

SECTION - A (ENGLISH)

Read the given passage carefully and answer the questions that follow.

Culture is not merely learning. It is discrimination, understanding of life. Liberal education aims at producing moral gifts as well as intellectual, sweetness of temper as much as sanity of outlook. into the art of living, the cultured man carries a certain grace, a certain refinement, a certain distinction which redeems him from the sterile futility of aimless struggle. Culture is not a pose of Intellect or a code of convention, but an attitude of life which finds nothing human, alien, common or unclean. An education that brings up a young man in entire indifference to the misery and poverty surrounding him, to the general stringency of life, to the dumb pangs of torture bodies and the lives submerged in the shadows, is essentially a failure. If we do not realize the solidarity of the human community, nor have human relation with those whom the world passes by as the lowly and the lost, we are not cultured.

1. Which of the following statements best expresses the theme of the passage?

- A. Culture lends grace and sanity to man.
- B. Culture and education are complimentary to each other
- C. Liberal education makes man cultured.
- D. Education brings man closer to life.
- E. None of these.

2. According to the author, the function of liberal is to

- A. Change the outlook of a person
- B. Increase intellectual powers.
- C. Improve a person morally
- D. Develop sensitivity to human dignity.
- E. None of these.

3. Consider the following;

i. Brotherhood of man ii. Understanding of pain and suffering
iii. Better human relations iv. Sweetness of temper
Which of the above expressions describe proper education?

- A. i and iii
- B. ii and iv
- C. ii, iii, and iv
- D. All of these
- E. None of these.

4. Find the analogy. Lens camera:: cinema Hall?

- A. Shopping Mall
- B. Celluloid
- C. Studio
- D. Market place
- E. None of these

5. In this question five words have been given. Arrange them in a meaningful sequence.

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- A. 5,1,4,3,2
- B. 2,3,4,5,1
- C. 3,2,5,1,4
- D. 5,2,1,3,4
- E. None of these

6. Change the voice.

Who taught her such thing?

- A. Who was she taught such things by?
- B. She was taught such things by who?
- C. By whom she was taught such things?
- D. By whom was she taught such things?
- E. None of these

7. Give the mood of the verb underlined in the sentence below. Are you well?

- A. Imperative mood
- B. Indicative mood
- C. Subjunctive mood
- D. All of these
- E. None of these

8. Culture redeems a person from the sterile futility of aimless struggle because

- A. It makes man learned.
- B. It makes man more intelligent
- C. It brings about a better understanding of life.
- D. It prepares man for struggle.
- E. None of these

9. Education is something a failure. Which of the following is the most likely reason for this?

- A. It improves the intellect only.
- B. It does not prepare man for struggle.
- C. It does not make man refine.
- D. It carries man away from life around him.
- E. None of these

10. Complete the question tag.

The teacher has instructed all of us to finish the work by tomorrow, _____?

- A. Isn't it
- B. it has she
- C. Hasn't she
- D. Did she
- E. None of these

SECTION – B (MENTAL ABILITY & REASONING)

1. How many squares are there in the figure given?
 - A. 36
 - B. 77
 - C. 60
 - D. 91
 - E. None of these.
2. If 'PMQE, is code as '51', then how will 'NRSZ' be coded?
 - A. 105
 - B. 85
 - C. 98
 - D. 77
 - E. None of these.
3. Find out the missing numbers in place of the question mark (?) from the given responses.
 - A. 32
 - B. 28
 - C. 38
 - D. 30
 - E. None of these.
4. The missing number in place of the question mark (?) in the following table is:
 - A. 12
 - B. 16
 - C. 26
 - D. 20
 - E. None of these.
5. Four of the following five are alike in a certain way and so from a group. Which is the one that does that does not belong to that group?
 - A. RPN
 - B. WSU
 - C. HDF
 - D. QMO
 - E. LHJ
6. Which set of alphabets will come in the place of question mark?
AZ,CX,EV.?
 - A. HU
 - B. GS
 - C. GT
 - D. HT
 - E. None of these.
7. Complete the series: 1,6,31,?
 - A. 151
 - B. 154
 - C. 155
 - D. 156
 - E. None of these.
8. If one third of one fourth of a number is 15, then three tenth of that number is:
 - A. 35
 - B. 36
 - C. 45
 - D. 54
 - E. None of these.
9. Which set of alphabet will come in the place of Question mark?
 - A. HU
 - B. GS
 - C. GT
 - D. HT
 - E. None of these.
10. On 8th Feb, 2005 it was Tuesday. What was the day of the week on 8th Feb 2004?
 - A. Tuesday
 - B. Monday
 - C. Sunday
 - D. Wednesday
 - E. None of these.

SECTION – C (SCIENCE)

