NEW ALWUROOD INTERNATIONAL SCHOOL, JEDDAH K S A
SUMMER VACATION ASSIGNMENT
Class –IX - July - August 2020

SUBJECT	ASSIGNMENT PLANNED WITH SPECIFICATION	REMARKS
ENGLISH	*Prepare a speech for the motion for a debate on the topic 'The unprecedented Covid pandemic is a blessing to us' in 150-200 words. * Submit any creative work e.g. article, essay, poem, drawing, painting etc. on topic of your choice, for the online magazine Epetalia and Class magazine.	
SOCIAL SCIENCE	Project work on Disaster Management ; MCQ Worksheets	Worksheets are appended
SCIENCE	• Assignment-I-Solve MCQ worksheets on Physics- Chapter **8, 9** Chemistry-Chapter **1,2** &Biology –Chapter **5,15** • Assignment-II-Plan and prepare Science Expo Project- Instructions given below.	MCQ worksheets will be uploaded through g-mail(Google classroom)

MATH	• Project – Contribution of Mathematicians:
	  <u>Rules for the project</u>:
	    a) 3 Mathematicians, photo compulsory
	    b) Total- 7 pages
	    c) Write only one side of the paper
	    d) First page- Project name & student name and class
	    e) Second page- Index
	    f) Third page- Introduction of the project
	    g) Fourth, Fifth, Sixth- Content of the project
	    h) Seventh- Conclusion & Bibliography (List of books or documents relevant to the project or author)
	• Solve the MCQ worksheets
	  (Chapters 1,2,3,4,5,6)
		MCQ worksheets are forwarded through e-mail

HINDI	वाद-विवाद सोशल मीडिया वरदान या अभिशाप ,अनुच्छेद-जीवन में खेलों का महत्तव,हमारा देश REFER WWW.HINDIVIDYA.COM	
ARABIC	**Write 15 lines on both topics** 1.الطيب من القول والعمل 2.بر الوالدين سعادة الدنيا والآخرة	

Note: Kindly submit the vacation assignments on 1ˢᵗ September, 2020 without fail

SCIENCE EXPO-2020
(for Class IX)

OBJECTIVE:

The objectives of organizing Science Project Competition is to emphasis on the development of science and technology as a major instrument for achieving goals of self-reliance and socio economic and socio ecological development.

The main theme of Science Exhibition:

"SCIENCE AND TECHNOLOGY FOR HEALTHY LIVING"

SUBTHEMES:

1) Health,Nutrition and Cleanliness.

 2) Resource Management.

3) Industry (Desalination Plant, Petrochemical plant etc.)

4) Agriculture and Food Safety / security.

 5) Disaster Management.

6) Eco- friendly tools and techniques(Eg. Waste Management Techniques, Pollution Control techniques)

 7) Conservation of natural resources.

8) Computer Sciences and IT Industry.

9) Nanotechnology and its applications.

10) Socially useful electronic, electrical and mechanical devices.

11) Biotechnology & its applications.

Note:There are two categories
(i)Junior(IX & X)
(ii)Senior(XI & XII)

RULES:

The exhibit /model include:

1. Working/Attractive models to explain a concept ,principle or a process

 2. An indigenous design of a machine /device

 3. An innovative /inexpensive design or technique

 4. Application of basic principles of Science and Technology 8. Scheme /design of a device or machine to reduce production cost

5. Investigation based study.

INSTRUCTIONS:

1)Choose your partner each team can contain two members

2)Choose you own project(idea) which connects with the main theme and subtheme as well.

3)Prepare some essential qurestions which could brainstorm your idea.

4) Predict your experimental outcome

5) Formulate hypothesis based on the predictions

6) Select dependent and independent variable

7) Procure material required for your project

8) Plan of action to excecute the idea for example circuit diagram / model experimental set up (graphical or digital set up), even you can prepare PPT to show how you are going to execute your Idea.

Note: IF possible you can present your working model /still model also if it is ready.

9) After the reopening of school (after vacation) each team has to submit your ground work done which are listed in the instructions with the help of PPT(Even you can present your model) if it is ready.

10) And then you can start the execution/assembling of your model.

Note: For Classes(XI & XII)This project will be considered as Investigatory project (based on the contents){Physics,Chemistry and Bio) as a part of Board practical examinations, So involvement of all the students is mandatory.

For queries and guidance you can contact your science teachers and regarding presentation you can contact English teachers.

PROJECT WORK -CLASS I X (2020-21)

1. Every student has to compulsorily undertake one project on Disaster Management

2. **Objectives:** The main objectives of giving project work on Disaster Management to the students are to:

a. create awareness in them about different disasters, their consequences and management

 b. prepare them in advance to face such situations

c. ensure their participation in disaster mitigation plans

 d. enable them to create awareness and preparedness among the community.

 3. The project work should also help in enhancing the Life Skills of the students.

 4. In order to realize the expected objectives completely, it would be required of the Principals / teachers to muster support from various local authorities and organizations like the Disaster Management Authorities, Relief, Rehabilitation and the Disaster Management Departments of

the States, Office of the District Magistrate/ Deputy Commissioners, Fire Service, Police, Civil Defense etc. in the area where the schools are located.

5. The distribution of marks over different aspects relating to Project Work is as follows:

a. Content accuracy, originality and analysis 2Marks

b Presentation and creativity 2 Marks

c Viva Voce 1 Mark

6. The project carried out by the students should subsequently be shared among themselves through interactive sessions such as exhibitions, panel discussions, etc.

7. All documents pertaining to assessment under this activity should be meticulously maintained by the schools.

9. A Summary Report should be prepared highlighting: a. objectives realized through individual work and group interactions; b. calendar of activities; c. innovative ideas generated in the process ; d. list of questions asked in viva voce.

10. It is to be noted here by all the teachers and students that the projects and models prepared should be made from eco-friendly products without incurring too much expenditure.

11. The Project Report should be handwritten by the students themselves.

12.. PRESCRIBED BOOKS: 1. India and the Contemporary World - I (History) - Published by NCERT

2. Contemporary India - I (Geography) - Published by NCERT

3. Democratic Politics - I Published by NCERT

4. Economics - Published by NCERT 5. Together, Towards a Safer India - Part II, a textbook on Disaster Management for Class IX - Published by CBSE

Social Science

ECONOMICS LESSON:1 THE STORY OF VILLAGE PALAMPUR

1. What are the factor of production?
(a) Land
(b) Capital
(c) Labour
(d) All of the above.

2. Which of the following is used in modern farming method?
(a) Chemical fertilizers
(b) HYV seeds
(c) Both
(d) None of these.

3. Which of the following is working capital?
(a) Cash
(b) Tools
(c) Furniture
(d) Machine

4. The concept of Green Revolution was associated with use of
(a) chemical fertilizers
(b) HYV seeds
(c) pesticides
(d) All of these.

5. A farmer who works on a piece of less than 2 hectare of land is treated as;
(a) Small farmer
(b) Medium farmer
(c) Large farmer
(d) None of the above.

6 .Which is the non-farm activities?
(a) Dairy

(b) Transporting
(c) Shopkeeping
(d) All of these.

7. Which is the main source of earning money in the village Palampur?
(a) Transporting
(b) Dairy
(c) Farming
(d) Shopkeeping

8. Full Form HYV is;
(a) High Yielding Varieties
(b) Huge Yielding Varieties
(c) Half Yielding Varieties
(d) Heavy Yielding Varieties

9. The concept of Green Revolution is associated mainly with the production of;
(a) wheat
(b) rice
(c) bazara
(d) both (a) and (b)

10. The concept of White Revolution is associated with;
(a) milk
(b) Sugarcane
(c) white
(d) rice

ECONOMICS LESSON:2 PEOLPLE AS RESOURCES

1. Why is literacy rate is low in the females?
(a) lack of equal education opportunities   (b) lack of transport facilities

(c) lack of infrastructure   (d) lack of income

2. Which state has highest literacy rate as per 2001?
(a) Kerala   (b) Madhya Pradesh
(c) Bihar   (d) Orissa

3. Which of the following is a significant step towards providing basic education to the children in the age group of 6-14 years?
(a) Sarva Siksha Abhiyan   (b) Adult Education Programme
(c) Mid-day meal   (d) None

4. Market activity known as production for
(a) exchange   (b) earning income

(c) earning profit   (d) all the above

5. Increase in longevity of life is an indicator of
(a) good quality of life   (b) improvement in health sector
(c) better HDI (Human Development Index)   (d) all the above

6. what is Self-consumption is called
(a) non-production activity   (b) non-market activity
(c) non-economic activity   (d) none of the above

7. Which one from the following is include in Secondary sector includes
(a) trade ((b) marketing
 (c) manufacturing   (d) education

8. One who can read and write in any language with understanding is termed as
(a) student   (b) adult
(c) child   (d) literate

