Session – 2018-19 class - 12

Section – A (ENGLISH)

Direction: For Q 1 - 5: Read the given passage carefully and answer the question that follow: When we are suddenly confronted with any terrible danger, the change of nature we undergo is equally great. In some cases fear Paralyzes us. Like animals, we stand still, powerless to move a step in fright or to lift a hand in defense of our lives, and sometimes We are seized with retinal being. On the other hand, frequently in cases of sudden extreme peril, which cannot to escaped by flight, and must be instantly faced, even the most timid men at once as if by miracle, become possessed of the necessary change, sharp quick apprehension, and swift decision. This is a miracle very common in nature. Man and the inferior animals alike, when confronted with certain almost death 'gather resolution from despair' but there can really be no trace of so debilitating a feeling in the person fighting, or prepared to fight for dear life. At such times the mind is clearer than it has ever been; the nerves are steel, there nothing felt but a wonderful strength and daring. Looking back and certain perilous moments in my own life, I remember them with a kind of joy not that was any joyful excitement then; built because they brought me a new experience, a new nature as it waw and lifted me for a time above myself.

1. **An appropriate title for the above passage would be:**
   A. The miracle if Confronting Danger
   B. Danger Bring Miracle
   C. The Change of Nature
   D. Courage of Nature
   E. None of these.

2. **2. The authors names three different ways in which a man may react to sudden danger. What are they?**
   A. He may flee in panic, or flight back or stand still.
   B. He may be paralyzed with fear seized with panic or act like in interior animal.
   C. He may be paralyzed with fear, or seized with panic or as if by miracle become possessed of the necessary courage and face the danger.
   D. He may be paralyzed with fear, run away or fight.
   E. None of these.

3. **The distinction between 'inferior animals' and 'rational beings' is that :**
   A. The former are capable of fighting.
   B. The latter are clever.
   C. The latter are stronger.
   D. The latter are capable of reasoning things out which the former cannot.
   E. None of these

4. **Explain the phrase 'gather resolution from danger'.**
   A. Find hope and courage.
   B. A state of utter hopelessness steels one to fight out of danger
   C. Not to lose hope, but fight
   D. Find courage to face danger
   E. None of these

5. **The author feels happy in the recollection of dangers faced and overcome because:**
   A. The brought him a new experience.
   B. The not only brought him a new experience but let him survive his ordeal.
   C. They not only brought him a new experience but lifted him above himself for a time.
   D. They not only brought him a new experience but instilled courage to face the danger.
   E. None of these

6. **Identify the type of clause for the underlined part of the sentence given below.**
   <u>Whichever read we take</u> we shall be too late.
   A. Adjective clause of consequence.
   B. Adverb clause of comparison of manner.
   C. Adjective clause of supposition.
   D. Adverb clause of condition.
   E. None of these

7. **Give the appropriate question tag.**
You lied to him, _____?
   A. Did you
   B. Don't you
   C. Isn't it
   D. Didn't you
   E. None of these

8. **Find the miss-spelt word.**
   A. Anniversary
   B. Acknowledgment
   C. Anasthetic
   D. Altogether
   E. None of these

9. **Find the odd one out.**
   A. One
   B. Each
   C. Some
   D. Many
   E. None of these

10. **Which one of the following is formed by making some change in the body of the simple word; such as 'Bond' from 'Bind'?**
   A. Compound word
   B. Primary word
   C. Primary derivative
   D. Secondary derivative
   E. None of these

Section – B (PHYSICS)

1. **An airplane is moving North horizontally, with a speed of 200 ms^{-1}, at a place where the vertical component of the Earth's magnetic field is 0.5 X 10^{-4}T. What is the induced emf set up between the tips of the wings if they are 10m apart?**
   A. 0.01 V
   B. 0.1 V
   C. 1 V
   D. 10 V
   E. None of these

2. **When telescope is in normal adjustment, the distance of the objective from the eye-piece is 100cm and the magnifying power is 24. The focal lengths of the lenses are:**
   A. 96cm, 4cm
   B. 90cm, 10cm
   C. 72cm, 3cm
   D. 80cm, 20cm
   E. None of these

