### DAV MODEL SCHOOL, KSTP, ASANSOL

Sample Worksheet 1

SESSION 2024-2025 Maximum Marks: 25

Class: XII Subject: English Time: 1Hour

1. Read the following passage carefully and answer the following question (1) In recent years, there has been a surge in both group and solo travel among young adults in India. A survey conducted among young adults aged 18-25 aimed to explore the reasons behind their travel preferences and recorded the percentage variation for 10 common points that influence travel choices.

(2) Among those who prefer solo travel, the most common reason cited was the desire for independence and freedom (58%), followed closely by the opportunity for introspection and self-discovery (52%). Additionally, solo travellers appreciated the ability to customize their itinerary to their preferences (44%) and the chance to meet new people on their own terms (36%).

(3) On the other hand, those who prefer group travel often cited the desire for socializing and making new friends (61%) as their primary reason. Group travel also provided a sense of security and safety in unfamiliar places (52%) and allowed for shared experiences and memories with others (48%). Additionally, group travellers enjoyed the convenience of having pre-planned itineraries and organized transportation (38%).

(4) Interestingly, both groups had similar levels of interest in exploring new cultures and trying new experiences (40% for solo travellers, 36% for group travellers). Similarly, both groups valued the opportunity to relax and escape from the stresses of everyday life (36% for solo travellers, 32% for group travellers).

(5) However, there were also some notable differences between the two groups. For example, solo travellers placed a higher priority on budget-friendly travel options (38%) compared to group travellers (24%). Conversely, group travellers were more likely to prioritize luxury and comfort during their travels (28%) compared to solo travellers (12%).

(6) Overall, the survey results suggest that both group and solo travel have their own unique advantages and appeal to different individuals, based on their preferences and priorities

Answer the following questions, based on given passage.

i) Infer two possible ways that the survey , mentioned in paragraph could be beneficial. Answer in about 40 words.

ii) Which travel choice point of the survey would influence tour operators to incorporate group dinners, social events, and shared accommodations in their itinerary?

- (a) Freedom to customise itinerary
- (b) Luxury and comfort
- (c) Security and safety
- (d) Desire for making new friend's

iii)What do the top choices in the survey, for traveling solo and in a group suggest about young adults?

(Iv)State True or False The tittle 'wonderlust the solo traveller trend among young adults in india' is appropriate for this passage

v)Which of the following is an example of an opportunity for self-discovery, as mentioned in paragraph 2?

- (a) Trying new cuisine
- (b) Hiring a tour guide
- (c) Purchasing local artifacts
- (d) Advance booking travel ticket

2.write a notice to be published in your school magazine about a charity show in aid of cancer patient. Don't forget to give the details regarding the date,venue and time etc You are Amar/Amrit

3.Answer the following question in 100to150 words a.justify the title "Lost Spring"

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## DAV MODEL SCHOOL, KSTP, ASANSOL Sample Worksheet 2 SESSION 2024-2025

Class: XII Subject: English Time: 1Hour 1.Read the passage given below.

1. Maharana Pratap ruled over Mewar only for 25 years. However, he accomplished so much grandeur during his reign that his glory surpassed the boundaries of countries and time turning him into an immortal personality. He along with his kingdom became a synonym for valour, sacrifice and patriotism. Mewar had been a leading Rajput kingdom even before Maharana Pratap occupied the throne. Kings of Mewar, with the cooperation of their nobles and subjects, had established such traditions in the kingdom, as augmented their magnificence despite the hurdles of having a smaller area under their command and less population. There did come a few thorny occasions when the flag of the kingdom seemed sliding down. Their flag once again heaved high in the sky thanks to the gallantry and brilliance of the people of Mewar.

2. The destiny of Mewar was good in the sense that barring a few kings, most of Jhe rulers were competent and patriotic. This glorious tradition of the kingdom almost continued for 1500 years since its establishment, right from the reign of Bappa Rawal. In fact only 60 years before Maharana Pratap, Rana Sanga drove the kingdom to the pinnacle of fame. His reputation went beyond Rajasthan and reached Delhi. Two generations before him, Rana Kumbha had given a new stature to the kingdom through victories and developmental work. During his reign, literature and art also progressed extraordinarily. Rana himself was inclined towards writing and his works are read with reverence even today. The ambience of his kingdom was conducive to the creation of high quality work of art and literature. These accomplishments were the outcome of a longstanding tradition sustained by several generations.. The life of the people of Mewar must have been peaceful and prosperous during the long span of time; otherwise such extraordinary accomplishment in these fields would not have been possible. This is reflected in their art and literature as well as their loving nature. They compensate for lack of admirable physique by their firm but pleasant nature. The ambience of Mewar remains lovely thanks to the cheerful and liberal character of its people.

3. One may observe astonishing pieces of workmanship not only in the forts and palaces of Mewar but also in public utility buildings. Ruins of many structures which are still standing tall in their grandeur are testimony to the fact that Mewar was not only the land of the brave but also a seat of art and culture. Amidst aggression and bloodshed, literature and art flourished and creative pursuits of literature and artists did not suffer. Imagine, how glorious the period must have been when the Vijaya Stambha which is the sample of our great ancient architecture even today, was constructed. In the same fort, Kirti Stambha is standing high, reflecting how liberal the then administration was which allowed people from other communities and kingdoms to come and carry out constructed first or the Kirti Stambha. The fact is that both the capitals are standing side by side and reveal the proximity between the king and the subjects of Mewar. PAGE 1

4. The cycle of time does not remain the same. Whereas the reign of Rana Sanga was crucial in raising the kingdom to the acme of glory, it also proved to be his nemesis.



History took a turn. The fortune of Mewar — the land of the brave — started waning. Rana tried to save the day with his acumen which was running against the stream and the glorious traditions for sometime.

<u>1.1 On the basis of your understanding of the above passage answer each of the questions</u> with the help of options that follow.

(a) Who is the earliest king of mewar according to passage?

(b) Difficulties in the way of Mewar were .....

(i) lack of cooperation of the nobility

(ii) its small area and small populations

(iii) the people of Mewar showed gallan try

2.Answers the following question in 35 to 50 words a.Discuss the similarities between the story of Saheb and Mukesh with reference to the story Lost Spring

b.What do the parting words of the poet and her smile signify?

3.Answer the following question in 100 to 150 words a.'Franz was a naughty boy though he had a good heart' justify the statement

PAGE 2



# D.A.V. MODEL SCHOOL, KSTP, ASANSOL **HOLIDAY HOMEWORK (WORKSHEET 1) SESSION: 2024-2025**

SUBJECT: MATHEMATICS

CLASS: XII

(d)

Name \_\_\_\_\_\_ Roll No: \_\_\_\_\_\_ Section: \_\_\_\_\_

# **Objective type question**

- 1. A relation R in a set A is called \_\_\_\_\_, if  $(a_1, a_2) \in R$  implies  $(a_2, a_1) \in R$ , for all  $a_1, a_2 \in A$ . (b) transitive (c) equivalence (d) non-symmetric (a) symmetric 2. Let R be a relation on the set N of natural numbers defined by nRm if n divides m. Then R is (a) Reflexive and symmetric (b) Transitive and symmetric (c) Equivalence (d) Reflexive, transitive but not symmetric 3. The maximum number of equivalence relations on the set A = {1, 2, 3} are (b) 2 (c) 3 (a) 1 (d) 5 4. If set A contains 5 elements and the set B contains 6 elements, then the number of one-one and onto mappings from A to B is (a) 720 (b) 120 (c) 0
- none of these