9. What is India's position in scientifically and technically manpower in the world?
(a) first   (b) second   (c) third   (d) fourth

10. Investment in human capital is expenditure on
(a) education   (b) training
(c) medical care   (d) all the above

11. The scheme for the establishment of residential schools to impart education to talented children from rural areas is
(a) Kendriya Vidyalayas   (b) Navodaya Vidyalayas
(c) Sarvodaya Vidyalayas   (d) None of the aboves

12. Services of housewives are included in
(a) national income   (b) domestic income
(c) household income   (d) none of the above

13. Infant mortality rate refers to the death of a child under the age of
(a) 1 year   (b) 2 years
(c) 3 years   (d) 4 years

14. Choose the non-market activities
(i) Vilas sells fish in the village market (ii) Vilas cooks food for his family (iii) Sakal works in a private firm (iv) Sakal looks after his younger brother and sister
(a) (i) & (ii)   (b) (iii) & (iv)
 (c) (i) & (iii)   (d) (ii) & (iv)

15.Which one from the following is the primary sector activities

(i) Forestry (ii) Poultry farming (iii) Animal husbandry (iv) Manufacturing
(a) (i)   (b) (i), (ii), (iii)
(c) (ii), (iii), (iv)   (d) All the above

16. What are Tertiary sector provides
(a) services   (b) goods
(c) both goods and services   (d) none of the above

17. The quality of population depends on
(a) literacy rate   (b) health
(c) skill   (d) all the above

18. People as a resource refers to the
(a) educational skills   (b) productive skills
(c) health skills   (d) none of the above

19. Where is Seasonal unemployment found
(a) urban areas   (b) rural areas
(c) in remote areas   (d) both in rural and urban areas

20. Bribe taking by parent is an
(a) economic activity   (b) marketing activity
(c) non-economic activity   (d) none of the above

21. The persons who are not working by their own willing is covered under
(a) seasonal unemployment   (b) disguised unemployment
(c) educated unemployment   (d) none of the above

22. Disguised unemployment when the number of persons working on a farm is
(a) only what is required   (b) more than required
(c) less than required   (d) None of the above

23. If a person cannot find jobs during some months of the year, which type of employment is this called?
(a) Structural unemployment   (b) Cyclical unemployment
(c) Seasonal unemployment   (d) None of these

24. What is the literacy rate of India as per 2011 census?
(a) 60%   (b) 62%
(c) 74.04%   (d) 70%

25. What is the sex-ratio of India According to 2001 census, :
(a) 921 females per 1000   (b) 930 females per 1000
(c) 928 females per 1000   (d) 933 females per 1000

26. Forestry and dairy are related to which?

(a) Primary Sector   (b) Tertiary Sector
(c) Secondary Sector   (d) None of the above

27. What is the expended form of PHC
(a) Public Health Club   (b) Private Health Club
(c) Primary Health Centre   (d) None of these

28. From the following in which fields is disguised unemployment found?
(a) Industries   (b) Agriculture
(c) Mining   (d) Fisheries

29. What is the aim of Sarva Siksha Abhiyan?
(a)   To provide elementary education to women
(b)   To provide elementary education to the rural poor
(c)   To provide elementary education to all children in the age group 6-14 years
(d)   To provide elementary education to the urban poor

Q.30.Which one from the following is related to the tertiary sector?
(a) Agriculture   (b) Forestry
(c) Mining   (d) Communication

31. Which one from the following is the most labour absorbing sector?
(a) Agriculture   (b) Fisheries
(c) Poultry farming   (d) Mining

32. Which one is an economic activity in the following?
(a) Work of Nurse at her home   (b) Work of Doctor at their home
(c) Work of Teacher in the school   (d) None of the above

33. Which one of the following is considered important to create a 'virtuous cycle' by the parents?
(a) To send their children to the school
(b) To provide goods food to their children
(c) To join their children in corporate schools
(d) To take care of the health and education of their children

34. Infant mortality rate in 2001 was :
(a) 85   (b) 70
(c) 75   (d) 35

35. What is the life expectancy in India as per the census of 2000?
(a) 72 years   (b) 53 years
(c) 64 years   (d) 80 years

36. Tenth Plan endeavored to increase enrolment in higher education from 6% to :
(a) 7%   (b) 9%
(c) 10%   (d) 12%

37. Decrease in IMR (Infant Mortality Rate) of a country signifies:
(a) Increase in life expectancy   (b) Increase in GNP
(c) Economic development of a country   (d) Increase in number of colleges in a country

38. which one is odd in the following (with reference to population) :
(a) Education   (b) Medical Care
(c) Training   (d) Computers

39. The number of females per thousand males refers to:
(a) Sex Ratio   (b) Literacy Rate
(c) Infant Mortality Rate (d) Birth Rate

GEOGRAPHY LESSON:1 INDIA SIZE AND LOCATION

1. Which line divides India into approximately two equal parts?
(i) Tropic of Cancer
(ii) Equator
(iii) Tropic of Capricorn
(iv) None of the Above

2. Which country among the India's neighbours is the smallest?
(i) Nepal
(ii) Sri Lanka
(iii) Bhutan
(iv) Bangladesh

3. The latitudinal extent of India lies between:
(i) 8° 5′ N and 37° 6′ N
(ii) 8° 4′ N and 27° 6′ N
(iii) 8° 4′ N and 37° 6′ N
(iv) 8° 6′ N and 37° 4′ N

4. Which of the following is the oldest route of contact between India and other countries of the world?
(i) Ocean routes
(ii) Land routes
(iii) Air routes
(iv) None of the Above

5. In which of the following places, would you find the least difference in the duration between day time and night time?
(i) Kannyakumari
(ii) Laddakh
(iii) Srinagar
(iv) None of the Above

16. By which geographical feature is India bounded in the north-west, north and north-east?
(i) Northern Plains
(ii) Plateaus
(iii) Young Fold Mountains
(iv) Desert

7. Which geographical feature bounds India's mainland south of 22°N latitude?
(i) Young Fold Mountains
(ii) Plateaus
(iii) Desert
(iv) Ocean

8. The sun rises two hours earlier in Arunachal Pradesh as compared to Gujarat. What time will the watch show in Gujarat if it is 6 am in Arunachal Pradesh?
(i) 4 am
(ii) 5 am
(iii) 6 am
(iv) 7 am

9. Which neighbouring country would you reach if you sail across the Palk Strait?
(i) Bangladesh
(ii) Maldives
(iii) Myanmar
(iv) Sri Lanka

10. Which one of the following straits separates India from Sri Lanka?
(i) Cook Strait
(ii) Bass Strait
(iii) Palk Strait
(iv) Bering Strait

GEOGRAPHY LESSON:2 INDIA PHYSICAL FEATURES

1. What are Lesser Himalayas known as?
(i) Himadri
(ii) Purvanchal
(iii) Shivaliks
(iv) Himachal

2. Which two hills are located in the south-east of Eastern Ghats ?
(i) Mizo Hills and Patkai Hills
(ii) Shevroy Hills and Javadi Hills
(iii) Patkai Hills and Naga Hills
(iv) Mizo Hills and Naga Hills

3. According to the 'Theory of Plate Tectonics,' when some plates come towards each other, which of the following is formed?
(i) Convergent boundary
(ii) Divergent boundary
(iii) Transform boundary
(iv) None of the Above

4. The Peninsular Plateau of India is part of which of the following landmass?
(i) Angaraland
(ii) Tethys
(iii) Gondwanaland
(iv) None of the Above

5. Which continents of today were part of the Gondwanaland?
(i) Asia and Africa
(ii) Europe and Asia
(iii) Europe and Africa
(iv) Australia and South America

6. Which of the following physiographic divisions of India was formed out of accumulations in the Tethys geosyncline?
(i) The Himalayas
(ii) The Peninsular Plateau
(iii) The Northern Plains
(iv) The Coastal Plains

7. Geologically, which of the following physiographic divisions of India is supposed to be one of the most stable land blocks?
(i) The Himalayas
(ii) The Northern Plains
(iii) The Peninsular Plateau
(iv) The Coastal Plains

8. Which Physiographic divisions have rising hills and wide valleys?
(i) The Himalayan Mountains
(ii) The Northern Plains
(iii) The Peninsular Plateau
(iv) The Coastal Plains

9. Which of the following is the highest peak in India?
(i) Mt. Everest
(ii) Nanga Parbat
(iii) Kanchenjunga
(iv) Nandadevi

10. In which division of the Himalayas are the famous valleys of Kashmir, Kangra and Kullu located?
(i) The Himadri
(ii) The Himachal
(iii) The Shivaliks
(iv) Purvanchal