3. **Three equal resistors, connected in series with a battery, dissipate P watts of power. What will be the power dissipate if the same resistance are connected in parallel across the same battery?**
   A. P
   B. 3P
   C. 9P
   D. 27P
   E. None of these

4. **The ratio of the intensities of the maxima and minima in an interference pattern is 49:9. What is the ratio of the intensities of the two coherent sources employed in the interference experiment to:**
   A. 7:3
   B. 49:9
   C. 5:2
   D. 25:4
   E. None of these

5. **The magnitude of the angular momentum of an electron revolving in a circular orbits of radius r in a hydrogen atom is proportional to:**
   A. $r^{1/2}$
   B. r
   C. $r^{3/2}$
   D. r^{2}
   E. None of these

6. **A free neutron decays into a proton, an electron and _____.**

A. A neutrino
B. An antineutrino
C. An (alpha)- particle
D. A (bita)- particle
E. None of these

7. What is the force between two small charged spheres having charges of $2x10^{-7}$ C placed 30cm apart in air?

A. $3 X 10^{-3}$ N
B. $6 X 10^{-3}$ N
C. $9 X 10^{-5}$ N
D. $4 X 10^{-4}$ N
E. None of these

8. A 1.0m metallic rod is rotated with an angular frequency of 400 rad s-1 about an axis normal to the rod passing through is one end. The other end of the rod is in contact with a circular metallic ring. A constant and uniform magnetic field of 0.5T parallel to the axis exists everywhere. Calculate the emf developed between the center and the ring.

A. 80V
B. 70V
C. 120V
D. 100V
E. None of these

9. A beam of light consisting of two wavelengths, 650nm and 520nm, is used to obtain interference fringes in a young's double – slit experiment. Find the distance of the third bright fringes on the screen from the central maximum for wavelength 650nm.

A. 1.17mm
B. 2.23mm
C. 0.1mm
D. 3.42mm
E. None of these.

10. In an unbiased p-n junction, holes defuse from then p-region to n-region because

A. Free electrons in the n-region attract them.
B. They move across the junction by the potential difference.
C. Whole concentration in p-region.
D. All of these.
E. None of these.

Section – C (CHEMISTRY)

1. The number of electron carrying a total charge equivalent to one K^+ ion is equal to:

A. 6.02×10^{25}
B. 6.02×10^{21}
C. 6.02×10^{18}
D. 6.02×10^{16}
E. None of these

2. A 0.004 M solution of K_2SO_4 is isotopic with a 0.010M solution of glucose at the same temperature. The apparent percent degree of dissociation of K_2SO_4 is:

A. 25%
B. 50%
C. 75%
D. 100%
E. None of these

3. Which of the following is the man-made radioactive disintegration series?

A. Thorium series
B. Neptunium series
C. Uranium series
D. Actinium series
E. None of these.

4. The oxidation states of Mn in K_2MnO_4 and $KMnO_4$ respectively are:

A. __ + 6, +7
B. __ + 6, +6

C. __ + 7, +7
D. __ + 7, +6
E. None of these

5. Desilverisation of lead may be carried out by using

A. MacArthur-Forest process
B. Parke's process
C. Parting process
D. Cyanide process
E. None of these

6. When $FeSO_4$ is heated strongly, the gas (es) evolved is/are:

A. SO_2 only
B. SO_3 only
C. Mixture of SO_2 and SO_3
D. Mixture of SO_2 and O_2
E. None of these.

7. Which of the following is the benzhydryl group?

A. $C_6H_5CH_3$-
B. $(C_6H_5)_2CH$
C. $(C_6H_5)_3C$-
D. C_6H_5CH-
E. None of these

8. Which of the following molecules have tetrahedral structure are expected to have maximum value of dipole moment?

A. CH_3Cl
B. CH_2C_{12}
C. CHC_{13}
D. CCl_4
E. None of these

9. Niobium crystallizes in body-centered cubic structure. If density is 8.55 g cm^{-3}, Calculate atomic radius of niobium using its atomic mass 93 u

A. 143 pm
B. 170 pm
C. 130 pm
D. 190 pm
E. None of these.

10. Which one of the following does not exist?

A. $XeFO_4$
B. NeF_2
C. XeF_2
D. XeF_6
E. None of these.

Section – D (BIOLOGY)

1. Which of the following unicellular organism has a macronucleus for trophic function and one or more micronuclei for reproduction?

