

EMMANUEL MISSION SR SEC SCHOOL, BEAWAR
ONLINE CLASSES
DAY 57 (26.11.2020)

SCIENCE MATHS (XI)

Physics: Kindly see below

Chemistry: Kindly see below

Mathematics: Kindly see below

Physical Education: Kindly see below

Computer Science: Kindly see below

SCIENCE BIOLOGY (XI)

Physics: Kindly see below

Chemistry: Kindly see below

Biology: Kindly see below

Physical Education: Kindly see below

Computer Science: Kindly see below

COMMERCE (XI)

Accountancy: Kindly see below

Business Studies: Kindly see below

Economics: Kindly see below

Physical Education: Kindly see below

Computer Science: Kindly see below

COMMERCE MATHS (XI)

Accountancy: Kindly see below

Business Studies: Kindly see below

Economics: Kindly see below

Mathematics: Kindly see below

EMMANUEL MISSION SR SEC SCHOOL, BEAWAR

PHYSICS

Sample Paper 2

- (Q.1) During elastic collision
(a) KE remains constant
(b) KE first increases then decreases
(c) KE first decreases then increases
(d) KE before collision is greater than kinetic energy after collision
- (Q.2) Change in kinetic energy of the system is equal to
(a) Work done by all the forces(internal and external)
(b) Work done by external forces
(c) Work done by internal conservative forces
(d) None of these
- (Q.3) A gun fires a bullet of mass 50 gm with a velocity of 30 m/s. because of this, the gun is pushed back with a velocity of 1 m/s. the mass of the gun is
(a) 5.5 kg (b) 3.5 kg (c) 1.5 kg (d) 0.5 kg
- (Q.4) A particle of mass 10 kg is moving in a straight line. If its displacement , x with time t is given by $x = (t^3 - 2t - 10)m$ then the force acting on it at the end of 4 seconds is:
(a) 24 N (b) 240N (c) 300 N (d) 1200 N
- (Q.5) A bullet of mass 25 gram moving with velocity 200 m/s is stopped within 5 cm of the target. The average resistance offered by the target is:
(a) 49 k N (b) 30 k N (c) 20 k N (d) 10 k N
- (Q.6) A boy starts from a point A, travels to a point B at a distance of 1.5 km and returns to A. If he takes one hour to do so, his average velocity is
(a) 3 km/h (b) zero (c) 1.5 km/h (d) 2 km/h
- (Q.7) A body starts from rest and travels with uniform acceleration on a straight line. If its velocity after making a displacement of 32 m is 8 m/s, its acceleration is
(a) 1 m/s² (b) 2 m/s² (c) 3 m/s² (d) 4 m/s²
- (Q.8) A body starts from rest and travels with an acceleration of 2 m/s². After t seconds its velocity is 10 m/s . Then t is
(a) 10 s (b) 5 s (c) 20 s (d) 6 s
- (Q.9)The angular velocity depends upon the rate of change of the?
(a) Angular acceleration (b) Angular Distance.
(c) Angular Displacement. (d) torque
- (Q.10) A body makes a displacement of 4 m due East from a point O and then makes displacement of 3 m due North. Its resultant displacement from O
(a) 7 m (b) 1 m (c) 5 m (d) 1.2 m
- (Q.11) A body is traveling in a circle at constant speed. It
(a) has an inward acceleration
(b) has constant velocity.
(c) has no acceleration
(d) has an outward radial acceleration
- (Q.12) When angular velocity changes with respect to time then?
(a) an angular acceleration is produced
(b) a linear acceleration is produced
(c) it constitute a couple
(d) a linear velocity is produced
- (Q.13) The centripetal component of acceleration arises when?
(a) The direction of motion is changed.
(b) The direction propagation is changed.
(c) The direction of gravity is changed.
(d) The direction of projectile is changed
- (Q.14) The path of a particle is given by the expression $y = at + bt^2$, where a and b are constants . Y is the displacement at time t. Its velocity at any instant is given by
(a) $a + 2bt$ (b) zero (c) $2bt$ (d) at
- (Q.15)A force acts on a 2 kg object so that its position is given as a function of time as $x = 3t^2 + 5$. What is the work done by this force in first 5 seconds?
(a) 850 J (b) 900 J (c) 875 J (d) 950 J

