer  
c) An unwelcome guest  
d) Very intelligent person

**Q40) Swing into action**

a) fumble at something b) to put end to something  
c) to go to a place d) start working

## Antonyms

Q41) QUIET

a) Breeze b) Bowl c) Common d) Noisy

Q42) LOVE

a) Villainy b) Hatred c) Compulsion d) Force

Q43) TANGIBLE

a) Ethereal b) Concrete c) Actual d) Solid

Q44) INDISCREET

a) Reliable b) Honest c) Prudent d) Stupid

Q45) FAMILIAR

a) Unpleasant b) Dangerous  
c) Friendly d) Strange

Q46) FRAIL

a) Unreliable b) Fresh c) Robust d) Fragile

Q47) PUISSANT

a) Lazy b) Timid c) Unite d) Peace

Q48) IMPUTE

a) Partially b) Defend c) Release d) Mild

Q49) EVIDENT

a) Obvious b) Indistinct c) Stubborn d) Irritable

Q50) Enigma

a) Mystery b) Clarity c) Charade d) Make-believe

## GENERAL KNOWLEDGE

Q51) If the usual rule of calculation of time were applied for the extremes of Gujarat and Arunachal Pradesh, then approximately time:

a) At Gujarat would be ahead of that at Arunachal Pradesh by about 3 hours  
b) At Gujarat would be ahead of that at Arunachal Pradesh by about 2 hours  
c) At Arunachal Pradesh would be ahead of that at Gujarat by about 3 hours  
d) At Arunachal Pradesh would be ahead of that at Gujarat by about 2 hours

Q52) The States which have common borders with China are:

1) Jammu and Kashmir 2) Sikkim  
3) Arunachal Pradesh 4) Himachal Pradesh

Select the correct answer:

a) 1,3 and 4 b) 1,2 and 3 c) 1 and 3 d) 2,3 and 4

Q53) Kodaikanal, the famous hill-station of South India, is situated on :

a) Palni hills b) Anaimalai mountain  
c) Nilgiri mountain d) Cardamom hills

Q54) Match the following:

Rivers	Origin
A. Indus	1. Uttarakhand
B. Ganga	2. Tibet
C. Godavari	3. Madhya Pradesh

# GAT NDA FLT 2

D. Narmada 4. Maharashtra

A B C D

a) 2 1 4 3 b) 4 3 2 1 c) 1 2 3 4 d) 3 4 1 2

Q55) Which one of the following pairs of sea ports and states is not correctly matched?

a) Kandla: Gujarat b) Paradip: Orissa  
c) Cochin: Kerala d) Kakinada: Maharashtra

Q56) Deforestation results in :

1) Flora destruction 2) Fauna destruction  
3) Ecological disbalance

Select the correct answer:

a) 2 and 3 b) 1, 2 and 3 c) 1 only d) 1 and 3

Q57) Match the following:

A. Alluvial Soil 1. Cotton  
B. Black Soil 2. Rice  
C. Brown Soil 3. Tea  
D. Red Soil 4. Wheat

A B C D

a) 2 3 1 4 b) 2 1 3 4 c) 3 1 2 4 d) 4 1 3 2

Q58) During the monsoon season rainfall decreases from the Ganga delta to the Punjab plains. It is because:

a) Monsoon current moves westward along the Ganga plain and becomes drier  
b) Western regions are warmer than the eastern region  
c) Hills do not form barriers for winds  
d) The area is far away from the sea

Q59) Which of the following statements about Ring of Fire is/are correct?