A. Euglena
B. Amoeba
C. Tryponosoma
D. Paramecium
E. None of these

2. Blastopore is the opening of:

A. Gut
B. Blastocoel
C. Mouth
D. Archenteron
E. None of these

3. The mutation are mainly responsible for:

A. Variation in organism
B. Constancy organism
C. Increasing the population rate.
D. Maintaining genetics continuity
E. None of there.

4. Which part of the world has high density of organism?

A. Tropical rain forest
B. Savannas
C. Deciduous
D. Grasslands
E. None of these

5. Convergent evolution is illustrated by:

A. Dogfish and Whale
B. Rat and Dog
C. Bacterium and Protozoan
D. Starfish and Cuttle fish
E. None of these

6. **Appearance of vegetative propagules from the nodes of plants such as sugarcane and ginger is mainly because:**

A. Nodes have meristematic cells.
B. Nodes are shorter than internodes.
C. Nodes are located near the soil.
D. Nodes have non-photosynthetic cells.
E. None of these.

7. **The clinical test that is used for diagnosis is:**

A. Widal
B. ESR
C. PCR
D. ELISA
E. None of these.

8. **Which one of the following is not a nitrogen – fixing organism?**

A. Anabaena
B. Nostoc
C. Azotobacter
D. Pseudomonas
E. None of these

9. **The Role of DNA ligase in the construction of a recombinant DNA molecules is:**

A. Formation of hydrogen bonds between sticky ends of DNA fragment.
B. Formation of phosphodiester bond between two DNA fragments.
C. Ligation of all purine and pyrimidine bases.
D. All of these
E. None of these.

10. **Two crosses between the same pair of genotypes or phenotypes in which the source of the gametes are reversed in one cross, is known as:**

A. Dihybrid cross
B. Reciprocal cross
C. Test cross
D. Reverse cross
E. None of these.

Section – E (MATHS)

1. **The order of the differential equitation whose general solution is given by y = $(c_1 + c_2) \cos (x + c_3)c_4e^{x+c5}$ where c1, c2, c3, c4, c5, are arbitrary constants, is:**

A. 5
B. 4
C. 3
D. 2
E. None of these.

2. **If P (1,2), Q(4,6), R(5,7) and S(a, b) are the vertices of a parallelogram PQRS, then:**

A. a = 2, b = 4
B. a = 3, b = 4
C. a = 2, b = 3
D. a = 3, b = 5
E. None of these.

3. **The area bounded by the curves $y = (x-1)^2$, $y = (x+1)^2$ and y = 1/4 is :**

A. 1/3 sq units
B. 2/3 sq units
C. 1/4 sq units
D. 1/5 sq units
E. None of there.

4. **If $y = x^n \log x + x(\log x)^n$, then dy/dx=**

A. $X^{n-1}(1+n \log x) + (\log x)^{n-1}[n + \log x]$
B. $X^{n-2}(1+n \log x) + (\log x)^{n-1}[n + \log x]$
C. $X^{n-1}(1+n \log x) + (\log x)^{n-1}[n - \log x]$
D. $X^{n-2}(1-n \log x) + (\log x)^{n-1}[n - \log x]$
E. None of these.

5. **Let P,Q and R try to hit the target simultaneously but independently. Their respective probabilities of hitting the target are 3/2, ½, and 5/8. The probability that the target is hit by A or B but not by C is ____.**

   A. 7/8
   B. 7/32
   C. 9/64
   D. 21/64
   E. None of these.

6. **A is one of 6 horses entered for a race and is to be ridden by one of two jockeys B and C. It is 2:1 that B rides A, in which case all the horses are equally likely to win. If C rides A, his chance of winning is trebled. What are the odds against winning of A?**

   A. 5 : 18
   B. 5 : 13
   C. 18 : 5
   D. 13 : 5
   E. None of these.

7. **If the plan $2ax-3ay+4az+6=0$ passes through the mid-point of the line joining the centers of the spheres $x^2+y^2+z^2-10x+4y-2z=8$, then a equals to __.**