EMMANUEL MISSION SR SEC SCHOOL, BEAWAR
CHEMISTRY
Sample Paper 2

1. The standard enthalpy change of neutralization involves the reaction of an acid with an alkali to form 1 mol of
 - a. water
 - b. oxygen
 - c. nitrogen
 - d. anhydrous salt
2. What will be the value of K_p if the K_c is 26 for a reaction, $\text{PCl}_5 \rightleftharpoons \text{PCl}_3 + \text{Cl}_2$ at 250° ?
 - a. 0.57
 - b. 0.46
 - c. 0.83
 - d. 0.61
3. Which of the following is not correct?
 - a. large value of K indicates large amount of products
 - b. small value of K indicates large amount of reactants
 - c. for $K < 1$ amount of reactants $>$ amount of products
 - d. none of the above
4. The father of modern chemistry is—
 - a. Priestley
 - b. Lavoisier
 - c. Dalton
 - d. Mendeleeff
5. Which one is not metal—
 - a. sulphur
 - b. Sugar
 - c. Nitrogen
 - d. all
6. In isotopes the number of neutrons are—
 - a. same
 - b. different
 - c. both
 - d. none
7. Red litmus paper is changed into blue in solution of—
 - a. Base
 - b. Acid
 - c. Salt
 - d. None
8. The law of relative lowering of vapour pressure was given by—
 - a. Vant Hoff
 - b. Ostwald
 - c. Lewis
 - d. Raoult

9. Which one will have maximum numbers of water molecules?

- a. 18 molecules of water
- b. 1.8 grams of water
- c. 18 grams of water
- d. 18 moles of water

10. Which of the species is not paramagnetic?

- a. As^+
- b. Cl^-
- c. Ne^{2+}
- d. Be^+

11. In the modern periodic table, the number of period of the element is the same as

- a. principal quantum number
- b. atomic number
- c. azimuthal quantum number
- d. atomic mass

12. The correct order of electronegativity is

- a. $\text{Cl} > \text{F} > \text{O} > \text{Br}$
- b. $\text{F} > \text{O} > \text{Cl} > \text{Br}$
- c. $\text{F} > \text{Cl} > \text{Br} > \text{O}$
- d. $\text{O} > \text{F} > \text{Cl} > \text{Br}$

13. Which one is the most acidic among these?

- a. MgO
- b. CaO
- c. Al_2O_3
- d. Na_2O

14. Electronic configuration of the outer shell of the element Gd with atomic number 64 is

- a. $4f^4 5d^5 6s^1$
- b. $4f^3 5d^5 6s^2$
- c. $4f^5 5d^4 6s^1$
- d. $4f^7 5d^1 6s^2$

15. The orientation of atomic orbitals depends on their

- a. spin quantum number
- b. magnetic quantum number
- c. azimuthal quantum number
- d. principal quantum number

EMMANUEL MISSION SR SEC SCHOOL, BEAWAR
MATHEMATICS
Sample Paper 2

1. $A = \{2,3,4,5,6,7\}$ and $B = \{3,1,4,2\}$ then $A \cup B$ is
 - a. $\{1,2,3,4,5,6,7\}$
 - b. $\{1,2,4,5,6,7\}$
 - c. A
 - d. $\{2,3,4,5,6\}$
2. The intersection of two sets A and B is
 - a. $A \cap B = \{x : x \in A\}$
 - b. $A \cap B = \{x : x \in B\}$
 - c. $A \cap B = \{x : x \in A \text{ and } x \in B\}$
 - d. None of these
3. $A \cup A =$
 - a. A
 - b. U
 - c. Φ
 - d. None of these
4. If $(x/3 + 1, y - 2/3) = (5/3, 1/3)$, find the value of x and y .
 - a. $x = 2, y = 1$
 - b. $y = 2, x = 1$
 - c. $x = 2, y = 2$
 - d. $x = 1, y = 1$
5. If $P = \{m,n\}$ and $Q = \{n,m\}$, then $P \times Q =$
 - a. $\{(m,n),(n,n)\}$
 - b. $\{(n,m),(m,m)\}$
 - c. $\{(m,n),(n,m)\}$
 - d. $\{(m,m),(n,m),(m,n),(n,n)\}$
6. If $P = \{1,2\}$ then the number of elements in the set $P \times P \times P =$