5. Let  $f: [2, \infty) \rightarrow R$  be the function defined by  $f(x) = x^2 - 4x + 5$ , then the range of f is (b) [1, ∞) (c)  $[4, \infty)$ (d) [5, ∞) (a) R 6. Let  $f : \mathbb{R} \to \mathbb{R}$  be defined by  $f(x) = 1/x \forall x \in \mathbb{R}$ . Then f is (a) one-one (b) onto (c) bijective (d) f is not defined 7. Let A = {1, 2, 3} and consider the relation R = {1, 1), (2, 2), (3, 3), (1, 2), (2, 3), (1,3)}. Then R is (a) reflexive but not symmetric (b) reflexive but not transitive (c) symmetric and transitive (d) neither symmetric, nor transitive 8. Let  $f : \mathbb{R} \to \mathbb{R}$  be given by  $f(x) = \tan x$ . Then  $f^{-1}(1)$  is (b)  $\{n \pi + \pi/4 : n \in Z\}$ (c) does not exist (d) none of these (a) π/4 9. Set A has 3 elements, and set B has 4 elements. Then the number of injective mappings that can be defined from A to B is (c) 24 (a) 144 (b) 12 (d) 64 10. Let  $f : \mathbb{R} \to \mathbb{R}$  be defined by f(x) = 3x - 4. Then  $f^{-1}(x)$  is given by

(a) (x + 4)/3(b) (x/3) - 4(c) 3x + 4(d) None of these 11. If sin<sup>-1</sup>( $x^2 - 7x + 12$ ) = nπ, ∀ n ∈ I, then x = (a) -2 (b) 4 (c) -3 (d) 5 12. If  $tan^{-1}(\cot \theta) = 2\theta$ , then  $\theta$  is equal to (a) π/3 (b) π/4 (d) (C) π/6 None of these 13. If  $\tan^{-1} 3 + \tan^{-1} x = \tan^{-1} 8$ , then x = (b) 1/5 (c) 5/14 (a) 5 (d) 14/514 If  $tan^{-1}(x - 1) + tan^{-1}x + tan^{-1}(x + 1) = tan^{-1}3x$ , then the values of x are (a) ±12 (b) 0, 12 (c) 0, -12 (d) **0**, ±12 15. The value of sin  $(2\tan^{-1}(0.75))$  is equal to (b) 1.5 (c) 0.96 (d) sin (a) 0.75 1.5 16. The value of expression 2 sec<sup>-1</sup>  $2 + sin^{-1}(1/2)$ (b) 5π/6 (a) π/6 (C) 7π/6 (d) 1 17. If  $\tan^{-1} 2x + \tan^{-1} 3x = \pi/4$ , then x is (c) (16, -1) (a) 16 (b) 1 (d) none of these

18. If  $\tan^{-1} x - \tan^{-1} y = \tan^{-1} A$ , then A is equal to

(a) x – y (b) x + y(C) x - y/1 + xy(d) x+y/1-xy

19. in the following questions, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct answer out of the following choices.

(a) Both (A) and (R) are true and (R) is the correct explanation of (A).

(b) Both (A) and (R) are true but (R) is not the correct explanation of (A).

(c) (A) is true but (R) is false.

(d) (A) is false but (R) is true.

1. Assertion (A): The relation P on set X is a transitive relation.

Reason (R): The relation P has a subset of the form  $\{(a, b), (b, c), (a, c)\}$ , where a, b,  $c \in X$ .

20. Assertion (A): The function  $f(x) = |x - 6|(\cos x)$  is differentiable in  $R - \{6\}$ . Reason (R): If a function f is continuous at a point c, then it is also differentiable at that point.

# **VERY SHORT QUESTION**

21. Find the value of cot (tan-1  $\alpha$  + cot-1  $\alpha$ ).

22. Prove that  $\sin_1(3/5) - \sin_1(8/17) = \cos_1(84/85)$ .

23. If f: R  $\rightarrow$  R is defined by f(x) = x<sub>2</sub> - 3x + 2, find f(f(x)).

- 24. Let  $f : N \rightarrow Y$  be a function defined as f(x) = 4x + 3, where,  $Y = \{y \in N: y = 4x + 3 \text{ for some } x \in N\}$ . Show that f is invertible. Find the inverse.
- 25. Find the value of  $\cos_1(1/2) + 2 \sin_1(1/2)$ .

# **VERY LONG QUESTION ANSWER**

- 26. <u>if</u> f: {1,3, 4}  $\rightarrow$  {1, 2, 5} and g: {1,2, 5}  $\rightarrow$  {1, 3} given by f = {(1,2), (3, 5), (4,1)} and g = {(1,3), (2, 3), (5,1)}. Write down gof.
- 27. Let R is the equivalence relation in the set A = {0,1, 2, 3, 4, 5} given by R = {(a, b) : 2 divides (a b)}. Write the equivalence class [0].

# case base question



**28.** Raji visited the Exhibition along with her family. The Exhibition had a huge swing, which attracted many children. Raji found that the swing traced the path of a Parabola as given by  $y = x^2$ . Answer the following questions using the above information.

1. Let f: R  $\rightarrow$  R be defined by f(x) = x<sup>2</sup> is\_\_\_\_\_

a. Neither Surjective nor Injective b. Surjective c. Injective d. Bijective 2.. Let f: R  $\rightarrow$  R be defined by  $f(x) = x^2$  is \_\_\_\_\_ a. Surjective but not Injective b. Surjective c. Injective d. Bijective 3.. Let f:  $\{1,2,3,...\} \rightarrow \{1,4,9,...\}$  be defined by  $f(x) = x^2$  is \_\_\_\_\_ a. Bijective b. Surjective but not Injective c. Injective but Surjective d. Neither Surjective nor Injective 4.Let : N  $\rightarrow$  R be defined by f(x) = x<sup>2</sup>. Range of the function among the following is \_\_\_\_\_ a. {1, 4, 9, 16,...} b. {1, 4, 8, 9, 10,...} c. {1, 4, 9, 15, 16,...} d. {1, 4, 8, 16,...}

**29**. A general election of Lok Sabha is a gigantic exercise. About 911 million people were eligible to vote and voter turnout was about 67%, the highest ever Let I be the set of all citizens of India who were eligible to exercise their voting right in general election held in 2019. A relation 'R' is defined on I as follows:



R = { $(V \ 1, V \ 2)$ : V 1, V 2  $\in$  I and both use their voting right in general election – 2019}

 Two neighbors X and Y∈ I. X exercised his voting right while Y did not cast her vote in general election – 2019. Which of the following is true?

a.  $(X,Y) \in R$ d.  $(X,Y) \notin R$ d.  $(X,Y) \notin R$ c.  $(X,X) \notin R$ 

2. 2. Mr.'X' and his wife 'W' both exercised their voting right in general election -2019, Which of the following is true?

a. both (X,W) and (W,X)  $\in \mathbb{R}$  b. (X,W)  $\in \mathbb{R}$  but (W,X)  $\notin \mathbb{R}$  c. both (X,W) and (W,X)  $\notin \mathbb{R}$ d. (W,X)  $\in \mathbb{R}$  but (X,W)  $\notin \mathbb{R}$ 

3. Three friends F1, F2 and F3 exercised their voting right in general election-2019, then which of the following is true?