   A. 1
   B. -1
   C. -2
   D. 2
   E. None of these.

8. **The equation of the plane passing through the points (2, 2, 1), (9, 3, 6) and perpendicular to the plane $2x+6y+6z=1$ is _____.**

   A. $3x+4y-5z-9=0$
   B. $2x-5y+3z-9=0$
   C. $2x+5y-3z+9=0$
   D. $3x-5y+4z+9=0$
   E. None of these.

9. **If $x+y<2$, $X>0$, $y>0$, then the point at which maximum value of $3x+2y$ is attained will be ___.**

   A. (0,2)
   B. (2,0)
   C. (1/2,1/2)
   D. (0,0)
   E. None of these.

10. **The triangle formed by the tangent to the curve $f(x)=x^2+bx-b$ at the point (1,1) and the coordinate axes, lies in the first quadrant. If its area is 2, then the value of b is:**

    F. -1
    G. 3
    H. -3
    I. 1
    J. None of these.

Section – F (ECONOMICS)

1. **Economics was originally developed as a science of _____.**

   A. State craft
   B. Business management
   C. Wealth of management
   D. Resource management
   E. None of these.

2. **____ of resources are necessary for development of economy.**

   A. Utilization
   B. Growth
   C. Wastage
   D. Non-utilization
   E. None of these.

3. **Which of the following is not examples of microeconomics studies?**

   A. Study of consumer equilibrium
   B. Study of price determination of a commodity
   C. Study of unemployment in an economy.
   D. All of these
   E. None of there.

4. **Which one of the following is not micro economics variables:-**

   A. Consumers demand
   B. Aggregate demand
   C. Firms output
   D. Market price of commodity
   E. None of these.

5. **A PPC curve is concave to the point of origin because of ___.**

   A. Increasing opportunity cost
   B. Law of demand
   C. Unit elastic
   D. Law of supply
   E. None of these.

6. **Rightward shift of PPC indicate ____.**

   A. Improve in technology
   B. Quantum of resource increases
   C. Both A & B
   D. Only (A)
   E. None of these.

7. **Factors which leads to shift of PPC ____.**

   A. Increase in sources
   B. Decrease in resources
   C. Change the technology
   D. All of the above
   E. None of these.

8. **Which one of the following is not the assumption of PPC_____.**

   A. Available resource are fully utilize
   B. There is change in the technology
   C. Available resource are fully and efficiently utilized
   D. There is no change in technology.
   E. None of these.

9. **Which is not the characteristic of monotonic indifferent curve?**

   A. IC are negatively sloped
   B. IC intersect each other
   C. IC are convex to origin
   D. A higher IC offered higher level of satisfaction.
   E. None of these.

10. **Properties of independence are:-**

    A. Negatively sloped
    B. Convex to the point of origin
    C. Touches neither nor Y axis
    D. All of the above
    E. None of these.

Section – G (POLITICAL SCIENCE)

1. **The constitution of India was enacted by a constitution Assembly set up:**

   A. Under the cabinet mission plan, 1946
   B. Under the Indian Independence Act, 1947
   C. By the Indian congress.
   D. Through a resolution of the provisional government.
   E. None of these.

2. **The members of the constitution Assembly were:**

   A. Directly elected by the people.
   B. Nominated by the rulers of the Indian states
   C. Nominated by the Indian National Congress.
   D. Elected by the provincial assemblies.
   E. None of these.

3. **The constitute assembly of India held its first meeting on**

   A. January 26, 1948
   B. November 26, 1947
   C. August 16, 1947
   D. December 9, 1946
   E. None of there.

4. **The constituent Assembly elected as its permanent chairman**

A. Jawaharlal Nehru
B. K.M. Munshi
C. Rajendra Prasad
D. B.R. Ambedkar
E. None of these.

5. Who acts as chairman drafting committee of the constituent Assembly

A. B.R. Ambedkar
B. C.R. Gopalachari
C. Jawaharlal Nehru
D. Rajendra Prasad
E. None of these.

6. The constitution of India was adopted on

A. January 26, 1949
B. November 26, 1949
C. January 26, 1950
D. December 31, 1949
E. None of these.

7. The constitution of India contains

A. 295 Articles
B. 259 Articles
C. Over 400 Articles
D. 301 Articles
E. None of these.

8. The constitution on India contains

A. 9 Schedule
B. 12 Schedule
C. 8 Schedule
D. 10 Schedule
E. None of these.

9. The constitution of India has been divided into _____parts.

A. 7
B. 22
C. 11
D. 21
E. None of these.

10. The constitution of India is

A. Rigid
B. Partly rigid and partly flexible
C. Flexible
D. Very rigid
E. None of these.

Section – H (GEOGRAPHY)