- a. 4
- b. 8`
- c. 6
- d. 2

7. Which of the following relation is a function

- a. $R = \{(2,1), (3,1), (4,2)\}$
- b. $R = \{(2,1), (2,2), (3,3), (4,4)\}$
- c. $R = \{(2,1), (3,4), (4,5)\}$
- d. Both a and c

8. If $f(x) = 2x-5$ then the value of $f(-3)$ is

- a. 11
- b. -11
- c. -1
- d. 1

9. $\cos x = -3/5$, x lies in third quadrant find the value of $\sin x$

- a. $4/5$
- b. $-4/5$
- c. $4/3$
- d. $-4/3$

10. The value of $\sin \pi/3$ is

- a. $\sqrt{3}/2$
- b. $1/\sqrt{2}$
- c. $1/2$
- d. 0

11. (i) $^{4m} =$

- a. 1
- b. Not defined
- c. 0
- d. -1

12. $(3+2i) + (-5-3i) =$

- a. $-2 + i$
- b. $-2 - i$
- c. $2 - i$
- d. $2 + i$

13. $\cos (x+y) =$

- a. $\sin x \cos y - \cos x \sin y$
- b. $\sin x \cos y + \cos x \sin y$
- c. $\cos x \cos y - \sin x \sin y$
- d. $\cos x \cos y + \sin x \sin y$

14. Solve $4x + 3 < 6x + 7$

- a. $(-2, 2)$
- b. $(\infty, -2)$
- c. $(-2, \infty)$
- d. $(2, \infty)$

15. Solve $2 \leq 3x-4 \leq 5$

- a. $[3, 2]$
- a. $[2, 3]$
- b. $[3, 2]$
- c. None of these

EMMANUEL MISSION SR SEC SCHOOL, BEAWAR
BIOLOGY
Sample Paper 2

Q.1 Synapsis is defined as the pairing of _____

- a) Acentric chromosomes
- b) Non-homologous chromosomes
- c) Any chromosomes
- d) Homologous chromosomes

Q.2 Mitosis can be observed in _____

- a) Polyploid individual
- b) Diploid individual
- c) Haploid individual
- d) Both (1,) (2) and (3)

Q.3 The spindle apparatus is formed during the _____ phase of mitosis.

- a) Telophase
- b) Metaphase
- c) Prophase
- d) Anaphase

Q.4 Linnaeus evolved a system of nomenclature called _____.

- a) Vernacular
- b) Monomial
- c) Polynomial
- d) Binomial

Q.5 What is a taxon?

- a. A group of related families
- b. A type of living organisms
- c. A group of related species
- d. A group of any ranking

Q.6 Phylogenetic classification is based on _____.

- a. Overall similarities
- b. Habit of plants
- c. Common evolutionary descendants
- d. All of these

Q.7 A colonial alga is

- a. Volvox
- b. Chlorella
- c. Ulothrix
- d. Spirogyra

Q.8 Double fertilization is the characteristic of

- a. Algae
- b. Gymnosperms
- c. Fungi
- d. Angiosperms

Q.9 Conifers can tolerate extreme environments because of

- a. Presence of vessels
- b. Thick cuticle
- c. Superficial stomata
- d. Broad hardy leaves

Q.10 First plants to inhabit the land

- a. Angiosperms
- b. Bryophytes
- c. Gymnosperms
- d. Pteridophytes

Q.11 Which of the following is a phospholipid?

- a. Sterol
- b. Cholesterol
- c. Lecithin
- d. Steroid

Q.12 Which biomolecule is distributed more widely in a cell?

- a. Chloroplast
- b. RNA
- c. DNA
- d. Spaherosomes

Q.13 Which is a reducing sugar?

- a. Galactose
- b. Gluconic acid
- c. Sucrose
- d. β -methyl galactosidase

Q.14 Which of the following cell organelles does not contain DNA?

- (a) Nucleus
- (b) Lysosomes
- (c) Chloroplast
- (d) Mitochondria

Q.15 Which of the following statements is true about the cell wall?