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a. (F1,F2) \in R, (F2,F3) \in R and (F1,F3) \in Rb. (F1,F2) \in R, (F2,F3) \in R and (F1,F3)∉ Rc. (F1,F2) \in R, (F2,F2) \in R but (F3,F3) \notin Rd. (F1,F2) \notin R, (F2,F3) \notin R and(F1,F3) ∉
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4. The above defined relation R is \_\_\_\_\_

a. Symmetric and transitive but not reflexive Universal relation c. Equivalence relation not symmetric and transitive

b. d. Reflexive but

5. Mr. Shyam exercised his voting right in General Election – 2019, then Mr. Shyam is related to which of the following?

a. All those eligible voters who cast their votes Mr.Shyam

c. All citizens of India

d. Eligible voters of India

b. Family members of

# D.A.V. MODEL SCHOOL, KSTP, ASANSOL HOLIDAY HOMEWORK (WORKSHEET 2) SESSION: 2024-2025

SUBJECT: MATHEMATICS

**CLASS: XII** 

Name \_\_\_\_\_\_ Roll No: \_\_\_\_\_\_ Section: \_\_\_\_\_

# **OBJECTIVE TYPE QUESTION**

1. The value of sin (2tan<sup>-1</sup> (0.75)) is equal to (a) 0.75 (b) 1.5 (c) 0.96 (d) sin 1.5 2. If tan<sup>-1</sup> 2x + tan<sup>-1</sup> 3x =  $\pi/4$ , then x is (a) 16 (b) 1 (c) (16, -1) (d) none of these 3. A relation R in a set A is called \_\_\_\_\_\_, if (a<sub>1</sub>, a<sub>2</sub>)  $\in$  R implies (a<sub>2</sub>, a<sub>1</sub>)  $\in$  R, for all a<sub>1</sub>, a<sub>2</sub>  $\in$  A. (a) symmetric (b) transitive (c) equivalence (d) non-symmetric . Let f: [2,  $\infty$ )  $\rightarrow$  R be the function defined by f(x) = x<sup>2</sup> - 4x + 5, then the range of f is (a) R (b) [1,  $\infty$ ) (c) [4,  $\infty$ ) (d) [5,  $\infty$ ) 4. Let f: R  $\rightarrow$  R be given by f (x) = tan x. Then f<sup>-1</sup>(1) is (a)  $\pi/4$  (b) {n  $\pi + \pi/4 : n \in Z$ } (c) does not exist (d) none of these

5. Solve for x :  $\{x\cos(\cot^{-1} x) + \sin(\cot^{-1} x)\}^2 = 5150$ (a)  $1/\sqrt{2}$  (b)  $1/5\sqrt{2}$ (c) 2√ 2 (d) 5√ 2 6. If  $tan^{-1}(\cot \theta) = 2\theta$ , then  $\theta$  is equal to (a) π/3 (b) π/4 (c) π/6 (d) None of these 7. If  $\tan^{-1}(x - 1) + \tan^{-1}x + \tan^{-1}(x + 1) = \tan^{-1} 3x$ , then the values of x are (a) ±12 (b) 0, 12 (c) 0, -12 (d) 0, ±12 8. If  $\sin^{-1}(x^2 - 7x + 12) = n\pi$ ,  $\forall n \in I$ , then x =(a) -2 (b) 4 (c) -3 (d) 5 9. If  $\cos^{-1} x + \sin^{-1} x = \pi$ , then the value of x is (b)  $1/\sqrt{2}$  (c)  $3/\sqrt{2}$ (a) 32 (d) 2/√ 2 10. If  $tan^{-1}(\cot \theta) = 2\theta$ , then  $\theta$  is equal to (b) π/4 (C) π/6 (a) π/3 (d) None of these **VERY SHORT TYPE QUESTION ANSWER** 11. Let  $f: N \rightarrow Y$  be a function defined as f(x) = 4x + 3, where,  $Y = \{y \in N: y = 4x + 3 \text{ for some } x \in N\}$ . Show that f is invertible. Find the inverse.

12. Solve:  $\tan_{-1} 2x + \tan_{-1} 3x = \pi/4$ 

**13.** Find the value of x, If  $6\sin^{-1}(x^2 - 6x + 8.5) = \pi$ ,

**14.** Find the value of the expression  $tan(1/2cos-12/\sqrt{3})$ .

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15. Find the value of \sec^2(\tan^{-1} 2) + \csc^2(\cot^{-1} 3).
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# **VERY LONG QUESTION TYPE**

**16.** Find the value of The value of  $\cot^{-1} 9 + \csc^{-1}(\sqrt{41/4})$ .

**17.** If  $f(x) = (ax^2 + b)^3$ , then the function g such that f(g(x)) = g(f(x)), find g(x).

# CASE BASE QUESTION

**18.** Sherlin and Danju are playing Ludo at home during Covid-19. While rolling the dice, Sherlin' s sister Raji observed and noted the possible outcomes of the throw every time belongs to set {1,2,3,4,5,6}. Let A be the set of players while B be the set of all possible outcomes.



A = {S, D}, B = {1,2,3,4,5,6}

1. Let  $R : B \rightarrow B$  be defined by  $R = \{(x, y) : y \ i \ s \ d \ i \ v \ i \ s \ i \ b \ l \ e \ b \ y \ x \}$  is a. Reflexive and transitive but not symmetric b. Reflexive and symmetric and not c. Not reflexive but symmetric and transitive transitive d. Equivalence 2. Raji wants to know the number of functions from A to B. How many number of functions are b. 62 possible? a26 c. 6! d. 212 3. Let R be a relation on B defined by R = {(1,2), (2,2), (1,3), (3,4), (3,1), (4,3), (5,5)}. Then R is b. Reflexive a. Symmetric c. Transitive d. None of these three 4. Let  $R : B \to B$  be defined by R={(1,1),(1,2), (2,2), (3,3), (4,4), (5,5),(6,6)}, then R is b. Reflexive and Transitive c. Transitive and symmetric a. Symmetric d. Equivalence

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#### DAV MODEL SCHOOL KSTP

#### HOLIDAY HOMEWORK

#### Worksheet – 1

CLASS – XII

SUB – PHYSICS

Q1. Three concentric metallic spherical shells of radii R, 2R, 3R, are given charges  $Q_1:Q_2:Q_3$  respectively. It is found that the surface charge densities on the outer surfaces of the shells are equal. Then, the ratio of the charges given to the shells,  $Q_1:Q_2:Q_3$ 

- (A) 1:2:3
- (B) 1:3:5
- (C) 1:4:9
- (D) 1 : 8 : 18

Q2. An infinitely long solid cylinder of radius R has a uniform volume charge density. It has a spherical cavity of radius R/2 with its centre on the axis of the cylinder, as shown in the figure. The magnitude of the electric field at the point P, which is at a distance of 2R from the axis of the cylinder, is given by the expression  $23\rho R/16k\epsilon_0$ . The value of k is



Q3. There is a uniform electrostatic field in a region. The potential at various points on a small sphere centred at P, in the region, is found to vary between in the limits 589.0 V to 589.8 V. What is the potential at a point on the sphere whose radius vector makes an angle of 60° with the direction of the field?

(A) 589.5 V

(B) 589.2 V

(C) 589.4 V

(D) 589.6 V

Q4. An electric field

 $\vec{E} = (25\hat{\imath} + 30\hat{\jmath}) \text{ N/C}$ 

exists in a region of space. If the potential at the origin is taken to be zero then the potential at x = 2 m, y = 2m is

(A) -110 J

(B) -140 J

(C) -120 J

(D) -130 J

Q5. Assume that an electric field

 $\vec{E}$  = 30 $x^2 \hat{i}$  N/C

exists in space. Then the potential difference  $V_A - V_0$ , where  $V_0$  is the potential at the origin and  $V_A$  the potential at x = 2m is

- (A) 120 J/C
- (B) -120 J/C
- (C) -80 J/C
- (D) 80 J/C

Q6. A hollow metal sphere of radius 5 cm is charged such that the potential on its surface is 10 volts. The potential at the centre of the sphere is

(A) zero

(B) 10 volts

(C) same as at a point 5 cm away from the surface

(D) same as at a point 25 cm away from the surface

Q7. Concentric metallic hollow spheres of radii R and 4R hold charges  $Q_1$  and  $Q_2$  respectively. Given that the surface charge density of the concentric spheres are equal, the potential difference V(R) - V(4R) is

- (A)  $3Q_1/16\pi\epsilon_0R$
- (B)  $3Q_2/4\pi\epsilon_0R$

(C)  $Q_2/4\pi\epsilon_0 R$ 

(D) 3Q<sub>1</sub>/4πε<sub>0</sub>R

Q8. A charge Q is divided into q and (Q - q). If Q/q = x, such that the repulsion between them is maximum, find x.

- (A) 1
- (B) 2
- (C) 3
- (D) 4

Q9. The process in which a region is made free from any electric field is known as \_\_\_\_\_\_.