HISTORY LESSON: I FRENCH REVOLUTION

1. Storming of the Bastille

(a) 14th July, 1789

(b) 14th July, 1798

(c) 14th June, 1789

(d) 14th June, 1798

2. The Bastille symbolised

(a) benevolence of the king

(b) despotic power of the king

(c) armed might of France

(d) prestige and power

3. 18th century French society was divided into

(a) castes

(b) four Estates

(c) three Estates

(d) None of these

4. Which of the following constituted the privileged class?

(a) Clergy and peasants

(b) Peasants and nobility

(c) First and Third Estate

(d) Clergy and nobility

5. The most important of the privileges enjoyed by the clergy and nobility

(a) right to collect dues

(b) ownership of land

(c) participate in wars

(d) exemption from taxes to the state

6. Which of the following believed social position must depend on merit?

(a) Middle class

(b) Nobility

(c) Workers

(d) Peasants

7. Society based on freedom, equal laws and opportunities was advocated by

(a) middle class and people of the Third Estate

(b) clergy and nobility

(c) philosophers such as John Locke and Rousseau

(d) Englishmen Georges Danton and Arthur Young

8. Which of the following refuted the doctrine of divine and absolute right?

(a) John Locke

(b) Rousseau

(c) Montesquieu

(d) Voltaire

9. Who advocated government based on Social Contract?

(a) Darwin

(b) Spencer

(c) Rousseau

(d) Montesquieu

10. Division of power within the government was put forth in

(a) 'Two Treaties of Government'

(b) 'The Spirit of the Laws'

(c) 'Le Moniteur Universal'

(d) 'The Social Contract'

11. King in France at the time of the Revolution

(a) Louis XIV

(b) Louis XVI

(c) Marie Antoinette

(d) Nicholas II

12. Political body of France

(a) Duma

(b) Reichstag

(c) Lok Sabha

(d) Estates General

13. Voting in the Estates General was conducted on the principle of

(a) each member one vote

(b) male adult franchise

(c) universal adult franchise

(d) each Estate one vote

14. The Estates General was last convened in

(a) 1604

(b) 1614

(c) 1416

(d) 1641

15. Where did the Third Estate form and announce the National Assembly?

(a) Indoor Tennis Court

(b) Hall of Mirrors

(c) Firoz Shah Ground

(d) Winter Palace

16. Members of the Third Estate were led by

(a) Louis XVI and Marie Antionette

(b) Lenin and Kerensky

(c) Mirabeau and Abbe Sieyes

(d) Rousseau and Voltaire

17. Which of the following was the main objective of the Constitution of 1791?

(a) to limit the powers of the king alone

(b) do away with feudal privileges

(c) give equal rights to women

(d) establish a constitutional monarchy

18. A broken chain symbolised

(a) Chains used to fetter slaves

(b) Strength lies in unity

(c) Royal power

(d) Act of becoming free

19. The winged woman personified

(a) National colours of France

(b) Act of becoming free

(c) Personification of Law

(d) Rays of the Sun will drive away the clouds of ignorance

20. Bundle of rods or fasces symbolised

(a) Royal power

(b) Equality before law

(c) Law is the same for all

(d) Strength lies in unity

21. Which of the following symbolised Eternity?

(a) Sceptre

(b) Eye within a triangle radiating light

(c) The Law Tablet

(d) Snake biting its tail to form a ring

22. Which of the following were the national colours of France during the?

(a) Blue-green-yellow

(b) Red-green-blue

(c) Blue-white-red

(d) Yellow-red-white

23. National Anthem of France

(a) Vande Matram

(b) Roget de L Isle

(c) Le Moniteur Universel

(d) Marseillaise

24. Members of the Jacbbin Club were known as

(a) Conservatives

(b) Revolutionaries

(c) Terrorists

(d) San-culottes

25. France on 21st September, 1792 was declared a

(a) Socialist State

(b) Democracy

(c) Communist State

(d) Republic

26. Which of the following was a factor in the rise of Napoleon?

(a) Fall of the Jacobin government

(b) Robespierres Reign of Terror

(c) Political instability of the Directory

(d) Nationalist forces

CHAPTER 2 : RUSSIAN REVOLUTION

1. Who led the procession of workers to the event 'Bloody Sunday' in Russia?

(i) Lenin

(ii) Stalin

(iii) Father Gapon

(iv) Friedrich Engels

2. The commune of farmers was known as:

(i) Soviets

(ii) Duma

(iii) Mir

(iv) Cossacks

3. Who led the Bolshevik group in Russia during Russian Revolution?

(ii) Karl Marx

(ii) Stalin

(iii) Vladimir Lenin

(iv) Tsar

4. Who formed an international body, named 'Second International'?

(i) Communists

(ii) Conservatives

(iii) Radicals

(iv) Socialists

5. Who wanted to modernize Islam to lead their societies?

(i) Radicals

(ii) Jadidists

(iii) Communists

(iv) Socilists

6. Which of the following statements is not correct about the 'liberals'?

(i) They wanted a nation which tolerated all religions.

(ii) They did believe in universal adult franchise.

(iii) They opposed the uncontrolled power of dynastic rulers.

(iv) They wanted to safeguard the rights of individuals against governments.

7. Who created Soviet Union from the Russian Empire?

(i) Bolsheviks

(ii) Mensheviks

(iii) Jadidists

(iv) Communists

8. Who among the following was the advisor of Tsarina Alexandra?

(i) Stalin

(ii) Rasputin

(iii) Lenin

(iv) Karl Marx

9. Who founded Comintern?

(i) Bolsheviks

(ii) Mensheviks

(iii) Jadidists

(iv) Communists

10. The associations of people who produced goods together and divided the profits according to the work done by members were called?

(i) Communists

(ii) Cooperatives

(iii) Bolsheviks

(iv) None of the Above

CIVICS LESSON:1 WHAT IS DEMOCRACY AND WHY DEMOCRACY?

1.The word 'Democracy' comes from the Greek word –
(a) Democracia (b) Demokratia (c) Demos (d) Kratia

2.What kind of government is there in Myanmar?
(a) Government elected by the people (b) Communist government (c) Army rule (d) Monarchy

3.The head of the government in Nepal is the:
(a) President (b) Prime Minister (c) King (d) Vice President

4. Who led a military coup in Pakistan in 1999?
(a) Benazir Bhutto (b) Nawaz Sharif (c) Pervez Musharraf (d) None of the above

5. In which case was the real power with external powers and not with the locally elected representatives?
(a) India in Sri Lanka (b) US in Iraq (c) USSR in Communist Poland (d) Both (b) and (c)

6. 'One person, one vote' means
(a) One person is to be voted by all (b) One person has one vote and each vote has one value

(c) A person can vote only once in his life (d) both (a) and (c)

7. How many members are elected to the National People's Congress from all over China?
(a) 3050 (b) 3000 (c) 4000 (d) 2000

8. Why can the Chinese government not be called a democratic government even though elections are held there?
(a) Army participates in election (b) Government is not accountable to the people

(c) Some parts of China are not represented at all (d) Government is always formed by the Communist Party

9.Which party always won elections in Mexico since its independence in 1930 until 2000?
(a) Revolutionary Party   (b) Mexican Revolutionary Party

(c) Institutional Revolutionary Party   (d) Institutional Party

10. Democracy must be based on
(a) One-party system (b) Free and fair election (c) Choice from only the ruling party (d) All the above

11. When did Zimbabwe attain independence and from whom?
(a) 1970, from Black minority rule (b) 1880, from White minority rule

(c) 1980, from Americans (d) 1980, from White minority rule

12.Which party has ruled Zimbabwe since its independence and who is its ruler?
(a) ZANU-PF, Robert Mugabe (b) ZANU-PF, Kenneth Kaunda

(c) Zimbabwe Freedom Party, Nelson Mandela (d) Zimbabwe Party, P Johnson

13 which of these features is/are necessary to provide the basic rights to the citizens?
(a) Citizens should be free to think (b) should be free to form associations

(c) Should be free to raise protest (d) All the above

14.Which organ of the government is required to protect the rights of the citizens?
(a) Executive (b) Legislature (c) Independent judiciary (d) Police

15What is Constitutional Law?
(a) Provisions given in the Constitution (b) Law to make Constitution

(c) Law to set up Constituent Assembly (d) none of the above

16.Which of these is permitted under the Rule of Law?
(a) Prime Minister can be punished for violating the Constitution. (b) Police has a right to kill anybody.

(c) Women can be paid lesser salaries (d) President can rule for as long as he wants.