- (a) The cell wall is mainly composed of lipid
- (b) The cell wall is mainly composed of starch
- (c) The cell wall is mainly composed of protein
- (d) The cell wall is mainly composed of cellulose

EMMANUEL MISSION SR SEC SCHOOL, BEAWAR
ACCOUNTANCY
Sample Paper 2

Q1. The full form of SGST IS:

- (a) State goods and service Tax
- (b) Short goods and service Tax
- (c) Simple goods and service Tax
- (d) South goods and service Tax

Q2. Which of the following accounts always shows a debit balance:

- (a) Capital Account
- (b) Sales Account
- (c) Creditors Account
- (d) None of the above

Q3. Paid Rs. 6900 to GARIMA in full settlement of Rs. 7000. Posting of Rs. 100 will be made to the:

- (a) Debit side of Garima
- (b) Credit side of Garima
- (c) Debit side of Discount
- (d) Credit side of Discount

Q4. Purchased goods from Sohan of Rs. 50000 at 20% trade discount posting will be made in Sohan A/c;

- (a) Debit side Rs 50000
- (b) Credit side Rs. 50000
- (c) Debit side Rs. 40000
- (d) credit side Rs. 40000

Q5. The credit balance of a personal account is

- (a) Cash in hand
- (b) Amount payable
- (c) Income earned
- (d) Amount receivable

Q6. Normally, the following accounts are balanced:

- (a) Personal A/c & Nominal A/c
- (b) Real A/c & Nominal A/c
- (c) Only Nominal A/c
- (d) Personal A/c & Real A/c

Q7. Which item shows a debit balance in the Trial Balance?

- (a) Accrued income
- (b) Salary outstanding
- (c) Purchase return
- (d) Sales

Q8. Goodwill is:

- (a) Current Asset
- (b) Tangible Asset
- (c) Intangible Asset
- (d) Fictitious Asset

Q9. Choose the Current Assets from the following:

- (a) Cash
- (b) Stock
- (c) Debtors
- (d) All of these

Q10. Calculate the gross profit if rate of gross profit is 25% on sales and cost of goods sold are Rs. 180000

- (a) Rs 60000
- (b) Rs. 36000
- (c) Rs. 45000
- (d) Rs. 30000

Q11. Salaries and wages appearing in Trial Balance is shown:

- (a) On the Debit side of Trading A/c
- (b) On the Debit side of profit & Loss A/c
- (c) On the Asset side of Balance Sheet
- (d) On the Liabilities Side of Balance Sheet

Q12. Balance Sheet shows:

- (a) Profit or Loss
- (b) Financial Position

(c) Errors of Accounts (d) Total Debtors

Q13. Balance Sheet is prepared:

- (a) For a particular period (b) For the whole year
(c) On a particular date (d) None of the above

Q14. The purpose of preparing final accounts is to ascertain:

- (a) Profit or loss (b) Capital
(c) The value of assets (d) Profit or loss and financial position

Q15. Premium paid on the life insurance policy of the proprietor will be debited to
.....A/c

- (a) insurance premium (b) insurance company
(c) Drawing (d) Cash

EMMANUEL MISSION SR SEC SCHOOL, BEAWAR
BUSINESS STUDIES
Sample Paper 2

Multiple Choice Questions:

Q1. Characteristics of Entrepreneurship

- (a) Systematic Activity
- (b) Innovation
- (c) Lawful and Purpose Activity
- (d) All of these**

Q2. Types of bank accounts

- (a) Saving deposit account
- (b) Current deposit account
- (c) Recurring deposit account
- (d) All of these.**

Q3. Which of the following has the power of the Government and the considerable amount of operating flexibility of private enterprises?

- (a) Departmental Undertakings
- (b) Statutory Corporations
- (c) Government companies
- (d) All of the above**

Q4. State any two types of services.

- (a) Banking
- (b) Insurance
- (c) Both (a) & (b)
- (d) None of these**

Q5. Insured is entitled to recover the loss suffered by him, up to the limit of policy amount.

- (a) The principle of indemnity
- (b) The principle of subrogation
- (c) The principle of insurable interest
- (d) None of these**

Q6. Which is considered as the cheapest means of transportation

- (a) Air
- (b) Road
- (c) Water
- (d) Railway**

Q7. Which method is very popular for making online transactions?