1) It is a zone of convergence plate boundaries  
2) It is an active seismic and volcanic zone  
3) It is associated with deep trench

Select the correct answer using the code given below:

a) 1 and 2 only b) 2 and 3 only  
c) 1 only d) 1,2 and 3

Q60) Which one of the following Himalayan vegetation species is found between the altitudes of 1800 to 2600 meters?

a) Saal b) Chir c) Spruce d) Deodar

Q61) Consider the following discontinuities inside the earth's surface

1) Repetti discontinuity 2) Gutenberg discontinuity

3) Conrad discontinuity 4) Lehmann discontinuity  
Arrange the given discontinuities vertically from top to bottom inside the Earth surface and choose the correct answer from the code given below -

a) 1-4-3-2 b) 3-2-1-4 c) 4-2-3-1 d) 3-1-2-4

Q62) Which one of the following stars is nearest to the Earth?

a) Polaris b) Alpha Centauri c) Sun d) Sirius

Q63) In the structure of planet Earth, below the mantle, the core is mainly made up of which one of the following?

a) Aluminium b) Chromium c) Iron d) Silicon

Q64) The biggest hot desert of the world is :

a) Kalahari b) Gobi c) Sahara d) Thar

Q65) Which one of the following land territories of Indonesia is not touched by the Equator?

a) Sumatra b) Sulawesi c) Java d) D. Kalimantan

Q66) Which of the following were the harbingers of renaissance?

1) Peter Abelard 2) Roger Bacon 3) Dante

Select the correct option from the codes given below:

a) Only1 & 2 b) Only2 & 3 c) Only1 & 3 d) 1,2 & 3

Q67) Match List I with List II and select the correct answer using the code given below the Lists:

List I (Dynasty)

List II (Architecture)

A. Chalukyas

1) Sun Temple, Konark

B. Hoysalas

2) Pattadakal Temples

C. Pandyas

3) Kesava Temple,

Somnathpur

D. Eastern Gangas

4) Eastern Gopura of

Chidambaram Temple

Code:

a) a-1 b-3 c-2 d-4

b) a-1 b-2 c-3 d-4

c) a-2 b-4 c-3 d-1

d) a-2 b-3 c-4 d-1

Q68) Which one of the following statements about the Ilbert Bill is correct?

a) It proposed that the Indian magistrates would try Europeans in criminal cases.

b) It allowed Indians to file criminal cases against Europeans.

## GAT NDA FLT 2

- c) It authorized Indian ICS officers to try Europeans in courts.  
d) It was an agitation led by Ilbert in support of the nationalists.

Q69) Which one of the following statements about the Quit India Movement is not correct?

- a) It broke out in August 1942.  
b) Ahmedabad Textile Mills went on strike for more than three months.  
c) Muslim League and Hindu Mahasabha actively participated in the movement.  
d) Communist Party did not support the movement

Q70) Consider the following movements:

- 1) Moplah Rebellion                      2) Bardoli Satyagraha  
3) Champaran Satyagraha              4) Salt Satyagraha

Which one of the following is the correct chronological order of the above in ascending order?

- a) 1-3-4-2    b) 3-1-2-4    c) 2-3-1-4    d) 4-2-1-3

Q71) The Special Congress Session held in 1920 at Calcutta was presided over by

- a) Nehru    b) Lala Lajpat Rai    c) Bose    d) Gandhi

Q72) The Revolt of 1857 in Awadh and Lucknow was led by:

- a) Wajid Ali Shah                      b) Begum Hazrat Mahal  
c) Asaf-ud-daula                        d) Begum Zeenat Mahal

Q73) The capital of Tipu Sultan, where he died while fighting the Fourth Anglo-Mysore war in 1799, was

- a) Bangalore    b) Mysore    c) Srirangapatnam    (d) Hubli

Q74) Where did Gandhi call the Congress Working Committee to announce the suspension of Non-Cooperation movement?

- a) Bardoli    b) Poona    c) Calcutta    d) Madras

Q75) The University of Nalanda was set up by which Gupta ruler?

- a) Kumargupta I                        b) Chandragupta II  
c) Samudragupta                        d) Kumargupta II

Q76) Which among the following sites has given the evidence of an earliest recorded "Earthquake"?

- a) Kalibangan    b) Lothal    c) Surkotda    d) Harappa

Q77) Why most of the Greeks, Kushanas & Shakas embraced Buddhism rather than Hinduism when they established their rules in India?

- a) Buddhism has risen and it eclipsed Hinduism  
b) A policy of war and violence was to be renounced before embracing Buddhism  
c) Hinduism was caste ridden and was not able to attract them  
d) It was easy to access to Indian society by embracing Buddhism

Q78) Which of the following ports during ancient / medieval era were situated on the west coast of South India?