- a. Electrostatic forcing
- b. Electrostatic binding
- c. Electrostatic shielding
- d. None of the options

Q10. The formula for electrostatic potential is \_\_\_\_\_.

- a. Electrostatic potential = Work done\*charge
- b. Electrostatic potential = Work done/charge
- c. Electrostatic potential = Work done+charge
- d. Electrostatic potential = Work done-charge

Q11. The electrostatic potential on the perpendicular bisector due to an electric dipole is \_\_\_\_\_

- a. Zero
- b. 1
- c. Infinite
- d. Negative

Q12. A surface that has the same electrostatic potential at every point on it is known as \_\_\_\_\_

- a. Equal-potential surface
- b. Same potential surface
- c. Equi-magnitude surface
- d. Equipotential surface
- Q13. . Dielectrics are \_\_\_\_
  - a. Conducting substances
  - b. Non-conducting substances
  - c. Semi-conducting substances
  - d. None of the option

**Directions:** These questions consist of two statements, each printed as Assertion and Reason. While answering these questions, you are required to choose any one of the following four responses.

(a) If both Assertion and Reason are correct and the Reason is a correct explanation of the Assertion.

- (b) If both Assertion and Reason are correct but Reason is not a correct explanation of the Assertion.
- (c) If the Assertion is correct but Reason is incorrect.
- (d) If both the Assertion and Reason are incorrect.

**Q.14. Assertion :** If the distance between parallel plates of a capacitor is halved and dielectric constant is three times, then the capacitance becomes 6 times.

**Reason :** Capacity of the capacitor does not depend upon the nature of the material.

Q15.**ASSERTION**:- A parallel plate capacitor is connected across battery through a key. A dielectric slab of dielectric constant K is introduced between the plates. The energy which is stored becomes K times. **Reason :** The surface density of charge on the plate remains constant or unchanged.

Q16. Obtain an expression for electric field due to an electric dipole at :-

- a) Axial point
- b) Equatorial point
- c) Any point in space

Q17. Show that gauss's law is in accordance with principle of superposition and coulomb's law.

Q18. Derive an expression for :-

- a) Torque
- b) Work done
- c) Potential energy

For an electric dipole placed in an uniform electric field .

Q19. State the properties of Gaussian surface. Explain why a Gaussian surface can pass through a continuous charge distribution but not from a discrete distribution of charge.

Q20. Write Maxwell's equations in electromagnetism in integral form and differential form. Also mention the physical significance of each equation.

# DAV MODEL SCHOOL, KSTP, ASANSOL SESSION: 2024-25 HOLIDAY HOMEWORK WORKSHEET

## **SUBJECT: CHEMISTRY**

### **CLASS: XII**

Name:	Sec:	Roll No:

1. What is an example of camphor in N2 gas?

- a) Solid in gas solution
- b) Gas in gas solution
- c) Solid in liquid solution
- d) Liquid in gas solution

#### Ans.\_\_\_\_

2. What is the mole fraction of ethylene glycol in a solution containing 20g by mass?

(a) 0.022

(b) 0.054

(c) 0.068

(d) 0.090

Ans.

- **3.** Choose the ideal solution from the following.
- (a) Carbon disulphide and acetone
- (b) Phenol and Aniline
- (c) Chloroform and Acetone
- (d) Ethyl iodide and ethyl bromide

## Ans.

- 4. Which law explained solubility of gasses in a liquid?
- (a) Charles law
- (b) Henry's law
- (c) Raoult's law
- (d) Boyle's law

Ans.

5.Two beakers of capacity 500 mL were taken. One of these beakers, labelled as "A", was filled with 400 mL water whereas the beaker labelled "B" was filled with 400 mL of 2 M solution of NaCl. At the same temperature both the beakers were placed in closed containers of same material and same capacity as shown



At a given temperature, which of the following statement is correct about the vapour pressure of pure water and that of NaCl solution.

- (a) vapour pressure in container (A) is more than that in container (B).
- (b) vapour pressure in container (A) is less than that in container (B).
- (c) vapour pressure is equal in both the containers.
- (d) vapour pressure in container (B) is twice the vapour pressure in container (A).

#### Ans.

6. If two liquids A and B form minimum boiling azeotrope at some specific composition then .

(a) A–B interactions are stronger than those between A–A or B–B.

(b) vapour pressure of solution increases because more number of molecules of liquids A and B can escape from the solution.

(c) vapour pressure of solution decreases because less number of molecules of only one of the liquids escape from the solution.

(d) A–B interactions are weaker than those between A–A or B–B.

Ans.

7. Choose the correct example for a non-ideal solution?

(a) Benzene + Toluene

(b) Hexane + Heptane

(c) Chlorobenzene + Bromobenzene

(d) Ethanol + Hexane

Ans.

DIRECTION: For question numbers 7 and 8, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below:

- (a) Both A and R are true and R is correct explanation of the A.
- (b) Both A and R are true but R is not the correct explanation of the A.
- (c) A is true but R is false.
- (d) Both A and R are false.

8. Assertion : When a solution is separated from the pure solvent by a semi- permeable

membrane, the solvent molecules pass through it from pure solvent side to the solution side **Reason :** Diffusion of solvent occurs from a region of high concentration solution to a region of low concentration solution.

Ans.\_\_\_\_\_

9. Assertion : When NaCl is added to water a depression in freezing point is observed.Reason : The lowering of vapour pressure of a solution causes depression in the freezing point.

Ans.\_\_\_\_\_

10. Assertion : Molarity of a solution in liquid state changes with temperature. **Reason :** The volume of a solution changes with change in temperature.

Ans.\_\_\_\_\_

11. When kept in water, raisins swell in size. Name and explain the phenomenon involved. Give two applications of the phenomenon. Ans.

12. Non-ideal solutions exhibit either positive or negative deviations from Raoult's law. What are these deviations and why are they caused? Explain with one example for each type.

Ans.\_\_\_\_\_

13. 1.00 molal aqueous solution of trichloroacetic acid (CCl<sub>3</sub>COOH) is heated to its boiling point. The solution has the boiling point of 100.18°C. Determine the van't Hoff factor for trichloroacetic acid. (K<sub>b</sub> for water = 0.512 K kg mol<sup>-1</sup>)

Ans.\_\_\_\_

14. 18 g of glucose,  $C_6H_{12}O_6$  (Molar mass – 180 g mol<sup>-1</sup>) is dissolved in 1 kg of water in a sauce pan. At what temperature will this solution boil? (K<sub>b</sub> for water = 0.52 K kg mol<sup>-1</sup>, boiling point of pure water = 373.15 K)

Ans. 15. (i) On mixing liquid X and liquid Y, volume of the resulting solution decreases. What type of deviation from Raoult's law is shown by the resulting solution? What change in temperature would you observe after mixing liquids X and Y? Ans. 16. A solution containing 30 g of non-volatile solute exactly in 90 g of water has a vapour pressure of 2.8 kPa at 298 K. Further 18 g of water is added to this solution. The new vapour pressure becomes 2.9 kPa at 298 K. Calculate (i) the molecular mass of solute and (ii) vapour pressure of water at 298 K Ans. 17. (a) Differentiate between molarity and molality for a solution. How does a change in temperature influence their values? Ans.\_\_\_\_

(b) Calculate the freezing point of an aqueous solution containing 10.50 g of MgBr <sub>2</sub> in 200 g of water. (Molar mass of MgBr <sub>2</sub> = 184 g) (K <sub>f</sub> for water = $1.86$ K kg mol <sup>-1</sup> )
Ans
18. (a)Explain why aquatic species are more comfortable in cold water rather than in warm water?
Ans
(b) A solution of glycerol ( $C_3H_8O_3$ ) in water was prepared by dissolving some glycerol in 500 g of water. This solution has a boiling point of 100.42°C. What mass of glycerol was dissolved to make this solution? ( $K_b$ for water = 0.512 K kg mol <sup>-1</sup> )
Ans
<ul><li>19.Read the passage given below and answer the following questions:</li><li>The solubility of gases increases with increase of pressure. William Henry made a systematic investigation of the solubility of a gas in a liquid. According to Henry's law "the mass of a gas dissolved per unit volume of the solvent at constant temperature is directly proportional to the pressure of the gas in equilibrium with the solution".</li><li>a) Henry's Law does not apply to which gas? Why?</li></ul>
Ans.
L) Will at is the write for Henry's law constant?
<ul><li>b) What is the unit for Henry's law constant?</li><li>Ans.</li></ul>
c) What are the Limitations of Henry's Law?
Ans.