17.Some of the drawbacks of democracy is
(a) Instability and delays (b) corruption and hypocrisy

(c) Politicians fighting among themselves (d) all the above

18. In which of these cases can democracy not provides a complete solution?
(a) Removing poverty completely (b) Providing education to all

(c) Giving jobs to all (d) All the above

19. In which period did China face one of the worst famines that have occurred in the world?
(a) 1932-36 (b) 1958-61 (c) 2001-2002 (d) 2004-2007

20 A democratic government is better than a non-democratic government because
(a) It may or may not be accountable (b) It always responds to the needs of the people

(c) It is a more accountable form of government (d) None of the above

21. Democracy improves the quality of decision-making because
(a) Decisions are taken by educated people (b) Decisions are taken by consultation and discussion

(c) Decisions are taken over a long period of time (d) All decisions are approved by judiciary

22.How does democracy allows us to correct its own mistakes?
(a) Mistakes are hidden and cannot be corrected

(b) Re-electing the same government to enable it to correct its mistakes

(c) The rulers can be changed (d) none of the above

23.The most common form that democracy takes in our time is that of
(a) Limited democracy (b) representative democracy

(c) Maximum democracy (d) none of the above

24.Which body in Indian political system is an example of direct democracy?
(a) Zila Parishad (b) Panchayat Samiti (c) Gram Sabha (d) Vidhan Sabha

25.Which of these is an example of perfect democracy?
(a) USA (b) UK (c) India (d) None of the above

26Which of these is not a feature of monarchy, dictatorship or one-party rule?
(a) Censorship of press (b) No opposition party or parties

(c) Citizens taking part in politics (d) One-man rule

LESSON 2   ELECTORAL POLITICS

1. Which of these is not a good reason to say that Indian elections are democratic?
a) India has the largest number of voters
b) India's Election Commission is very powerful
c) In India, everyone above the age of 18 has a right to vote
d) In India, the losing parties accept the electoral verdict

2. Who appoints the Chief Election Commissioner (CCE) of India?
a) The Chief Justice of India
b) The Prime Minister of India

c) The President of India
d) The People of India

3. What is the age of a person who can contest election for Lok Sabha in India?
a) 25 Years
b) 30 Years
c) 35 Years
d) 40 Years

4. The number of Lok Sabha Constituencies in India at present is:
a) 541
b) 546
c) 543
d) 540

5. The voter's list is also known as:
a) Election
b) Voter Identity Card
c) Electoral Roll
d) None of these

6. Which of the following statements is against the democratic process of elections?
a) Parties and candidates should be free to contest elections
b) Elections must be held regularly immediately after the term is over
c) The Right to Vote should be given to selected people only
d) Elections should be conducted in a free and fair manner

7. The number of seats reserved for scheduled caste in Lok Sabha is:
a) 59
b) 79
c) 89
d) 99

8. Which one of the following provisions fails to ensure fair and equal chance to compete to candidates and political parties?
a) No party or candidate can bribe or threaten voters
b) No party or candidate is bound by the model code of conduct
c) No party or candidate can use government resources for election campaign
d) Nobody can appeal to the voters in the name of caste or religion

9. Which of the following statements about the reasons for conducting elections are false?
a) Elections enable people to judge the performance of the government
b) People select the representative of their choice in an election
c) Elections enable people to evaluate the performance of the judiciary
d) People can indicate which policies they prefer

10. What makes an election democratic? Select the correct option.
a) Universal Adult Franchise
b) Fundamental Rights
c) Directive Principles of State Policy
d) Free and fair Election.

11. Which of the following does not include election procedure?
a) Voting
b) Nomination of Candidate
c) Booth capturing
d) Canvassing

12. Which of the following is not allowed while carrying out an election campaign?
a) Giving money to voters to cast vote for particular candidate
b) Using television channels.
c) Door-to-door canvassing.
d) Contacting voters on phone.

13. Is it good to have Political Competition? Which of the following statements justify this?
a) It creates a sense of disunity and factionalism
b) Political Competition helps to force political parties and leaders to serve people
c) It gives fair chance to people for the responsible government
d) Political competition causes divisions and some ugliness

14. What are the main challenges to free and fair elections in India? Select the correct options.
a) Model of Code of Conduct
b) Lack of Internal Democracy among Political Parties
c) Influence of Money and Muscle Power
d) Dynastic Rule

15. During election the voters make many choices. Select the correct options.
a) Who will make laws for them?
b) Who will grant Fundamental Rights?
c) Who will form the government and take major decisions?
d) Who will check the functioning of courts?

16. Which among the following is not correct?
a) The Election Commission conducts all elections for the Parliament and Assemblies.
b) The Election Commission directs and controls the preparation of electoral rolls.
c) The Election Commission cannot fix the election dates
d) The Election Commission does the scrutiny of Nomination papers.

17. Which is the new reform introduced in the electoral process by the Election

Commission?
a) Indelible ink
b) Electronic voting machine
c) Polling booths
d) Voters list

18. Which of the following statements regarding elections and election commission hold true?
(i) Election Commission of India has enough powers to conduct free and fair elections in the country.
(ii) There is a high level of popular participation in the elections in our country.
(iii) It is very easy for the party in power to win an election.
(iv) Many reforms are needed to make our elections completely free and fair.

a) (i), (ii), and (iii)
b) (i), (ii') and (iv)
c) (i), (ii), (iii) and (iv)
d) only (iii)

19. Which of the following is not a feature of Election system in India?
a) Universal Adult Franchise
b) Secret Voting
c) Reservation of seats in the legislature for the members of Scheduled Castes and Scheduled Tribes
d) Communal Electorate

20. Elections in India for Parliament and State Legislatures are conducted by
a) President
b) Prime Minister
c) Governor
d) Election Commission of India

21. Members of Election Commission are appointed by
a) President of India
b) Prime Minister of India
c) Elected by the people
d) Chief Justice of India

22. By-Election is the election which is held
a) Directly
b) Indirectly
c) To fill up a vacancy in the legislature
d) When a legislature is dissolved before the expiry of its normal term.

23. In Democracy Elections are important because
a) The formation of government becomes easy
b) They help in the formation of opposition party
c) They are a check on the working of the government
d) All of the above

24. Following is a weakness (challenge to) Indian election system:
a) Secret Ballot
b) Use of Electronic Voting Machines
c) Misuse of Official Machinery
d) Universal Adult Franchise.

Science

Physics

LESSON-1 MATTER IN OUR SURROUNDINGS

1. CO_2 can be easily liquified and even solidified because
   (a) It has weak forces of attraction
   (b) It has comparatively more force of attraction than other gases
   (c) It has more intermolecular space
   (d) It is present in atmosphere.
2. Which of the following has heighest kinetic energy?
   (a) Particles of ice at 0 °C
   (b) Particles of water at 0 °C
   (c) Particles of water at 100 °C
   (d) Particles of steam at 100 °C
3. Bose-Einstein Condensate have
   (a) Very low kinetic energy
   (b) Low kinetic energy
   (c) High kinetic energy
   (d) Highest kinetic energy.
4. Which of the following is most suitable for summer?
   (a) Cotton
   (b) Nylon
   (c) Polyester
   (d) Silk.
5. Which of the following is incorrect about plasma?
   (a) Fluorescent tube and neon sign bulbs consist of plasma.
   (b) The gas gets ionised when electrical energy flows through it.
   (c) It consists of super-energetic and super-excited particles.

(d) The plasma glows with colour which does not depend upon nature of gas.

6. The colour of vapours formed on sublimation of iodine solid is
    (a) Purple (violet)
    (b) Colourless
    (c) Yellow
    (d) Orange

7. Under which of the following conditions we can boil water at room temperature?
    (a) At low pressure
(b) At high pressure
    (c) At very high pressure
(d) At atmospheric pressure

8. Which of the following is not endothermic process?
    (a) Fusion
(b) Vapourisation
    (c) Temperature
(d) Insoluble heavy impurities

9. Which of the following does not affect rate of evaporation?
    (a) Wind speed
    (b) Surface area
    (c) Temperature
     (d) Insoluble heavy impurities

10. Kinetic energy of molecules is directly proportional to
    (a) Temperature
    (b) Pressure
    (c) Both (a) and (b)
    (d) Atmospheric pressure

LESSON-2 IS MATTER AROUND US PURE

1. Air shows the property of
    (a) N_2
    (b) O_2
    (c) Both (a) and (b)
    (d) None of these.

2. The components of water can be separated by
    (a) Physical methods
    (b) Chemical methods
    (c) Both
    (d) They can't be separated

3. Mixture can be
    (a) homogeneous
    (b) heterogeneous
    (c) Both (a) and (b)

(d) pure substance

4. Brass is a
   (a) Compound
   (b) Element
   (c) Homogeneous mixture
   (d) Heterogeneous mixture

5. In sugar solution,
   (a) Sugar is solute, water is solvent
   (b) Sugar is solvent, water is solute
   (c) Both are solutes
   (d) Both are solvents.