- 1) Kaveripattinam    2) Korkai    3) Musiri    4) Tondi  
Choose the correct answer from the codes given below:

- a) 1 and 2                      b) 2 and 3                      c) 3 and 4  
d) 2, 3, and 4

Q79) The growth of the Indian capitalist class was hampered in the 19th Century by :

- a) The growing national consciousness  
b) The trade union movement  
c) Tariff and trade policies of the imperial government  
d) The lack of a mobile workforce

Q80) Who persuaded Yugoslavia to hand over the Port of Fiume and acquired it in 1924?

- a) Adolf Hitler                        b) Benito Mussolini  
c) Vladimir Lenin                        d) Joseph Stalin

Q81) Which of the following Fundamental Right cannot be suspended even during National Emergency?

- a) Right to life and personal liberty  
b) Right to move freely throughout the territory of India  
c) Right to reside and settle in any part of the country  
d) Right to carry on any profession or business

Q82) By which amendment act 10th schedule was added in the Indian Constitution, giving special status to Sikkim?

## GAT NDA FLT 2

- a) 35th Amendment Act    b) 36th Amendment Act  
c) 37th Amendment Act    d) 38th Amendment Act

Q83) Fourth Schedule of Indian Constitution deals with which of the following?

- a) Panchayat Raj System                      b) Schedule Tribes  
c) Allocation of seats for the Council of States  
d) Anti-defection Law

Q84) Which of the following are the features of unitary form of government?

- 1) Single government  
2) Constitution may be written or unwritten  
3) No division of powers  
4) Judiciary may be independent or may not be independent.

Select the correct option from the codes given below:

- a) Only 1 & 2                      b) Only 2 & 4  
c) Only 3 & 4                      d) 1, 2, 3 & 4

Q85) What can be the maximum gap between the two sessions of state legislature?

- a) 1 month    b) 3 months    c) 6 months    d) 9 months

Q86) Which of the following Union Territories has a High Court of its own?

- a) Jammu & Kashmir    b) Lakshadweep  
c) Delhi                      d) Andaman & Nicobar

Q87) Consider the following statements regarding National Emergency:

- 1) A proclamation of National Emergency may be applicable to the entire country or only a part of it.  
2) The President can proclaim a National Emergency only after receiving a written recommendation from the cabinet.

Which of the above statements is/are correct?

- a) Only 1                      b) Only 2  
c) Both 1 and 2                      d) Neither 1 nor 2

Q88) Which of the following are listed as a Directive Principle of State policy?

- 1) Freedom in the economic field for the interest of the consumer and producer  
2) Regulation of economic system of the country to prevent concentration of wealth and means of production  
3) To ensure decent standard of living and facilities of leisure for all workers

4) To protect and improve the environment and to safeguard forests and wildlife

Select the correct answer:

- a) (ii) and (iii)                      b) (ii), (iii) and (iv)  
c) (ii), (iv)                      d) (iii), (iv)

Q89) Which article of the Indian constitution says that there will be an election commission in India?

- a) Article 124                      b) Article 342  
c) Article 324                      d) Article 115

Q90) Jabal and Nabi Shu'ayb is the highest point of which among the following country

- (a) Oman  
(b) Bahrain  
(c) Qatar  
(d) Yemen

Q91) Loktak lake is located in

- (a) Manipur  
(b) Assam  
(c) West Bengal  
(d) Tripura

Q92) Carl-Gustaf M4, a shoulder-fired weapon system recently seen in news manufacturing by

- (a) Japan    (b) Germany    (c) Poland    (d) Sweden

Q93) Consider the following statements regarding Giant Metre wave Radio Telescope:

1. It is an instrument for studying astrophysical phenomena, ranging from nearby Solar system to edge of observable Universe, at low radio frequencies.

2. It is operated by National Centre of Radio Astrophysics (NCRA), which is part of Tata Institute of Fundamental Research.

Which of the statements given above is/are correct?