20. Plot a graph of vapour pressure and mole fraction of an ideal solution at constant temperature.

# DAV MODEL SCHOOL,KSTP,ASANSOL HOLIDAY HOME WORK SESSION :- 2024-25

# **Class:- XII**

## **Sub:-** Biology

1.	During the pollen grain formation, the generative cell divides to give rise to the two male gametes.					
	What is the ploidy of Gener	ative cell?				
	a) n	b) 2n	c) 3n	d) 4n.		
2.	Choose the function of Scut	tellum:-				
	a) It protects and provides nourishments to the developing embryo.					
	b) It protects Plumule	c) It protects Radicle	e	d) It provides only		
	protection					
3.	. MTP is considered safe up to how many weeks of pregnancy?					
	a) 8	b)12	c) 18	d) 6		
4.	There is no cell division inv	volved in	, ,			
	a) Spermatogenesis	b) Oogenesis	c)Embryogenesis	d) Spermiogenesis		
5.	How many functional spern	ns and how many ova	will be formed by a primar	y spermatocyte and a		
	primary oocyte, respectively?					
	a) 1, 1	b) 1,4	c) 4,1	d) 4,4		
	<b>DIDECTION.</b> In the following questions, a statement of $A$ scortion(A) is followed by a statement of					
	<b>DIRECTION:</b> In the following questions, a statement of Assertion(A) is followed by a statement of Reason(R).Mark the correct choice as:					
	A. Both A and R are true and R is the correct explanation.					
	B. Both A and R are true and R is not the correct explanation.					
	C. A is true R is false.					
	D. A is false R is true.					
	6. Assertion: The endosperm	of angiosperms is genera	ally triploid(3n).			
	<b>Reason:</b> It develops from primary endosperm nucleus formed by fusion of haploid male gamete and diploid					
	secondary nucleus.					
	-					

**9**. While visiting an orchard Ganesh found some flowers were covered with butter bags. He was about to remove the bags, but the gardener did not allow him.

a) Why the flowers have been covered?

b) How will Ganesh understand the need for covering flowers?

c) Is it possible that all seeds produced will grow into plants with desirable qualities? why?

11. Observe the following diagram and label the marked areas



12. Give any three differences between Tubectomy and Vasectomy.

13. An infertile couple is advised to adopt test tube baby programme. Describe the two principal procedures adopted for such technology?

14. What are the advantages and disadvantages of hormonal contraceptives?

15. a) All reproductive tract infections are STDs but not all STDs are reproductive tract infection. Justify with an example.

b)	Expand the following					
	ICSI, GIFT, ZIFT, IUT, IUI					

16. Explain the process of Oogenesis with the help of Flow diagram.

17. Explain the importance of different hormones during pregnancy and embryonic development.

## DAV MODEL SCHOOL KSTP , ASANSOL

PRACTICE WORKSHEET - 1 (SESSION 2024-2025)

CLASS – XII

-

Name of the Student:

SUBJECT – ACCOUNTANCY

\_\_Roll No:\_\_\_\_\_Section:\_\_\_\_\_

#### QUESTIONS

1. In the absence of a partnership deed, how are mutual relations of partners governed?

**2.** State the provision of 'Indian partnership Act 1932' relating to sharing of profits in absence of any provision in the partnership deed.

3. Give two circumstances in which the fixed capital of partners may change.

**4.** Ramesh, a partner in the firm has advanced a loan of a Rs. 1,00,000 to the firm and has demanded on interest @ 9% per annum. The partnership deed is silent on the matter. How will you deal with it?

**5.** Kanha, Neeraj and Asha were partners in a firm. They admitted Raghav their Landlord as a partner in the firm. Raghav brings sufficient amount of capital and goodwill premium for his share in the profits. Raghav had given a loan of Rs. 1,00,000 @ 10% p.a. interest to the partnership firm before he became the partner. Now the accountant of the firm is emphasizing that the interest on loan should be paid @ 6% p.a. Is he right in doing so ? Give reason in support of your answer.

**6.** X, Y, and Z are partners sharing profits in the ratio of 5: 4: 1. Z is given a guarantee that his share of profit in any given year would be Rs. 10000. Deficiency if any would be borne by X and Y equally. The profits for the year 2016 amounted to Rs.80000. Pass necessary entries in the books of the firm.

**7.** A, B and C are in partners sharing profits and losses in the ratio if 1:2:3. They have omitted interest on capital @8% p.a. for two year ended 31st March 2016. Their fixed capitals were Rs.4,00,000, Rs.6,00,000 and Rs.8,00,000 respectively. Pass the necessary adjusting entries

\_\_Page :- 2

**8.** A, B and C entered into partnership on 1st April, 2016 to share profits & losses in the ratio of 4:3:3. A, however, personally guaranteed that C's share of profit after charging interest on Capital @ 5% p.a. would not be less than Rs. 40,000 in any year. The Capital contributions were: A Rs. 3, 00,000; B Rs. 2, 00,000 and C Rs. 1, 50,000. The profit for the year ended on 31st March, 2016 amounted to Rs. 1, 60,000. Show the Profit & Loss Appropriation Account.

**9.** Pappu and Munna are partners in a firm sharing profits in the ratio of 3:2. The partnership deed provided that Pappu was to be paid salary of Rs. 2,500 per month and Munna was to get a commission of Rs. 10,000 per year. Interest on capital was to be allowed @5% per annum and interest on drawings was to be charged @ 6% per annum. Interest on Pappu's drawings Rs. 1,250 and on Munna's drawings Rs. 425. Capital of the partners were Rs. 2,00,000 and Rs. 1,50,000 respectively, and were fixed The firm earned a profit of Rs. 90,475 for the year ended 31.03.2014. Prepare Profit and Loss Appropriation Account of the firm.

**10.** P and Q are partners with capitals of Rs. 6,00,000 and Rs. 4,00,000 respectively. The profit and Loss Account of the firm showed a net Profit of Rs. 4, 26,800 for the year. Prepare Profit and Loss Appropriation account after taking the following into consideration:-

(i) Interest on P's Loan of Rs. 2,00,000 to the firm (ii) Interest on 'capital to be allowed @ 6% p.a. (iii) Interest on Drawings @ 8% p.a. Drawings were; P Rs. 80,000 and Q Rs. 50,000. (iv) Q is to be allowed a commission on sales @ 3%. Sales for the year was Rs. 10,00,000 (v) 10% of the divisible profits is to be kept in a Reserve Account.

12. What is subscription? How is it calculated?

13. Show the treatment of the following items by a not-for-profit organisation:(i)Annual subscription(ii)Specific donation(iii)Sale of fixed assets(iv)Sale of old periodicals(v)Sale of sports materials(vi)Life membership fee

14. From the following particulars taken from the cash book of a health club, prepare a receipts and payments account.

Particulars ₹ Opening balance:Cash in Hand 5,000 Cash at Bank 25,000 Subscriptions 1,65,000 Donations 35,000 Investment Purchased 80,000 Rent Paid 20,000 General Expenses 21,500 Postage and Stationery 2,000 Courier Charges1,000 Sundry Expenses 2,500 Closing Cash in Hand 12,000

**15.** Prepare the income and expenditure account for the year ended on March **31**, **2015**, after considering the following:

(i)It was decided to treat fifty per cent of the amount received on account of legacies and donations as income.(ii)Liabilities to be provided for are: Rent ₹ 800; salaries ₹ 1,200; advertisement ₹ 200.(iii)₹ 2,000 due for interest on investment was not actually received.