6. Brass is a solution of molten copper in
   (a) solid zinc
   (b) molten zinc
   (c) gaseous zinc
   (d) molten tin

7. Diamond is lustrous because
   (a) it is colourless
   (b) it is hard
   (c) it is pure
   (d) its refractive index is high

8. Barometer measures
   (a) Pressure
   (b) Atmospheric pressure
   (c) Wind velocity
   (d) Gaseous pressure.

9. Thermometer is an instrument that measures
   (a) Temperature of substance
   (b) Heat of substance
   (c) Radiation of substance
   (d) Flow energy in a substance.

10. Anemometer measures
   (a) Amount of haemoglobin in blood
   (b) Pollination of plant by the wind
   (c) Wind resistance
   (d) Wind speed.

1. If the displacement of an object is proportional to square of time, then the object moves with:

(a) Uniform velocity

(b) Uniform acceleration

(c) Increasing acceleration

(d) Decreasing acceleration

2. From the given v-t graph, it can be inferred that the object is
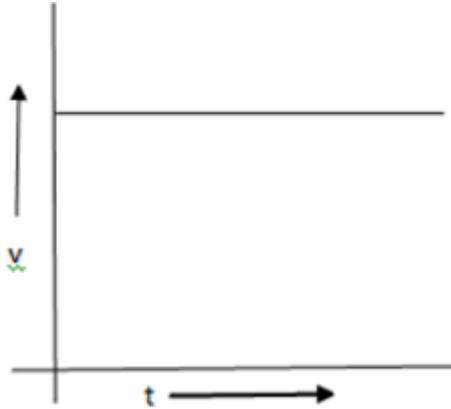
(a) At rest

(b) In uniform motion

(c) Moving with uniform acceleration

(d) In non-uniform motion

3. Suppose a boy is enjoying a ride on a marry-go-round which is moving with a constant speed of 10 m/s. It implies that the boy is:
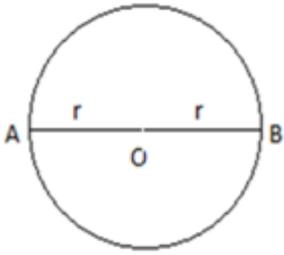
(a) At rest

(b) Moving with no acceleration

(c) In accelerated motion

(d) Moving with uniform velocity

4. A particle is moving in a circular path of radius r.

The displacement after half a circle would be:

(a) Zero

(b) πr

(c) 2r

(d) 2πr

5. Which of the following can sometimes be 'zero' for a moving body?

i. Average velocity

ii. Distance travelled

iii. Average speed

iv. Displacement

(a) Only (i)

(b) (i) and (ii)

(c) (i) and (iv)

(d) Only (iv)

6. Which of the following statement is correct regarding velocity and speed of a moving body?

(a) Velocity of a moving body is always higher than its speed

(b) Speed of a moving body is always higher than its velocity

(c) Speed of a moving body is its velocity in a given direction

(d) Velocity of a moving body is its speed in a given direction

7. When a car driver travelling at a speed of 10 m/s applies brakes and brings the car to rest in 20 s, then the retardation will be:

(a) + 2 m/s²

(b) − 2 m/s²

(c) − 0.5 m/s²

(d) + 0.5 m/s²

8. The speed – time graph of a car is given here. Using the data in the graph calculate the total distance covered by the car.
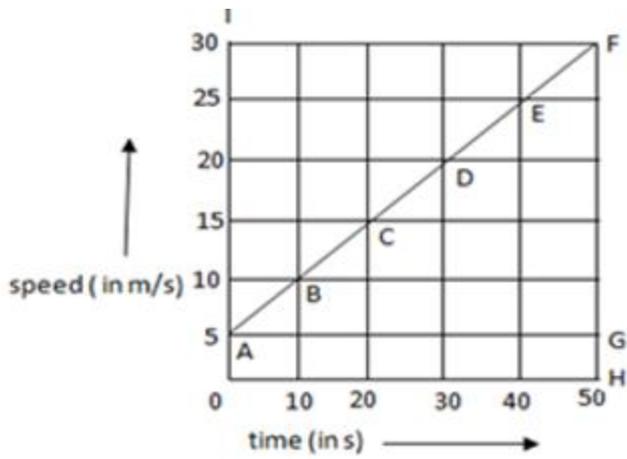
(a) 1250 m

(b) 875 m

(c) 1500 m

(d) 870 m

9. A car of mass 1000 kg is moving with a velocity of 10 m/s. If the velocity-time graph for this car is a horizontal line parallel to the time axis, then the velocity of the car at the end of 25 s will be:

(a) 40 m/s

(b) 25 m/s

(c) 10 m/s

(d) 250 m/s

10. Which of the following is most likely not a case of uniform circular motion?

(a) Motion of the earth around the sun

(b) Motion of a toy train on a circular track

(c) Motion of a racing car on a circular track

(d) Motion of hours' hand on the dial of a clock

11. In which of the following cases of motions, the distance moved and the magnitude of the displacement are equal?

i. If the car is moving on a straight road

ii. If the car is moving in circular path

iii. The pendulum is moving to and fro

iv. The earth is moving around the sun

(a) only(ii)

(b) (i) and (iii)

(c) (ii) and (iv)

(d) only (i)

12. A car is travelling at a speed of 90 km/h. Brakes are applied so as to produce a uniform acceleration of -0.5 m/s^2. Find how far the car will go before it is brought to rest?

(a) 8100 m

(b) 900 m

(c) 625 m

(d) 620 m

13. In a free fall the velocity of a stone is increasing equally ion equal intervals of time under the effect of gravitational force of the earth. Then what can you say about the motion of this stone? Whether the stone is having:

(a) Uniform acceleration

(b) Non-uniform acceleration

(c) Retardation

(d) Constant speed

14. The numerical ratio of displacement to distance for a moving object is:

(a) Always less than 1

(b) Equal to 1 or less than 1

(c) Always more than 1

(d) Equal to 1 or more than one

15. Four cars A, B, C and D are moving on a leveled, straight road. Their distance time graphs are shown in the figure below. Which of the following is the correct statement regarding the motion of these cars?
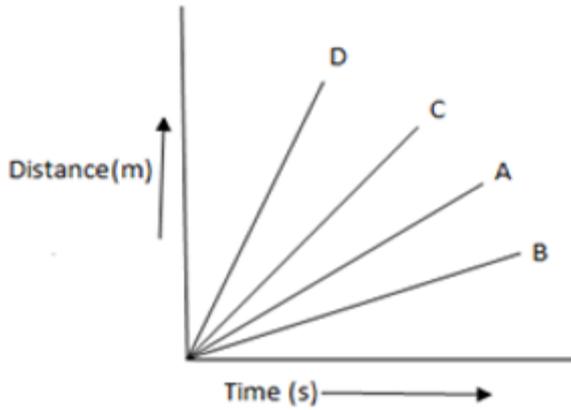
(a) Car A is faster than car D

(b) Car B is the slowest

(c) Car C is faster than car D

(d) Car C is the slowest

SET -B

1. A worker covers a distance of 40 km from his house to his place of work, and 10 km towards his house back. Then the displacement covered by the worker in the whole trip is

(a) zero km
(b) 10 km
(c) 30 km
(d) 50 km

2. Rate of change of displacement is called

(a) Speed
(b) Deceleration
(c) Acceleration
(d) Velocity

3. Acceleration is a vector quantity, which indicates that its value

(a) Is always negative
(b) Is always positive

(c) Is zero
(d) Can be positive, negative or zero

4. A player moves along the boundary of a square ground of side 50 m in 200 sec.The magnitude of displacement of the farmer at the end of 11 minutes 40 seconds from his initial position is

(a) 50 m
(b) 150 m
(c) 200 m
(d) 50√2 m

5. An object travels 40m in 5 sec and then another 80m in 5 sec. What is the average speed of the object?
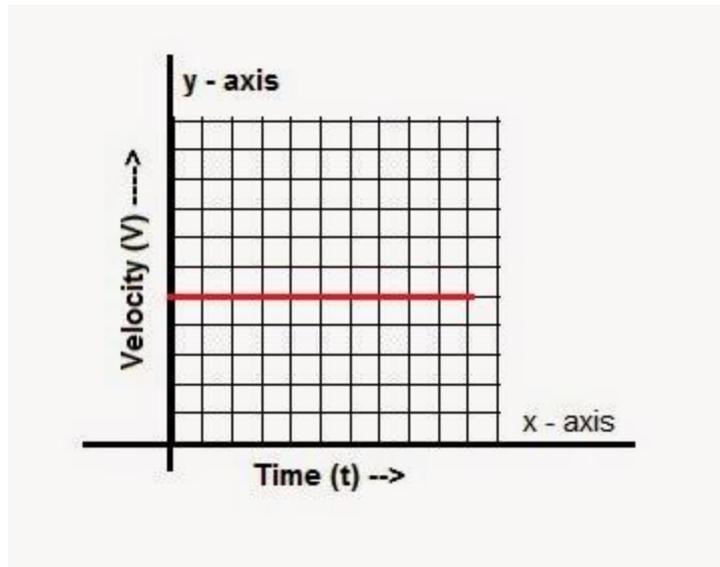
(a) 12 m/s
(b) 6 m/s
(c) 2 m/s
(d) 0 m/s