- (a) Credit Card
- (b) All of these
- (c) Net banking
- (d) Debit Card**

Q8. Expand EOUs

- (a) Essential Operating units
- (b) Export Order Units
- (c) Export Oriented units
- (d) Essential order units**

Q9. Wholesalers providing warehousing facilities provides manufacturer

- (a) Goods Utility
- (b) Store Utility
- (c) Time Utility
- (d) None of the above**

Q10. E-commerce does not include

- (a) A business's interactions with its suppliers

- (b) A business's interactions with its customers
- (c) Interactions among the various departments within the business
- (d) Interactions among the geographically dispersed units of the business

Q11. ____ transactions have business firms at one end and its customers on the other end.

- (a) C2B Commerce
- (b) B2C Commerce
- (c) OB2B Commerce
- (d) C2C Commerce

Q12. It is not an application of e-business

- (a) Contract R&D
- (b) Online trading
- (c) Online procurement
- (d) Online bidding

Q13. In India, the ?Village and Small Industries? Sector consists of both traditional and modern small industries. This sector has _____ subgroups.

- (a) Eleven
- (b) Five
- (c) Ten
- (d) Eight

Q14. The small scale industry can enjoy the status of _____ if it supplies not less than 50% of its production to another industry, referred to as the parent unit.

- (a) Village industries
- (b) Micro Business industry
- (c) Export oriented unit
- (d) Ancillary small industry

Q15. The funding of which of the following enterprise comes directly from the government treasury, is under an annual appropriation from the budget of the government and the revenue earned by it is also paid into the treasury?

- (a) Departmental undertaking
- (b) Statutory corporation
- (c) Government company
- (d) Cooperatives

EMMANUEL MISSION SR SEC SCHOOL, BEAWAR
ECONOMICS
Sample Paper 2

(Q.1) In which situation, can PPC be a straight line:

- (a) When MRT is decreasing (b) When MRT is increasing
(c) When MRT is constant (d) None of these

(Q.2) Which of these economic problem deals with technique of production?

- (a) What to Produce (b) How to Produce
(c) For whom to Produce (d) None of these

(Q.3) PPF is concave to the origin because of:

- (a) Increasing MRT (b) Diminishing MRT
(c) Constant MRT (d) None of these

(Q.4) Indifference Map refers to:

- (a) Highest Indifference curve (b) Lowest Indifference curve
(c) Family of Indifference curves (d) None of these

(Q.5) Indifference curves are

- (a) Concave to the origin (b) Convex to the origin
(c) Upward sloping straight line passing from the origin
(d) None of these

(Q.6) Total Utility is.....at the point of satiety:

- (a) Minimum (b) Maximum (c) Zero (d) None of these

(Q.7) Which of the following is an example of complementary goods?

- (a) Tea and Coffee (b) Coke and Pepsi
(c) Rice and Wheat (d) None of these

(Q.8) Which one of these is a determinant of Individual demand?

- (a) Size and composition of population
(b) Season and weather
(c) Distribution of Income
(d) None of these

(Q.9) The elasticity of demand for a product will not be higher

- (a) When it is considered a necessity by its buyers
(b) When more substitutes for the product are available
(c) When it has several uses
(d) When it is an expensive commodity

(Q.10) If the demand for a good is made by rich consumer, its demand is generally

- (a) Less elastic (b) Highly elastic
(c) Unitary elastic (d) perfectly elastic

(Q.11) When MP is zero, what can you say about TP?

- (a) TP is increasing (b) TP is maximum
(c) TP is falling (d) None of the above

(Q.12) What happens to AP, when MP is more than AP?

- (a) AP rises (b) AP falls
(c) AP remains constant (d) None of these

(Q.13) According to law of variable Proportions, there are_____ Phases.

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

(Q.14) Which curve is not affected by fixed cost?

- (a) MC Curve (b) MC Curve
(c) AC Curve (d) AFC Curve

(Q.15) Cost function is aconcept:

- (a) Economical (b) Functional (c) Financial (d) Technical

EMMANUEL MISSION SR SEC SCHOOL, BEAWARE
PHYSICAL EDUCATION
Sample Paper 2

All Questions are compulsory.

Q.1. Who was the first president of Indian Olympic association IOA?