- (a) Neither 1 nor 2    (b) Both 1 and 2  
(c) 1 only                      (d) 2 only

Q94) World's First CNG Terminal will established in

- (a) Gujarat  
(b) Tamil Nadu  
(c) Maharashtra  
(d) Kerala    d) Cleaning Water Bodies

## GAT NDA FLT 2

Q95) 1. Greater Scaup is a migratory bird widely distributed across Arctic and Subarctic regions where it mainly nests in coastal tundra habitats.  
2. It belongs to the family of Anatidae.  
3. The IUCN status of this species is Least Concern.  
Which of the statements given above is/are correct?  
(a) 1 and 3 only      (b) 2 and 3 only  
(c) 1 and 2 only      (d) 1, 2 and 3

Q96) FIFA WC 2026, will be jointly hosted by Canada, the United States and....?  
a) France      b) Mexico      c) Uruguay      d) England

Q97) With reference to regarding Solomon Islands, consider the following statements:  
1. It is located in southwest Pacific Ocean.  
2. It is geographically positioned in the Southern and Eastern hemispheres of the Earth.  
3. The highest point in the Solomon Islands is Mount Popomanaseu.  
Which of the statements given above is/are correct?  
(a) 1 and 3 only      (b) 2 and 3 only  
(c) 1, 2 and 3      (d) 2 only

Q98) During Naval Innovation and Indigenisation Organisation (NIIO) seminar 'Swavlamban' (self-reliance), PM Narendra Modi unveiled which initiative/ Scheme aimed at giving a boost to the usage of indigenous technology in Indian Navy?  
a) SPRINT Initiative      b) Agnipath Scheme  
c) Sagarmala Project      d) Veergatha Initiative

Q99) Which anti-submarine warfare shallow water craft (ASW-SWC) ship was recently launched by Indian Navy to replace the Indian Navy's 'Abhay' class ASW ships?  
a) INS Arnala      b) INS Vikrant  
c) INS Rajput      d) INS Mumbai

Q100) Recently, which app/portal was launched by Union Home Ministry for Border Security Force (BSF) Jawans?  
a) Prahari App      b) Sambhav Portal  
c) Yukt Dhara      d) PM- DAKSH

### **SCIENCE**

Q101) Which is made of balls or cages of carbon?  
a) graphite      b) diamond  
c) fullerene      d) none of these

Q102) On which form carbon do not exist  
a) CO      b) CO<sub>2</sub>      c) CaCO<sub>3</sub>      d) CaCO<sub>3</sub>. MgCO<sub>3</sub>

Q103) What did Dalton's Theory couldn't explain?  
a) gaseous volumes      b) conservation of mass  
c) chemical philosophy      d) indivisible atoms

Q104) Who proposed Law of Conservation of Mass?

a) Antoine Lavoisier      b) Joseph Proust  
c) Lorenzo Romano      d) Joseph Louis

Q105) Chemical equation is balanced according to the law of  
a) Multiple proportion      b) Reciprocal proportion  
c) Conservation of mass      d) Definite proportions

Q106) Which non-metal is liquid at room temperature

a) Hydrogen      b) Carbon      c) Bromine      d) Sulfur

Q107) What is silicon?

a) Non metal      b) Metal      c) Compound      d) Metalloid

Q108) Which acid is responsible for itching in skin

a) Methanoic acid      b) Ethanoic acid  
c) Propanoic acid      d) Formalin

Q109) Nuclear reactor is a

a) Controlled fission      b) Controlled fusion  
c) Uncontrolled fission      d) Uncontrolled fusion

Q110) Malleic acid is present in

a) Apple      b) Strawberry      c) Banana      d) Pineapple

Q111) Denaturation of alcohol is mixing of

a) Ethanol into propanol      b) Methanol into hexanol  
c) Ethanol into methanol      d) Butanol into methanol

Q112) Q1. Match List-I and List-II and select the correct answer by using the code given below—

List-I	List-II
A. Vitamin	1. Pepsin
B. Enzyme	2. Carotene
C. Hormone	3. Keratin
D. Protein	4. Progesterone

Code:

A	B	C	D	
a)	1	2	3	4
b)	2	1	4	3
c)	2	1	3	4

## GAT NDA FLT 2

d) 1 2 4 3

Q113) Which of the following disease is not caused by viruses?