6. The average velocity of a body is given by the expression :

(a) V= u+ at
(b) 2as= v^2− u^2
(c) V_{av}=(u + v)/2
(d) S= ut + ½ a t^2

7. SI Unit of measurement of acceleration is

(a) m/s
(b) m/s^2
(c) m/hr
(d) M

8. From the given Velocity-Time graph (figure)

it can be inferred that the object is moving with

(a) Non uniform velocity
(b) moving with uniform acceleration
(c) At rest
(d) Uniform velocity

9. The acceleration of a body from a velocity –time graph is

(a) Is denoted by a line parallel to the time axis at any point on the distance axis
(b) Equal to the slope of the graph
(c) Area under the graph
(d) Is denoted by a line parallel to the distance axis at any point on the time axis

10. Distance covered by a body from velocity-time graph is

(a) Is denoted by a line parallel to the distance axis at any point on the time axis
(b) Is denoted by a line parallel to the time axis at any point on the distance axis
(c) Equal to the slope of the graph
(d) Area under the graph

Velocity-time graph for a car moving with uniform acceleration
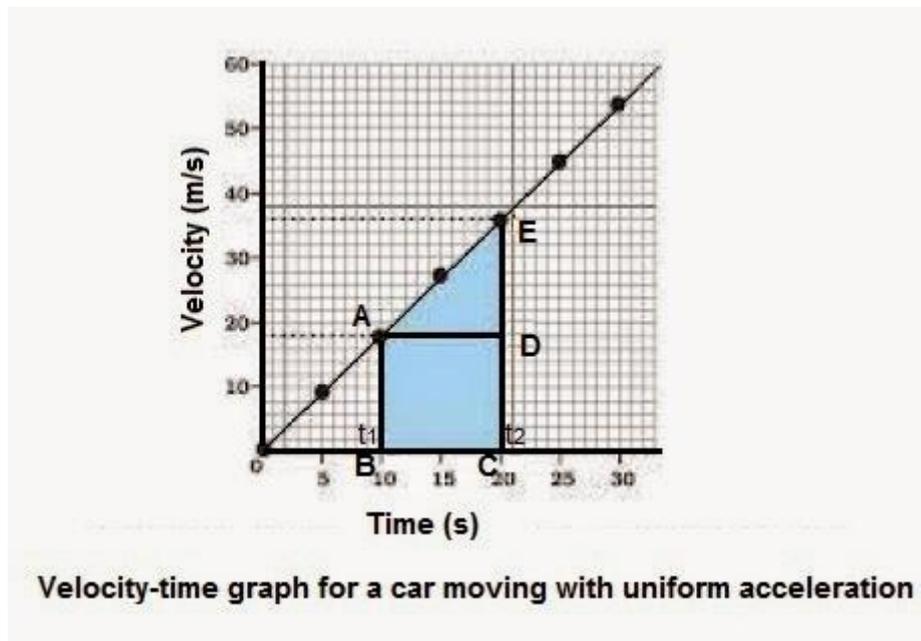
From the above given Velocity-Time graph, answer the following questions (Q11 to Q15): -

11. From the above Velocity-Time graph, the body is moving with

(a) Variable Acceleration
(b) Zero Acceleration
(c) Constant Acceleration
(d) Zero velocity

12. Distance covered by the body during the interval from 10sec to 20 sec is

(a) 180
(b) 200
(c) 240
(d) 270

13. At the point A the body is at a distance of

(a) 90m
(b) 180m
(c) 270m
(d) 350m

14. The velocity of the body at the point 'B' is

(a) 20m/s
(b) 24m/s
(c) 32m/s
(d) 36m/s

15. In the total journey, starting from the rest, the body has traveled up to a distance

of

(a) 270m
(b) 360m
(c) 450m
(d) 540m

16. What does the slope of distance - time graph give?

(a) Acceleration
(b) Uniform speed
(c) Speed
(d) both[b] and [c] depending upon the time of graph

17. An example of a body moving with constant speed but still accelerating is

(a) A body moving with constant speed on a straight road
(b) A body moving in a helical path with constant speed
(c) A body moving with constant speed in a circular path
(d) A body moving with constant speed on a straight railway track

18. .Find the average speed of a bicycle if it completes two round of a circular track of radius 140m twice in 5min 52 sec.
   a) 10m/s
   b) 5m/s
   c) 2m/s
   d) 4m/s

19. A particle travels with a speed of 18 km/hr, its speed in m/s is
   a) 5 m/s
   b) 50 m/s
   c) 64.8 m/s
   d) 48 m/s

20. A bus moves from stop 'A to stop 'B' with a speed of 40 km/hr and then from stop 'B' to stop 'A with a speed of 50 km/hr. Its average speed is
   a) 48.5 km/hr
   b) 44 km/hr
   c) 45 km/hr
   d) 44.4 km/hr

Force and Laws of Motion

1. The S.I. unit of force is
   a) Kgm/s

b) Kgm/s^2
c). Newton
d) Newton-meter

2. What do we get by the product of mass and velocity?
   a). Force
   b)Inertia
   c) Momentum
   d). Newton

3. The rate of change of momentum of an object is proportional to
   a). Mass of the body
   b)Velocity of the body
   c) Net force applied on the body
   d). None of these

4. If two balls of same masses are dropped on sand, the depths of penetration is same if
   a). Heavier ball is dropped faster than lighter ball
   d)Lighter ball is dropped faster than heavier ball
   c)The product 'mv' is same for both bodies
   d). None of these

5. A coin placed on a card(rested at the edges of the glass) remains at rest because of
   a). Inertia of rest
   b)Two forces act on the coin which balance each other
   c) No unbalanced force acts on it
   d). All of these

6. A force of 50N moves a body,
   a). Friction force exerted on the body is less than 50N
   b)Friction force exerted on the body is more than 50N
   c) None of these
   d). Both of a and b

7. A fielder giving a swing while catching a ball is an example of
   a)Inertia
   b)Momentum
   c) Newton's II law of motion
   d). Newton's I law of motion

8. Action and reaction forces
   a). Act on the same body
   b)Act on different bodies
   c) Act in same direction
   d). Both I and III

9. When we pedaling the bicycle it stops because
   a). The earth's gravitational force acts on it
   b)It is not accelerated
   c) No unbalanced force acts on it
   d). Frictional force acts on it

10. A football and a stone has same mass
    a). Both have same inertia
    b)Both have same momentum
    c) Both have different inertia
    d). Both have different momentum

11. A cyclist of mass 30 kg exerts a force of 250 N to move his cycle. acceleration is 4 ms^{-2}. force of friction between road and tyres will be
    a).120 N

b).130 N

c)150N

d)115 N

12. How much centripetal force is needed to make a body of mass 0.8 kg to move in a circle of radius 40 cm with a speed 2 ms^{-1}?

a)5 N

b)6 N

c)7 N

d)8 N

13. If pressing force on sliding surfaces is greater, then friction will be

a)small

b)constant

c)zero

d)greater

14.Newton's first law of motion is valid only in absence of

a)force

b)net force

c)momentum

d)friction

15.Acceleration produced by a force of 120 N in a mass of 35 kg will be

a)4 ms^{-2}

b) 3.43 ms^{-2}

c)5.21 ms^{-2}

d) 6.8 ms^{-2}

16.If a body is moving in a straight line then net force acting on it is

a)increasing

b)decreasing

c)zero

d) constant

17.As we go farther away from Earth, gravitational force becomes

a)constant
b)stronger
c)weaker
d)positive

Biology

I. Choose the correct answer

1. The only cell organelle present in prokaryotic cell is
a)Mitochondria
b) ribosome
c) plastids
d)lysosome

2. Which cell organelle plays a crucial role in detoxifying many poisons and drugs in a cell?
a)Golgi Apparatus
b) Lysosomes
c) Smooth endoplasmic reticulum
d)Vacuoles

3. Osmosis is a special case of diffusion because:-

   a)More water enters the cell than enters it.
   b)In osmosis water only enters
   c)In osmosis water only leaves
   d)More water leaves the cell than that enters it.