1. Study of the universe is known as?

A. Sociology
B. Cosmology
C. Universology
D. Petology
E. None of these.

2. Approximately how many galaxies are there?

A. 10 Billion Galaxies
B. 100 Billion Galaxies
C. 1000 Billion Galaxies
D. 10000 Billion Galaxies
E. None of these.

3. Big Bang theory explain?

A. Origin of Universe
B. Origin of sun.
C. Laws of physics.
D. All of the above
E. None of there.

4. Big Bang was an explosion that occurred?

A. 10 Billion year ago
B. 15 Billion years ago
C. 20 Billion years ago
D. 25 Billion years ago
E. None of these.

5. Which is correct order of solar system staring from sun?

A. Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune

B. Mercury, Venus, Earth, Mars, Jupiter, Saturn, Neptune, Uranus
C. Mercury, Venus, Mars, Earth, Jupiter, Saturn, Neptune, Uranus
D. Mercury, Venus, Earth, Jupiter, Mars, Saturn, Uranus, Neptune
E. None of these.

6. Which planet is dwarf planet?

A. Mercury
B. Pluto
C. Mars
D. Uranus
E. None of these.

7. Diameter of sun is?

A. 12 Lakh kms
B. 13 Lakh kms
C. 14 Lakh kms
D. 15 Lakh kms
E. None of these.

8. Which one of the following is the main cause of land degradation in Punjab?

A. Intensive cultivation
B. Deforestation
C. Over irrigation
D. Overgrazing
E. None of these.

9. In which of the following states is black soil found?

A. Jammu & Kashmir
B. Gujrat
C. Rajasthan
D. Jharkhand
E. None of these.

10. Regur soil is the other name of

A. Black soil
B. Alluvial soil
C. Arid soil
D. Laterite soil
E. None of these.

Section – I (HISTORY)

1. To perform which among the following functions, Rajukas were appointed by ashoka?

A. Revenue function
B. Judicial functions
C. Religious function
D. Military function
E. None of these.

2. Which among the following scripts of modern India have descended from the Sarda script?
1. Gurumukhi 2. Dogri 3. Sindhi
Choose the correct option from the codes given below:

A. Only 1
B. Only 1 & 2
C. Only 2 & 3
D. 1,2, & 3
E. None of these.

3. The "Sidhimatrika" script was one of the forms of writing Sanskrit in ancient India. This script, which made Sanskrit works known in china and Japan was developed during the times of____:

A. Kanishka
B. Harsha
C. Meander
D. Chandragupta Vikrammaditya
E. None of there.

4. The 'Saptanga Theory of state' (theory of seven limbs of the state) was propounded by:

A. Kautilya in Arthashastra
B. Manu in Manusmriti
C. Kalhana in Rajatarangini
D. Banabhatta in Harshacharita
E. None of these.

5. The doctrine of ' Vyuhavada' is associated with which among the following sects (or) cults if India?

A. Shaivism

B. Vaishnavism
C. Buddhism
D. Jainism
E. None of these.

6. Which among the following vedic text gives a systematic exposition of the 'theory of rebirth' for the first time?

A. Chhandogya Upanishad
B. Mundaka Upanishad
C. Satapatha Brahmana
D. Brihadaranyaka Upanishad
E. None of these.

7. The evidence of 'pit-dwelling' have been discovered by from which of the following ancient Indian sites?

A. Lothal and Kalibangan
B. Burzahom and Gufkaral
C. Ropar and Rangpur
D. Kalibangan and Surkotada
E. None of these.

8. The first astronomical observatory of Harappan civilisation has been found at which among the following ancient Indian sites?