- a) Cholera b) Chickenpox c) Hepatitis d) Measles

Q114) Which of the following is involved in controlling blood sugar level?

- a) Pituitary gland b) Islets of Langerhans  
c) Hypothalamus d) Spleen

Q115) Which of the following are water-borne diseases?

1. Viral hepatitis 2. Cholera  
3. Typhoid fever 4. Amoebiasis

Select the answer using code given below—

- a) 1 and 2 only b) 1, 2 and 3  
c) 1 and 4 only d) 2, 3 and 4

Q116) Among following which one is the highest source of ascorbic acid?

- a) Apple b) Beans c) Carrot d) Guava

Q117) Which one of the following glands in human body enlarged due to goiter?

- a) Adrenal cortex b) Adrenal medulla  
c) Pituitary d) Thyroid

Q118) Consider the following vitamins —

1. Niacin 2. Pyridoxine 3. Riboflavin 4. Thiamine  
Which of these are water-soluble vitamins —

- a) 1, 2 and 3 b) 2, 3 and 4  
c) 1 and 4 d) 1, 2, 3 and 4

Q119) The major component of honey is —

- a) Glucose b) Sucrose c) Maltose d) Fructose

Q120) Which of the following is mainly used for the production of Aluminium?

- a) Hematite b) Lignite c) Bauxite d) Magnetite

Q121) Solder used in soldering metal pieces consists of any alloy of:

- a) Tin and Zinc b) Tin and Lead  
c) Tin, Zinc and Copper d) Tin, Lead and Zinc

Q122) Which one of the following fuels causes minimum air pollution?

- a) Kerosene oil b) Hydrogen c) Coal d) Diesel

Q123) Identify the largest muscle in the human body.

- a) Sartorius b) Iliopsoas  
c) Gluteus Maximus d) Latissimus Dorsi

Q124) Which of the following is the universal recipient blood group?

- a) O b) B c) A d) AB

Q125) Which one of the following has Oxalic acid?

- a) Gooseberry b) Tamarind c) Lemon d) Spinach

Q126) A bullet is fired vertically up from 400m tall tower with a speed 80m/s. If g is taken 10m/s<sup>2</sup>.

The taken by bullet to reach the ground will be

- a) 8sec b) 16sec c) 20sec d) 24sec

Q127) A body is thrown with velocity of 10 m/s at an angle of 60° with horizontal It's velocity at highest point is

- a) zero b) 5m/s c) 10m/s d) 8.66

Q128) A man can throw a stone to maximum distance of 80m the maximum height to which it will rise in metre

- a) 30m b) 20m c) 10m d) 40m

Q129) A bullet of mass 20g is fired in the horizontal direction with a velocity 150 m/s from a pistol of mass 1 kg Recoil velocity of pistol is

- a) 3m/s b) 4m/s c) 300m/s d) 1/3 m/s

Q130) If maximum and minimum value of the resultant of two forces acting at a point are 7N and 3N respectively. The smaller force is equal to

- a) 4N b) 5N c) 3N d) 2N

Q131) The height at which the weight of the body becomes 1/16<sup>th</sup> it's weight on the surface of earth.

- a) 5R b) 15R c) 3R d) 4R

Q132) A satellite in a circular orbit of radius R has period of 4h. Another satellite with orbit radius 3R round the same planet have a period (in hr)

- a) 16 b) 4 c) 4√27 d) 4√8

Q133) Two particles of equal masses go round a circle of radius R. under the action of their mutual gravitation attraction. The speed of each Particle is

## GAT NDA FLT 2

- a)  $V=1/2R \sqrt{1/Gm}$       b)  $V= \sqrt{Gm/2R}$   
c)  $V=1/2 \sqrt{Gm/R}$       d)  $V= \sqrt{4Gm/2r}$

Q134) A ball is dropped from a height of 2m rebounds to height of 1.5m after hitting the ground then the Percentage of energy loss is  
a) 25%      b) 30%      c) 50      d) 40%