- Hydrogen and oxygen combine in the ratio 1 : 8 by mass to form water. What mass of oxygen gas would be required to react completely with 8g of hydrogen gas?
 - 16g
 - 24g
 - 32g
 - 64g
 - None of these.
- Planaria belongs to which of the following phyla?
 - Nematoda
 - Annelida
 - Platyhelminthes
 - Arthropoda
 - None of these.
- Which among the following is the most dangerous for ozone layer?
 - Chlorine
 - Fluorine
 - Hydrogen
 - Chlorofluorocarbon
 - None of these.
- The frequency of a source is 20 KHz. The frequency of the sound waves produced by it in water and air will.
 - Be same as that of the source
 - Depend upon the velocity of the waves in these media
 - Depend upon the wavelength of the waves in these media
 - Depend on the density of the media
 - None of these.
- Which fundamental particle is not present in the normal hydrogen atom?
 - Electron
 - Proton
 - Neutron
 - All of these
 - None of these.
- The mass of 3.011×10^{23} molecules of chlorine is:
 - Less than 36g
 - Between 7g and 20g
 - Exactly 78g
 - More than 40g
 - None of these.
- Which phloem element is not living?
 - Sieve tubes
 - Phloem fibres
 - Companion
 - Phloem parenchyma
 - None of these.
- The number of electron present in M shell of a chlorine atom is:
 - 8
 - 7
 - 2
 - 18
 - None of these.
- Which of the following is included in thallophyta?
 - Mosses
 - Liverworts
 - Spirogyra
 - Hornworts
 - None of these.
- Which one of the following is into a connective tissue?
 - Blood
 - Lymph
 - Tendon
 - Ligament
 - None of these.

SECTION – D (MATHS)

1. The area of the figure obtained by joining the mid-points of the adjacent sides of a rhombus with mid – point of the adjacent sides of a rhombus with diagonal 16 cm and 20 cm is
 (A) 48 cm^2
 (B) 64 cm^2
 (C) 80 cm^2
 (D) 96 cm^2
 (E) None of these.
2. The following observations are arranged in ascending order?
 $36, 39, 45, 48, x, x + 4, 57, 62, 65, 68$
 If the median is 52, then the mean of the observation is ___
 (A) 52.4
 (B) 50.6
 (C) 51.8
 (D) 51.2
 (E) None of these.
3. Find the remainder where $2x^4 - 6x^3 + 3x^2 - 2$ is divided by $x^2 - 3x + 2$.
 (A) -3
 (B) 0
 (C) 1
 (D) 3
 (E) None of these.
4. Two coins are tossed 1000 times and the outcomes are recorded as given below:

 Based on his information, the probability of getting atleast 1 head is ____.
 (A) $84/125$
 (B) $17/25$
 (C) $81/125$
 (D) $44/125$
 (E) None of these.
5. If the mean of 6 observation $x, x+3, x+6, x+9, x+12, x+15$ is 18. Find the mean of first 4 observations.
 (A) 45
 (B) 36
 (C) 25
 (D) 15
 (E) None of these.
6. Two dice are thrown simultaneously. What is the probability of getting two numbers whose product is even?
 (A) $1/2$
 (B) $3/4$
 (C) $3/8$
 (D) $5/16$
 (E) None of these.
7. In a quadrilateral with distinct sides, if diagonal AC and BD intersect at right angle, then which of the following is true?
 (A) $AB^2 + BC^2 = CD^2 + DA^2$
 (B) $AB^2 + CD^2 = BD^2 + DA^2$
 (C) $AB^2 + AD^2 = BC^2 + CD^2$
 (D) $AB^2 + BC^2 = (CD^2 + DA)^2$
 (E) None of these.
8. The area bounded by y-axis, $2x + 3y = 12$ and $x - y = 1$ is..
 (A) 7.5 Square unit
 (B) 13.5 Square unit
 (C) 4.5 Square unit
 (D) 75 Square unit
 (E) None of these.
9. Find the median for the following frequency distribution:
 (A) 168 cm
 (B) 167 cm
 (C) 183 cm
 (D) 198 cm
 (E) None of these.
10. Find n, if $2200 - 2192.31 + 2n$ is perfect square.
 (A) 97
 (B) 138
 (C) 198
 (D) 218
 (E) None of these.

SECTION – E (GENERAL KNOWLEDGE)

1. Food crops include:
 - (A) Cotton, tobacco, sugarcane
 - (B) Rice, pulses, edible, oil seeds
 - (C) Jute, Chillies
 - (D) Linseed, castor, turmeric
 - (E) None of these.
2. What is the tagline of “Pradhan mantra jan – Dhan Yojana”?
 - (A) Mera khata Bhagya Vidhata
 - (B) Mera khata Mera Anna
 - (C) Mera Khata Mera Data
 - (D) Mera Khata Meri Pahechan
 - (E) None of these.
3. Sir C.V Raman was awarded Nobel Prize for his work on:
 - (A) Sonometer
 - (B) Light scattering
 - (C) Radio activity
 - (D) Cryogenis
 - (E) None of these.
4. The National policy for empowerment of women was Adopted in which year?
 - (A) 2004
 - (B) 2001
 - (C) 1998
 - (D) 2009
 - (E) None of these.
5. Which National water ways connects Allahbad to Haldia?
 - (A) NW 1
 - (B) NW 2
 - (C) NW 3
 - (D) NW 4
 - (E) None of these.
6. Which one of the following is the largest river island of India?
 - (A) East Nicobar
 - (B) Middle Nicobar
 - (C) Easr Andaman
 - (D) Majuli
 - (E) None of these.
7. What does the letter ‘E’ denote in the term ‘E-banking’?
 - (A) Economics Banking
 - (B) Expansion Banking
 - (C) Essential Banking
 - (D) Electronic Banking
 - (E) None of these.
8. Panchayati Raj system was first introduced in which one of the following states of india?
 - (A) Bihar
 - (B) Rajasthan
 - (C) Karnataka
 - (D) Punjab
 - (E) None of these.
9. How many High Court are in India?
 - (A) 24
 - (B) 26
 - (C) 22
 - (D) 28
 - (E) None of these.
10. The febral system of India was inspired by the constitution of which country?
 - (A) Canada
 - (B) United Kingdom
 - (C) USA
 - (D) Ireland
 - (E) None of these.