## DAV MODEL SCHOOL KSTP ,ASANSOL PRACTICE WORKSHEET -2 (SESSION : 2024 – 2025) CLASS XII SUBJECT: ACCOUNTACY Name: \_\_\_\_\_\_ Roll No: \_\_\_\_\_ Section: \_\_\_\_\_

#### (Multiple Choice Questions)

1) Manager's Commission will be recorded In.

a) Profit & Loss Account b) In Profit & Loss Appropriation Account

c) In Revaluation Account d) In Realisation Account

2) In Case of fluctuating Capitals, Interest on Capital will be recorded .

a) On the Credit Side of Current Accounts b) On the Debit Side of Current Accounts

c) On the Credit Side of Capital Accounts d) On the Debit Side of Profit & Loss Accounts

3) In a partnership, what is the consequence of partners having unlimited liability?

a) Partners can lose personal Assets to cover business debts .

b) Partners can lose the amount invested in business .

c) Partners are protected from business liabilities .

d) Partners are exempt from paying taxes .

4) In a Partnership, Good will is :

a) Recorded on the balance sheet as intangible asset

b) Distributed among partners equally

c) Always amortized over a fixed period

d) Excluded from financial Statements

5) Interest on capital paid to the partners if provided for in the partnership deed but only out of :

a) Profits b) Reserves c) Accumulated profits d) Goodwill

**6)** When a partner leaves a partnership and the remaining partners agree to share profits and losses unequally, what type of change occur?

a) Dissolution b) Reconstitution c) Admission d) None of the above

Assertion:

**7)** (A):A partnership firm can have a maximum of 50 partners Reason(R) : Maximum limit of partners is prescribed in Indian Partnership Act, 1932.

a) Both the Assertion and reasoning are true and the reasoning is the correct explanation of assertion.

b) Both the assertion and reasoning are true, but the reasoning is not the correct explanation of the assertion.

c) The assertion is true, but the reasoning is false

d) The assertion is false, but the reasoning is true

8) Match the following items :
<u>Column IColumn II</u>
i. Partnership deed
ii. Maximum number of partner
iii. Interest on partner's loan
iv. Balance sheet

A. FiftyB. 6% p.a.C. A statementD. Written agreement

9) Amit and Sumit were partners in a firm with capitals of Rs.3,00,000 and Rs.2,00,000 respectively. The normal rate of return was 20% and the capitalised value of average profits was Rs.8,50,000.
i) The Goodwill of the firm by capitalisation of average profits method will be :
a) Rs.10,00,000 b) Rs1,50,000 c) Rs.3,50,000 d) Rs.5,00,000.

**10**<u>Assertion</u> (A): Goodwill is an intangible asset that represents the reputation and brand value of a partnership. Reasoning(R): Goodwill is always recorded at its historical cost on the balance sheet. a) Both the assertion and reasoning are true, and the reasoning is the correct explanation of the assertion b) Both the assertion and reasoning are true, but the reasoning is not the correct explanation of the assertion of the assertion of the assertion is true, but the reasoning is false d) The assertion is false, but the reasoning is true.

**11)** Assertion(A): Rent payable to a partner is transferred to the credit of Partner's Capital Account and not to Rent Payable Account. Reasoning(R): Rent payable to a partner for letting the firm use his personal property for business is a transaction that is not related to him being a partner. Therefore, it is credited to Rent Payable Account. a) Both the assertion and reasoning are true, and the reasoning is the correct explanation of the assertion b) Both the assertion and reasoning are true, but the reasoning is not the correct explanation of the assertion c) The assertion is true, but the reasoning is false d) The assertion is false, but the reasoning is true.

**12)** A,B and C are partners sharing profits in the ratio 3:2:1. A withdraws Rs. 5000, B withdraws Rs. 30000 and C withdraws Rs. 2000 at different intervals during the year. If the total interest on drawings is Rs. 400, .

How much interest on drawings will B have to pay if interest is charged at 10% per annum? a) Rs. 120 b) Rs. 80 c) Rs. 40 d) Rs. 60

**13)** C and D are partners in a firm C withdrew Rs. 15,001 per quarter in the beginning of each quarter and interest on drawings was calculated at Rs.14,501 at the end of the year. Calculate the rate of interest on drawing.

**14)** A,B and C were partners sharing profits and losses in the ratio 5:3:2. B was guaranteed profit of Rs. 20,00,000. The firm earned a profit of Rs. 35,00,000 for the year ended 31st March 2023. Prepare the Profit and Loss Appropriation Account for the year ended 31st March 2023.

**15)** A firm's average profits are Rs. 70,000. It includes an abnormal profit of Rs. 5000, Capital invested in the business is Rs. 5,50,000 and the normal rate of return is 10%. Calculate goodwill at four times the super profit.

**16)**Satnam and Qureshi after doing their MBA decided to start a partnership firm to manufacture ISI marked electronic goods for economically weaker section of the society. Satnam also expressed his willingness to admit Juliee as a partner without capital who is specially abled but a very creative and intelligent friend of him. Qureshi agreed to this. They formed a partnership on 1st April 2012 on the following terms. (i) Satnam will contribute Rs. 4,00,000 and Qureshi will contribute 2,00,000 as capitals. (ii) Satnam, Qureshi and Juliee will share profits in the ratio of 2:2:1. (iii) Interest on capital will be allowed @6%pa. Due to shortage of capital Satnam contributed 50,000on 30<sup>th</sup>September, 2012 and Quresh and Qureshi contributed 20,000 on 1st January, 2013 as additional capital. The profit of the firm for the year ended 31st March,2013 was Rs.3,37,800. Identify any two values which the firm wants to communicate to the society. Prepare Profit and Loss Appropriation Account for the year ending 31st March 2013.(Page :-3)

**17)** A and B are partners sharing profits and losses in the ratio of 2:1 with capitals of Rs. 10,00,000 and Rs. 5,00,000 respectively on 1st April, 2023. Each partner is entitled to 8% p.a. interest on his capital B is entitled to a salary of Rs.10,000 p.m. together with a commission of 10% of Net Profit after charging his commission. Net profit for the year ended 31st March, 2024 amounted to Rs. 6,60,000. Prepare profit and loss appropriation a/c.

**18)** Give two circumstances under which the fixed capitals of partners may change.

**19)** If a fixed amount is withdrawn on the first day of every quarter, for what period the interest on the total amount withdrawn will be calculated?

**20)** Discuss the main provisions of the Indian Partnership Act 1932 that are relevant to partnership accounts if there is no partnership deed.

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## DAV MODEL SCHOOL KSTP ,ASANSOL

PRACTICE WORKSHEET - 1 (SESSION 2024-2025)

CLASS – XII

SUBJECT – ENTREPRENEURSHIP

Name of the Student:\_

\_\_\_\_\_Roll No:\_\_\_\_\_Section:\_\_\_

#### (Multiple Choice Questions)

1. What is the primary characteristic of an entrepreneur?

a) Risk aversion b) Innovation c) Avoidance of challenges d) Preference for stability

2.Which of the following is not a characteristic of a successful entrepreneur?a) Persistence b) Resistance to change c) Visionary d) Initiative

3. What does SWOT analysis stand for?

a) Strengths, Weaknesses, Opportunities, Threats b) Strategic Ways of Organizational Tactics

c) Sales, Workflow, Operations, Time d) Solutions, Workflows, Objectives, Tasks

4. What is the main purpose of a business plan?

a) To secure fundingb) To outline the entrepreneur's goals and strategiesc) To provide a roadmap for the business d) All of the above.

5. Which type of entrepreneurship involves starting a new venture within an existing organization?

a) Social entrepreneurship b) Entrepreneurship

c) Corporate entrepreneurship d) Sustainable entrepreneurship.