Q135) A spring of spring constant  $5 \times 10^3 \text{ NM}^{-1}$  is stretched initially by 5 cm from the unstretched position. The work required to stretch it further by another 5cm is  
a) 12.50 Nm    b) 18.75 Nm    c) 25.00Nm    d) 6.251

Q136) A uniform chain of length 2m is kept on a table such that a length of 60cm hangs freely from the edge of the table. The total mass of the chain is 4kg. What is the work done in pulling the entire chain on the table.  
a) 7.2J      b) 3.6J      c) 120J      d) 1200J

Q137) Two metallic wire A and B are made using copper. The radius of wire A is  $r$  while its length is  $l$ . A DC voltage  $V$  is applied across the wire A causing power dissipation is  $P$ . The radius of wire B is  $2r$  and its length is  $2l$  and the same DC voltage  $V$  is applied across it causing power dissipation  $P_1$ . Which one of the following is correct relation between  $P$  and  $P_1$ ?  
a)  $P = 2P_1$     b)  $P = P_1/2$     c)  $P = 4 P_1$     d)  $P = 2P$

Q138) Two conducting wire A and B are made of some material. If the length of B is twice that of A and the radius of circular cross-section of A is twice that of B. then their resistance  $R_A$  and  $R_B$  are in the ratio  
a) 2:1      b) 1: 2      c) 1:8      d) 1:4

Q139) The time-period of simple pendulum measured inside a stationary lift is found to be  $T$ . If the lift starts accelerating upward with  $accl'' = 2g$  then new time period will be  
a)  $T\sqrt{3}$       b)  $T/\sqrt{3}$       c)  $3T$       d)  $2\sqrt{3}T$

Q140) A particle is executing SHM of amplitude  $A$ . At what displacement from the mean position, is the energy half kinetic and half potential?  
a)  $A/2$       b)  $A/\sqrt{2}$       c)  $A/4$       d) none

Q141) The refractive index of fused quartz is 1.46 and that of sapphire is 1.77 of  $V_q$  is speed of light

in quartz and  $V_s$  is the speed of light in sapphire. then which of the following relation is correct  
a)  $V_q > V_s$     b)  $V_s > V_q$     c)  $V_s = V_q$     d)  $V_s = V_q/2$

Q142) In case of a concave mirror. If an object is kept between the focus and pole  $p$  of the mirror. Then which of the following statement about the image is not correct

- a) the image will be virtual  
b) the image will be enlarged or magnified  
c) the image will be formed at infinity  
d) the image will be erect

Q143) When a ray of light enters glass slab then  
a) Only frequency changes  
b) Frequency and velocity changes.  
c) Frequency does not change  
d) Frequency and wavelength changes.

Q144) An object is placed at the centre of curvature of a concave mirror of focal length 16cm. If the object is shifted by 8cm towards the focus, then the nature of the image would be  
a) Real and magnified    b) virtual and magnified  
c) real and reduced      d) virtual and reduced

Q145) By increasing the temperature the specific resistance of a conductor and semiconductor  
a) increases for both    b) decreases for both  
c) increases, decreases respectively  
d) decreases, increases respectively

Q146) An electric bulb is rated 220-100W the power consumed by it, when on 110V will be  
a) 25W      b) 50W      c) 75W      d) 40W

Q147) Two thin lenses of focal length 15cm and 30cm respectively are kept in contact with each other the power of the combined lens  
a) +20D      b) +10D      c) +30D      d) +40D

Q148) A convex lens of focal length 50cm in contact with concave lens of focal length 20cm. The power of the combination is  
a) +5D      b) -3D      c) +10D      d) -20D

Q149) The value of  $-30^\circ \text{C}$  on Fahrenheit scale is  
a)  $-54^\circ \text{F}$       b)  $32^\circ \text{F}$       c)  $22^\circ \text{F}$       d)  $-22^\circ \text{F}$

Q150) The temperature for which the reading on Celsius and Fahrenheit scale are identical, is  
a)  $-40^\circ \text{C}$       b)  $40^\circ \text{C}$       c)  $-30^\circ \text{C}$       d)  $-30^\circ \text{C}$