4. Plastid that is colourless is
   a) Chromoplast
   b)Leucoplast
   c) Chloroplast
   d) Lysosome

5. A slide of human cheek cell is stained with methylene blue and mounted in glycerine. Which of the following cellular organelle would you be able to see under a microscope?
   a) Plasma membrane
   b) Cell wall
   c) Mitochondrial
   d.)Lysosome

6. Which process requires the energy provided by ATP?
   a) Osmosis
   b) Diffusion

c) Active transport

d) Plasmolysis

7. A cell "X" contains a cell wall, large central vacuole and a nucleus at the periphery. The cell "X" is _____.

a) Plant cell

b) Animal cell

c) Bacterial cell

d) Prokaryotic cell

8. Which term is used to refer the process of absorption of water by raisins from kheer?

a) Exosmosis

b) Endosmosis

c) Diffusion

d) Imbibition

9. Old organelles, viruses and bacteria that a cell can ingest are broken down in

a) Ribosomes

b) Golgi bodies

c) SER

d) RER

10. What will happen, a when a human RBC is a placed in a hypotonic environment?

a. It undergoes plasmolysis

b. It undergoes turgidity

c. It is at equilibrium

d. None of these

11. Given below four operations for preparing a temporary mount of human cheek cells-

(i) taking scraping from inner side of cheek and spreading it on a clean slide.

(ii) putting a drop of glycerine on the material.

(iii) adding 2-3 drops of methylene blue.

(iv) rinsing the mouth with fresh water and disinfectant solution.

12. Which of the following is a correctly labelled cell of an onion peel?
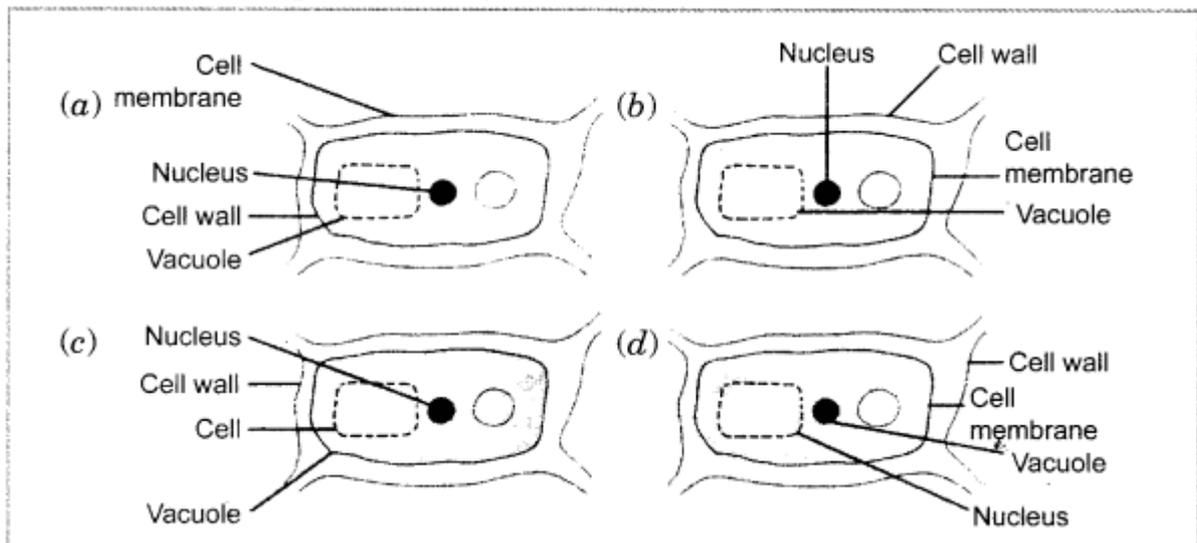
13. Diagrams of cells of an onion peel were labelled by four students as given below. The correctly labelled diagram is

(A)   (B)

(C)   (D)
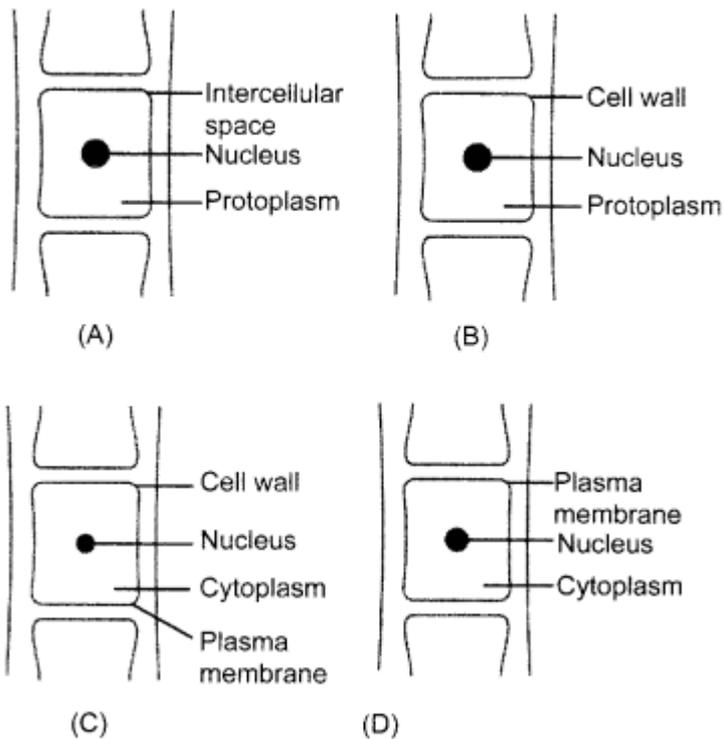
(a) nucleus, cytoplasm,
(b) nucleus, vacuole.
(c) vacuole, nucleus.
(d) cytoplasm, vacuole.

Chapter:15 Improvement in food resources

1. The management and production of fish is called
a) Pisciculture
b) Apiculture
c) Sericulture
d) Aquaculture

2. What is the process of growing two or more crops in a definite pattern?
a) Crop rotation
b) Inter-cropping
c) Mixed cropping
d) Organic cropping

3. Cyperinus and Parthenium are types of
a) Diseases
b)Pesticides
c) Weeds
d) Pathogens

4. Pasturage is related to
a) Cattle
b) Fishery
c) Apiculture
d) Sericulture

5. The major constituents of animal feed apart from water is

a) antibiotics
b) grain mixture
c) minerals
d) roughages

6.   Rotation of crops is essential for
a) getting different kind of crops
b) increasing quality of minerals
c) increasing fertility of soil
d) increasing quality of proteins
7.   Which one of the following fishes is a surface feeder?
a)Rohus
b)Mrigals
c)common carps
d)catlas
8.   What is the other name for Apis cerana indica?
a) Indian cow
b) Indian buffalo
c) Indian bee
d) None of these
9.   Using fertilizers in farming is an example of
a) No cost production
b) Low cost production
c) High cost production
d) None of these
10. Cyperinus and Parthenium are types of
a) Diseases
b) Pesticides
c) Weeds
d) Pathogens

****

MATHEMATICS (2020-21)
(Chapters 1,2,3,4,5,6)

1. From the choices given below mark the co-prime numbers
   (a) 2, 3 (b) 2, 4 (c) 2, 6 (d) 2, 110

2. A rational number equivalent to $\frac{5}{7}$ is
   (a) $\frac{15}{17}$ (b) $\frac{25}{27}$ (c) $\frac{10}{14}$ (d) $\frac{10}{27}$

3. An example of a whole number is
   (a) 0 (b) $\frac{1}{2}$ (c) $\frac{11}{5}$ (d) −7

4. Given a rational number $\frac{5}{9}$ this rational number can also be known as
   (a) a natural number (b) a whole number
   (c) a fraction (d) a real number

5. The rational number $0.\bar{3}$ can also be written as
   (a) 0.3 (b) $\frac{3}{10}$ (c) 0.33 (d) $\frac{1}{3}$

6. If the decimal representation of a number is non-terminating, non-repeating then the number is
   (a) a natural number (b) a rational number
   (c) a whole number (d) an irrational

7. $(-5+2\sqrt{5}-\sqrt{5})$ is
   (a) an irrational number (b) a positive rational number
   (c) a negative rational number (d) an integer

8. $(\sqrt{12}+\sqrt{10}-\sqrt{2})$ is
   (a) a positive rational number (b) equal to zero
   (c) an irrational number (d) a negative integer

9. $(-7+4\sqrt{7}-3\sqrt{7})$ is
   (a) a positive rational number (b) an irrational number
   (c) a negative rational number (d) equal to zero

10. The number $(3-\sqrt{3})(3+\sqrt{3})$ is
    (a) an irrational number (b) a rational number
    (c) not a natural number (d) none of these