A. Chanhudaro
B. Ropar
C. Diambad
D. Dholavaria
E. None of these.

9. Who were Manu, Yajnavakya, Narada and Brihaspati?

F. Law givers of ancient India
G. Gods of vedic religion
H. Budhhist scholars and logicians
I. Celebrated mathermaticians and astronomers of ancient India
J. None of these.

10. Select the statement which is NOT correct regarding Kalidasa:

F. Kalidas was a renowned Sanskrit poet and dramatist of gupta period.
G. He was one of the nine gems in the court of Chandragupta I.
H. Kumarasambhavam and Ritusamhara are his two epic works.
I. His plays and poetry are primarily based on Hindu Pranas and philosophy.
J. None of these.

SECTION – J (ACCOUNTS)

1. The cost of air – conditioning of the manager's office will be.

   (A) A capital expenditure
   (B) A revenue expenditure
   (C) A deferred revenue expenditure
   (D) All of the above
   (E) None of these.

2. Call in advance is shown under....

   (A) Share capital
   (B) Reserve and surplus
   (C) Current liabilities
   (D) Loans and advance
   (E) None of these.

3. A loan can be described as a short term loan if the period is...

   (A) Three years
   (B) Less than one year
   (C) Over one year
   (D) More than two years
   (E) None of these.

4. How many parties are there in consignment?

   (A) 1
   (B) 2
   (C) 3
   (D) 5
   (E) None of these.

5. In the absence of any agreement, partners are liable to receive interest on their loans@

   (A) 12%
   (B) 10%
   (C) 6%
   (D) 8%
   (E) None of these.

6. Goods costing Rs. 1, 00,000 are consigned at 20% on invoice price. What is its load?

   (A) 1,25,000
   (B) 25,000
   (C) 75,000
   (D) 20,000
   (E) None of these.

7. Companies profit divided among shareholder is....

   (A) Interest
   (B) Reserve
   (C) Dividend
   (D) Surplus
   (E) None of these.

8. Debenture carrying charge on particular assets on the company is known as...

   (A) Fixed
   (B) Mortage
   (C) Naked
   (D) Floating
   (E) None of these.

9. Retained earnings is synonymous to...

   (A) Accumulated profit and loss account
   (B) Profit for the year
   (C) Operating profits
   (D) Gross profit
   (E) None of these.

10. Dividends are usually paid as a percentage of...

    (A) Authorised Share capital
    (B) Net profit
    (C) Paid up capital
    (D) Called up capital
    (E) None of these.

SECTION – K (BUSINESS)

1. Economic activities may be classified into business, _____ and employment

   (A) Profession
   (B) Occupation
   (C) Vocation
   (D) Work
   (E) None of these.

2. Which of the following is not an example of non-economic activity?

   (A) Patriotism
   (B) Teaching
   (C) Sentiment
   (D) Sympathy
   (E) None of these.

3. Human activities are of _____ types.

   (A) 1
   (B) 2
   (C) 3
   (D) 4
   (E) None of these.

4. ___ is a statement which derives the role that an organisation plays in a society.

   (A) Goals
   (B) Mission
   (C) Objectives
   (D) Success
   (E) None of these.

5. Which of the following quality (or qualities) a manger must possess to succeed in planning?

   (A) Reflective thinking
   (B) Imagination
   (C) Farsightedness
   (D) All of these
   (E) None of these.

6. Which one of the following may not be a factor behind starting business?

   (A) Routing workload
   (B) Size of the firm
   (C) Finance
   (D) Location of the business
   (E) None of these.

7. Name the two broad categories of business actives.

   (A) Trade and commerce
   (B) Trade and industry
   (C) Industry and commerce
   (D) All of the above
   (E) None of these.

8. Transfer of interest exists in the case of

   (A) Profession
   (B) Employment
   (C) Business
   (D) All of the above
   (E) None of these.

9. Commerce includes activities relating to trade and ___ to trade.

   (A) Supporting
   (B) Subsidiaries
   (C) Auxiliaries
   (D) All of the above
   (E) None of these.

10. Following are the characteristic of business risks. One of then is not correct. Please identify it.

    (A) Loss is the reward for risk bearting
    (B) Business risks are due to uncertainties
    (C) Risk is an essential component of every business
    (D) All of the above
    (E) None of these.