6.Which of the following is not a characteristic of successful entrepreneurs? a) Adaptability b) Fear of failure c) Networking skills d) Vision

7. What term refers to the process of identifying and exploiting market opportunities by creating new products or services?

a) Entrepreneurship b) Market penetration c) Entrepreneurship d) Market development

8. What role does networking play in entrepreneurship?

- a) It is irrelevant for entrepreneurial success.
- b) It helps in building relationships, accessing resources, and finding opportunities.
- c) It leads to increased competition.
- d) It hinders innovation.
- 9. Which section of a business plan typically includes an analysis of the company's competitors and market environment?

a) Operations plan b) Financial projections c) Executive summary d) Industry analysis

- 10. What is the primary purpose of conducting market research for an entrepreneurial venture?
  - a) To validate the entrepreneur's idea b) To identify potential competitors
  - c) To understand customer needs and preferences d) To secure funding from investors Section
Q6. Define entrepreneurship and explain its importance in the economy.

Q7.Discuss the role of creativity and innovation in entrepreneurship.Explain the difference between a business idea and a business opportunity.

Q8.Describe the components of a business plan.

Q9. What are the benefits of conducting a SWOT analysis for a new venture?

#### Case Study : Read the following case study and answer the questions :

ABC Consulting is a startup firm providing digital marketing services to small businesses. The company is facing stiff competition from well-established firms in the industry. The management is seeking ways to differentiate itself and attract more clients.

Q10.Propose three strategies that ABC Consulting could implement to differentiate itself from competitors.

Q11.Discuss the advantages and disadvantages of each strategy proposed. Based on the company's resources and market conditions, which strategy would you recommend and why?

12. Explain how the entrepreneurial mindset differs from the employee mindset.

13. Describe three methods entrepreneurs can use to generate business ideas.

14. Discuss the importance of market research for entrepreneurs and provide examples of how it can benefit a startup.

15. Outline the steps involved in developing a business plan.

16. How can entrepreneurs effectively manage the risks associated with starting a new venture?

17. Discuss the impact of technological advancements on entrepreneurship, providing examples of how technology has enabled new business opportunities & Entrepreneurship is often associated with innovation.

18. Explain why innovation is crucial ?

# DAV MODEL SCHOOL KSTP ,ASANSOL PRACTICE WORKSHEET- 2 (SESSION : 2024 – 2025) CLASS XII SUBJECT: ENTREPRENEURSHIP

	SUBJECT: ENTREPRENEURSHIP		
Name:	RollNo:	Section:	_
(Multiple choice Question)			

<ol> <li>What is the primary function of er</li> </ol>	ntrepreneurs?
a)Maximizing profits b)	Minimizing costs
c)Following established norms d)F	Risk-taking and innovation
2) Which characteristic is essential for	or entrepreneurial success?
a) Fear of failure b) Res	sistance to change
c) Persistence and resilience d) Ave	pidance of risks
3) What role does innovation play in	entrepreneurship?
a) Replicating existing ideas	b) Avoiding change
<ul><li>c) Introducing new ideas and solut</li></ul>	ions d) Following established norms
	market research in entrepreneurship?
<ul> <li>a) To identify potential competitor</li> </ul>	s b) To understand customer needs and preferences
c) To avoid risks	d) None of the above
5) Which section of a business plan outlines	
	Executive summary
	Operations plan
<ul><li>6) What distinguishes entrepreneurship</li><li>a) Focus on risk aversion</li></ul>	o from other forms of business:
b) Preference for stability	
c) Creation of value through innovat	ion and opportunity exploitation
d) Strict adherence to established p	
7) What role does creativity play in entrepr	
a) Following established norms and p	procedures b) Replicating existing business models
c) Avoiding innovation and change	d) Generating new ideas and solutions
8) Which characteristic is most essenti	al for an entrepreneur?
a) Perseverance b) Risk ave	rsion
c)Resistance to change d)Conformity	
9) Which section of a business plan our market?	tlines the company's marketing strategies and target
a) Financial projections b) Execut	tive summary
c) Marketing plan d) Opera	itions plan
10) What is the primary purpose of conduct	
a) Identifying the company's strengt	
b)Evaluating potential threats from compet	
c) Assessing external opportunities i	n the market
d) All of the above.	
Page :- 1	

11) Define entrepreneurship and explain its significance in today's economy.

12) Discuss the importance of innovation and creativity in the entrepreneurial process.

13) Explain the distinction between a business idea and a business opportunity, providing examples for each.

14) Define entrepreneurship and explain its importance in economic development.

\_\_\_\_\_ Page :- 2

15) Discuss the characteristics of successful entrepreneurs and their significance

16) Explain the concept of opportunity recognition and its role in entrepreneurship.

17) Describe the functions of entrepreneurs in starting and managing a business.

\_\_\_\_\_ Page :- 3

#### 18) Case Study Questions

Read the following case study and answer the questions that follow : Case Study: ABC Electronics is a startup company specializing in eco-friendly gadgets. The company's founder is facing challenges in securing funding for product development and marketing .ABC Electronics is passionate about creating innovative gadgets that are environmentally friendly. However, the founder, Sarah, has limited personal savings and is struggling to attract investors or secure loans from banks due to the risky nature of the business. Questions: Suggest three potential sources of funding that ABC Electronics could explore. Discuss the advantages and disadvantages of each funding option .Based on the company's needs and risk appetite, which funding option would you recommend and why?

19) Outline the key elements of a business plan and their significance.

## DAV MODEL SCHOOL KSTP ,ASANSOL PRACTICE WORKSHEET -1 (SESSION : 2024 – 2025) CLASS XII SUBJECT: BUSINESS STUDIES

Name: \_\_\_\_

\_\_\_\_\_Roll No:\_\_\_\_\_ Section: \_\_\_\_\_

1. Management is \_\_\_\_\_

\_\_\_through others.

**2**. Management activities are performed in all types of organizations in all departments and at all levels. Which management character is highlighted here?

**3.**Arun, a finance, manager applies his knowledge in a personalized manner while making managerial decisions. Which nature of management is highlighted here.

**4.** Sumitelectricals Limited, Panipat has production, purchase, marketing, finance and human resource departments, all departments are working together to achieve organizational goals. Highlight the concept of management mentioned here.

**5.** Mark the levels of Management in the diagram given below and give two designations each of the respective levels.



6. Briefly explain the functions of management.

**7.** Explain any three features of coordination.

#### 8. Match the following:

<u>Column – IColumn –II</u>

(a) Managing Director (i) Midde Level Management

- (b.) Sales Manager (ii) Lower-Level Management
- (c) C.E.O (iii) Top-level Management
- (d.) Plant Superintendent
- (e.) Supervisor
- (f) Foreman (vi) Top Level Management

- (iv) Middle Level Management
- (v) Lower-Level Management

9. Explain 'contingent as a feature of principles of management.

**10.** Management of any organization strives to attain different objectives Enumerate any two such objectives?

11. 'Management is considered to be a three-tier machinery. Why?

**12.** Name the process by which a manager synchronizes the activities of different departments & explain.

\_\_\_\_\_

13. How is entry to a profession restricted?

14 . State any two points which prove that management is multi-dimensional? **15.** Identify the nature of Management when it is said to be a systematized body of knowledge that explains certain general truths.

## DAV MODEL SCHOOL KSTP ,ASANSOL PRACTICE WORKSHEET -2 (SESSION : 2024 – 2025)

CLASS XII	SUBJECT: BUSINESS STUDIES			
Name:	Roll No	: Se	ction:	
Q1. "The Activities involved in managi	ng an enterprise are comn	non to all organiz	ations whether	
economic, social or political." Which c	haracteristic of manageme	ent is highlighted	by this statement?	
<b>Q2.</b> Policy formation is the function of	which level of manageme			
Q3. In order to be successful an organ	ization must change its go	als according to t	he need of the	
environment. Which characteristic of i		-		

**Q4**. To meet the objectives of the firm the management of Navya Ltd. Offer employment to physically challenged persons. Identify the organizational objective it is trying to achieve.