11. On simplifying $\left(\sqrt{5}+\sqrt{7}\right)^2$, we get

    (a) 12   (b) $\sqrt{35}$ (c) $\sqrt{5}+\sqrt{7}$ (d) $12+2\sqrt{35}$

12. On simplifying $8^3 \times 2^4$, we get

    (a) 16^7 (b) 2^{13} (c) 2^{10} (d) 8^4

13. For rationalizing the denominator of the expression $\frac{1}{\sqrt{12}}$ we multiply and divide by

    (a) $\frac{1}{\sqrt{12}}$ (b) 12   (c) $\sqrt{2}$ (d) $\sqrt{3}$

14. The number of zeros of $x^2 + 4x + 2$

    (a) 1   (b) 2(c) 3(d) none of these

15. The polynomial of type $ax^2 + bx + c$, a = 0 is of type

    (a) linear(b) quadratic(c) cubic(d) Biquadratic

16. The value of k, if (x – 1) is a factor of $4x^3 + 3x^2 – 4x + k$, is

    (a) 1(b) 2(c) –3   (d) 3

17. The degree of polynomial $p(x) = x + \sqrt{x^2 + 1}$ is

    (a) 0   (b) 2 (c) 1   (d) 3

18. If 3 + 5 – 8 = 0, then the value of $(3)^3 + (5)^3 – (8)^3$ is

    (a) 260 (b) –360   (c) –160   (d) 160

19. If value of 104 × 96 is

    (a) 9984(b) 9469(c) 10234(d) 11324

20. The value of 5.63 × 5.63 + 11.26 × 2.37 + 2.37 × 2.37 is

    (a) 237(b) 126(c) 56(d) 64

21. The value of $\dfrac{(361)^3 + (139)^3}{(361)^2 - 361 \times 139 + (139)^2}$ is

    (a) 300 (b) 500(c) 400(d) 600

21. If x + y = 3, $x^2 + y^2 = 5$ then xy is

    (a) 1(b) 3   (c) 2   (d) 5

22. If x + 2 is a factor of $x^3 – 2ax^2 + 16$, then value of a is

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

23. If one of the factor of $x^2 + x – 20$ is (x + 5). Find the other

    (a) x – 4 (b) x + 2   (c) x + 4(d) x – 5

24. Which graph is parallel to x-axis?

    (a) y=x+1   (b) y=2   (c) x=3(d) x=2y

25. Which point lies on x-axis ?

    (a) (3, 2)   (b) (-3, 2)   (c) (2, 0)   (d) (-1,-2)

26. Which point lies on y-axis?

    (a) (1, 3)   (b) (0, 3)   (c) (5, 2)   (d) (-2,-3)

27. Which point lies to the right of y-axis?

    (a) (0, 3) (b) (-2,-1)(c) (3, 5)(d) (-3,-2)

28. Which line is parallel to y=x-2?

(a) y=2x+1(b) 2y=2x-6(c) 2y=x+7(d) y=3x+1
29. Which point lies on the left of y-axis?
   (a) (2, 0)(b) (-2,-4) (c) (5, 2)(d) (3, 6)
30. Which point lies in IV quadrant?
   (a) (-3,-4) (b) (2,-4)   (c) (-2, 3) (d) (0, 1)
31. Which point lies above x-axis?
   (a) (-1, 2)(b) (2, 0)(c) (-1,-5) (d) (0,-3)
32. What is the length of each side of an equilateral triangle having an area of $4\sqrt{3}$ cm^2 ?
   (a). 4cm   (b). 5cm   (c). 5cm   (d). 6cm
33. The sides of a triangle are 3 cm, 5 cm and 6 cm. What is its area?
   (a). 2√3cm^2 (b). 4√14cm^2 (c). 5√12cm^2(d). 2√5cm^2
34. What is the area of an equilateral triangle with side $\dfrac{\sqrt{3}}{4}$?
   (a). 2/27 cm^2 (b). 2/15 cm^2 (c). 3/16 cm^2 (d). 3/14 cm^2
35. length of one of the equal sides of an isosceles triangle is 4 cm. If its be is 2 cm then what is its area?
   (a). √15cm^2 (b). √13cm^2 (c). √12cm^{2}d. √14cm^2
36. If the perimeter of an equilateral triangle is 60 cm, then what is its area?
   a. 200√2cm^2 b. 100√2cm^{2}c. 100√3cm^{2}d. 200√3cm^2
37. The sides of a triangle are 8 cm, 11 cm and 13 cm. What is its area?
   a. 8√30cm^2 b. 4√10cm^2 c. 3√100cm^{2b} d. 6√200cm^2
38. What is the measure of an angle whose measure is 32° less than its supplement?
   a. 148° b. 60° c. 74°   d. 55°

39. If the supplement of an angle is 4 times of its compliment, find the angle.
   a. 60°   b. 50° c. 80°   d. 100°
40. In a right angled triangle where angle A= 90° and AB=AC. What are the values of angle B.
   a. 45° b. 35°c. 75° d. 65°
41. What is the supplement of 105°
   a. 65°b. 75°c. 85° d. 95°
42. If ∠S and 100° form a linear pair. What is the measure of ∠S
   a. 180°b. 120° c. 90° d. 80°
43. Find the angle which is four times its compliment is 10° less than twice its complement.
   a. 15° b. 10°c. 25°d. 5°
44. How many straight lines can be drawn through two given lines?
   a. None   b. Only one   c. Two   d. Three
45. What is the minimum number of lines required to make a closed figure?
   a. One   b. Two   c. Three   d. Four
46. Which of the following is an axiom?
   a. Theorems   b. Definitions   c. The universal truth in all branches of Mathematics
   d. Universal truth specific to geometry

47. How many dimension does a surface has?

    a. One   b. Two   c. Three   d. Four

48. A solid has how many dimensions?

     a. One   b. Two   c. Three   d. Four

49. If ΔABC is congruent to ΔDEF by SSS congruence rule, then:

    (a) $\angle C < \angle F$ (b) $\angle B < \angle E$(c) $\angle A < \angle D$

    (d) $\angle A = \angle D, \angle B = \angle E, \angle C = \angle F$

50. In the given figure, the congruency rule used in proving $\angle ACD \cong \angle ADB$ is
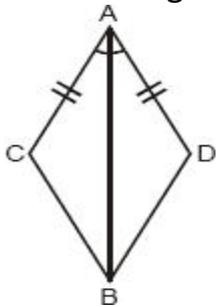
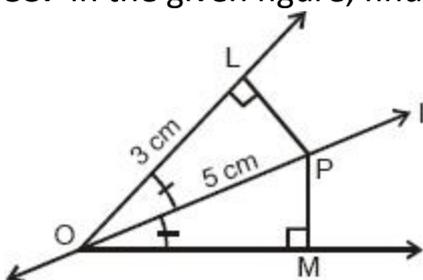   (a) ASA   (b) SAS

    (c) AAS   (d) RHS

51. Given two right angles triangles ABC and PRQ, such that $\angle A = 20°$, $\angle Q = 20°$ and AC = QP. Write the correspondence if triangles are congruent.

    (a) ΔABC≅ ΔPQR   (b) $\angle ABC \cong \Delta PRQ$

    (c) $\angle ABC \cong \Delta RQP$ (d) ΔABC ≅ ΔQRP

52. In a triangle PQR if $\angle QPR = 80°$ and PQ = PR, then $\angle R$ and $\angle Q$ are

    (a) 80°, 70°   (b) 80°, 80°

    (c) 70°, 80°   (d) 50°, 50°

53. In the given figure, find PM

    (a) 3 cm   (b) 5 cm

    (c) 4 cm   (d) 2 cm

54. In the given figure, AD is the median then ∠BAD is
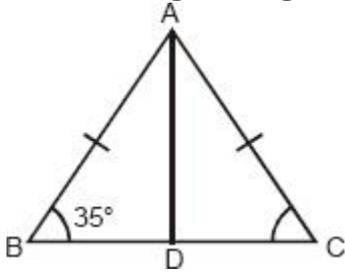
   (a) 35°   (b) 70°

   (c) 110°   (d) 55°

55. Find the number of solutions of the following pair of linear equations. $x + 2y - 8 = 0$ and $2x + 4y = 16$:

a) 0

b) 1

c) 2

d) Infinite

56. If (2, 0) is a solution of the linear equation $2x + 3y = k$, then the value of k is:

a) 4

b) 6

c) 5

d) 2

57. The equation $y = 5$, in two variables, can be written as:

a) $1 \cdot x + 1 \cdot y = 5$

b) $0 \cdot x + 0 \cdot y = 5$

c) $1 \cdot x + 0 \cdot y = 5$

d) $0 \cdot x + 1 \cdot y = 5$

58. The graph of $x = 5$ is a line:

a) Parallel to x-axis at a distance 5 units from the origin

b) Parallel to y-axis at a distance 5 units from the origin

c) Making an intercept 5 on the x-axis

d) Making an intercept 5 on the y-axis

59.Any point on the x-axis is of the form:

a) (0, y)

b) (x, 0)

c) (x, x)

d) (x, y)

60. If a linear equation has solutions (−3, 3), (0, 0) and (3, −3), then it is of the for Equation of the line parallel to x-axis and 6 units above the origin is:

a) x = 6

b) x = −6

c)y = 6

d)y = −6

61.The linear equation 4x − 10y = 14 has:
a) A unique solution

b) Two solutions

c) Infinitely many solutions

d) No solutions