- (a) Sir Dorabji Tata (b) Jawahar Lal Nehru (c) Sardar Patel (d) Mahatma Gandhi

Q.2. The 2020 Olympic will be held in—

- (a) Los Angeles (b) India
(c) Mexico. (d) Tokyo

Q.3. The Ancient Olympic games were organised in the honour of—

- (a) Heracles (b) Theonosis (c) Poseidon. (d) Zeus

Q.4. Who is known as the father of modern Olympic games

- (a) Prof. Dugald B. (b) Sir Dorabji Tata
(c) Jacques Rogge (d) Pierre de Coubertin

Q.5. How many rings are there in the Olympic flag—

- (a) Three (b) Two
(c) Five (d) Four

Q.6. Which of the following is a coordinative ability—

- (a) Sports announcer (b) Sports photographer
(c) Umpires. (d) Sports Journalist

Q.7. Special Olympic India started in—

- (a) 2001. (b) 1948
(c) 1995 (d) 2005

Q.8. Deaf Olympic started in—

- (a) 1960 (b) 1924
(c) 1947 (d) 2001

Q.9. Physical Education is a sum of men's physical activities selected as a kind and conducted as to outcomes. Who said this

- (a) C.C. Covell (b) J.F. Williams
(c) J.B. Nash (d) Charles A. Butcher

Q.10. Where was the first Modern Olympic Games held?

- (a) Athens. (b) Atlanta
(c) Los Angeles (d) Mexico

Q.11. When was the first Khelo India Programme held.

- (a) 2012 (b) 2014
(c) 2016 (d) 2018

Q.12. How many Disciplines of Sports were there in Khelo India Event.

- (a) 14 (b) 15
(c) 16 (d) 18

Q.13. IOC (International Olympic Committee) was established in the year.

- (a) 1886 (b) 1892
(c) 1894 (d) 1890

Q.14. The important thing in Olympics is not to win but to.

- (a) Loose. (b) Take part
(c) Struggle (d) Overtake

Q.15. Pranayama is the control of.

- (a) Larynx. (b) Breathing
(c) Running. (d) Walking

EMMANUEL MISSION SR SEC SCHOOL, BEAWARE
COMPUTER
Sample Paper 2

- Q1) What is the output when we execute list("hello")?
a) ['h', 'e', 'l', 'l', 'o'] b) ['hello'] c) ['llo'] d) ['olleh']
- Q2) Suppose list1 is [2, 33, 222, 14, 25], What is list1[-1]?
a) Error b) None c) 25 d) 2
- Q3) To add a new element to a list we use which command?
a) list1.add(5) b) list1.append(5) c) list1.addLast(5) d) list1.addEnd(5)
- Q4) Suppose list1 is [3, 4, 5, 20, 5], what is list1.index(5)?
a) 0 b) 1 c) 4 d) 2
- Q5) Suppose list1 is [3, 4, 5, 20, 5, 25, 1, 3], what is list1.count(5)?
a) 0 b) 4 c) 1 d) 2
- Q6) Suppose listExample is [3, 4, 5, 20, 5, 25, 1, 3], what is list1 after listExample.pop()?
a) [3, 4, 5, 20, 5, 25, 1] b) [1, 3, 3, 4, 5, 5, 20, 25]
c) [3, 5, 20, 5, 25, 1, 3] d) [1, 3, 4, 5, 20, 5, 25]
- Q7) Which of the following is a Python tuple?
a) [1, 2, 3] b) (1, 2, 3) c) {1, 2, 3} d) {}
- Q8) Which of the following statements create a dictionary?
a) d = {} b) d = {"john":40, "peter":45} c) d = {40:"john", 45:"peter"} d) All of the mentioned
- Q9) What will be the output of the following Python code
- ```
d={"john":40,"peter":45}
Print(d["john"])
```
- a)45 b) 40 c) john d) Peter
- Q10) Which is not output Device  
a) Keyboard b) Monitor c)Printer d) Speaker
- Q11) what is the smallest unit of Memory  
a) Kilobyte b) bit c) byte d) mega byte
- Q12) What is base of decimal number system  
a) 2 b) 16 c) 8 d) 10
- Q13) What is base of binary number system  
a) 2 b) 16 c) 8 d) 10
- Q14) which is not type of RAM  
a) DRAM b) SRAM c) PRAM d) None of the above
- Q15) Which memory is non volatile  
a) DRAM b) RAM c) ROM d) SRAM