\_\_\_\_\_Page:-

1**Q5.** Your father has retired as a purchase manager of a company. At what level of management was he working?

**Q6.**Chintu is working as Operations Manager" in Tifco Ltd. Name the managerial level at which he is working. State any four functions he will perform as, Operations Manager" in this company.

**Q7.** Raymonds Ltd.'s target is to produce 10000 shirts per month at a cost of Rs. 100/- per shirt. The Production Manager achieved this target at a cost of Rs. 90/- per shirt. Do you think the Production Manager" is effective? Give one reason in support of your answer.

**Q8.** Management is based on personalized application of knowledge i.e it varies from person to person". Which nature of management is signified by it?

**Q9.** The authority responsibility relationship that binds individuals as superiors and subordinates in an organization, gives rise to what?

**Q10.** If an organization derives more benefits even after using less resources it's a result of what?

**Q11.** A company"s target production is 5000 units in a year, to achieve this target the manager has to operate in double shifts due to power failure. The manager is able to meet the target but at a higher production cost. Is the manager efficient or effective? Explain.

Q12. State any two points which prove that management is multi-dimensional?

**Q13.**An achievement of which organizational objectives results in "an increase in sales volume, increase in number of employees, no of products, and increase in capital investment."

**Q14.** In the absence of management, the productive resources will remain resources and shall never become production." Explain the importance of management in the light of the above statement with the help of any four points.

**Q15.** State any two social objectives of management.

**Q16.** State any two personal objectives of management.

**Q17**. Mr.Harshad Mehta has been working as Production Manager in Bhushan Steel Limited 'since 2000 At which level of management is he working. State any three functions performed by him.

# DAV MODEL SCHOOL KSTP , ASANSOL

PRACTICE WORKSHEET - 1 (SESSION 2024-2025)

CLASS – XII	SUBJECT	
Name of the Student:	Roll No:	_Section:
(Multiple Choice Questions)		
<b>1.</b> The difference between gross and net is:		
(a) Depreciation (b) NFIA (c) Net Indirect Tax (d) Subsidies		
2. If NFIA is negative,		
(a) Factor income to abroad will be less than Factor income from abroad	oad	
(b) Factor income to abroad will be equal to Factor income from abroad	bad	
(c) Factor income to abroad will be more than Factor income from ab	oroad	
(d) None of the above		
<b>3.</b> If NFIA is positive,		
(a) NDPFC = NNPFC (b) NDPFC > NNPFC (c) NDPFC < NNPFC	(d) None of the	above
<b>4.</b> Which of the following is not a component of factor income?		
(a) Compensation of employees (b) Operating surplus		
(c) Sales of goods and services (d) Mixed income of self employed	l	
5. The output at current year price is called:		
(a) Nominal GDP (b) Real GDP (c) National GDP (d) None of the a	lbove	
<ul><li>6. When was the 1st census data compiled during the British Raj (a)1882 (b)1881 (c)1981 (d)1985</li></ul>		
<ul><li>7. When were the Railways introduced in India?</li><li>(a)1830 (b)1860 (c)1853 (d)1900</li></ul>		
Q.8) Difference between Stock and flow		

Q.9) Explain circular flow of income in two (2) sector economy with Diagram?

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Q.10) What is double counting? How can it be avoided?

Q.11) How are these treated in estimation of national income of India. Give reasons.
(a) School fees paid by students (b) Medical expenses of employees (c) Interest on public debt
(d) Expenses on electricity by a factory (e) Purchase by foreign tourists .

Q.12) Calculate (a) Gross domestic product at factor cost and (b) NNP factor cost of the following ?

(i) Net indirect tax 130 (ii) Government final consumption expenditure 100 (iii) Profit 90 (iv) Net domestic capital formation 120 (v) Change in stocks (–) 10 (vi) Private final consumption expenditure 500 (vii) Net imports 20 (viii) Net current transfers to abroad 10 (ix) Net factor income to abroad 30 (x) Gross domestic capital formation 160.

12) Eror	n the following data calcula	to GND	at FC by (a)	Income metho	d (b) Expendi	ura math

Q.13) From the following data calculate GNP at FC by (a) Income method (b) Expenditure method ?
(i) Net domestic capital formation 500 (ii) Compensation of employees 1850 (iii) Consumption of fixed capital 100 (iv) Govt. final consumption expenditure 1100 (v) PVT. final consumption expenditure 2600 (vi) Rent 200 (viii) Interest 500 (ix) Net Exports (-) 100 (x) Profits 1100 (xi) NFIA (-) 50 (xi) Net Indirect taxes 250.

14) What was the life expectancy during British India and what is it today?

15) Explain in brief the state of industrial sector during the colonial period?

16) Which industries were adversely affected during ?

17) What is export surplus?

18) When did the commercialisation of agriculture begin in India?

19) What are the changes railways brought in India?

20) Write a note on the Zamindari system?

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# DAV MODEL SCHOOL KSTP ,ASANSOL

PRACTICE WORKSHEET - 2 (SESSION 2024-2025)

CLASS – XII	SUBJECT	- ECONOMICS
Name of the Student:	_Roll No:	_Section:

**1.** Which of the following is correct?

- (a) GDPMP = Value of Output- Intermediate Consumption (b) GDPFC = Sales+ change in stock
- (c) NDPFC = Value of Output- Intermediate Consumption (d) NDPMP = Sales + change in stock
- 2. Which of the following is a part of gross domestic capital formation?
- (a) Gross fixed capital formation (b) Inventory investment (c) Both (a) and (b) (d) None of the above
- **3.** If population increase, then:
- (a) GDP rise (b) Welfare rise (c) Welfare decrease (d) Both (a) and (c)
- 4. The difference between domestic income and National income is\_\_\_\_\_\_.
- (a) NFIA (b) Net Indirect Tax (c) Depreciation (d) All of the above
- 5. Which of the following is a component of profits?
- (a) Corporate tax (b) Dividends (c) Retained earnings (d) All of the above

6. The opening of the \_\_\_\_\_\_ facilitated British trade with India after the year \_\_\_\_\_\_.a) Suez Canal ; 1879(b) Suez Canal ; 1869

c) Indian Economy ; 1991 (d) None of the above

7. \_\_\_\_\_ Industry suffered the most due to de-industrializationa) Cotton (b) Coal

c) Handicraft (d) Iron Ore

Q.8 Identify the following as normal resident of India

a) Indian official working in the Indian embassy in USA.

b) A Japanese tourist who stays in India for 2 month.

c) Indians going to Pakistan for watching the cricket match

d) Indians working in the Uno official located in America for less than 1 year

e) Indian Muslims going for the HAJ pilgrimage

Q.9 There are only two producing sectors A and B in an economy. Calculate:(a) Gross value added at market (b) National income.

(i) Net factor income from Abroad. 20 (ii) Sales by A 1000 (iii) Sales by B 2000 (iv) Change in stock of B (–) 200 (v) Closing stock of A 50 (vi) Opening stock of A 100 (vii) Consumption of fixed capital by A and B 180 (viii) Indirect taxes paid by A and B 120 (ix) Purchase of raw material by A 500 (x) Purchase of raw material by B 600 (xi) Exports by B 70.



Q.10) From the following data, calculate (a) Gross Domestic Product at Factor Cost (GDPFC) and(b) Factor income to abroad.

(i) Gross Domestic Capital formation 600 (ii) Interest 200 (iii) Gross national product at market price 2800 (iv) Rent 300 (v) Compensation of employees 1600 (vi) Profit 400 (vii) Dividends 150 (viii) Factor income from abroad. 50 (ix) Change in stock 100 (x) Net indirect taxes 240 (xi) Net fixed capital formation 400 (xii) Net Export (–) 30.

**11)** Name a few individuals who tried to estimate colonial India's per capita income.

\_\_\_\_ Page :- 2

12) How did the export surplus lead to an economic drain of wealth during colonial period?

13) Explain in brief the state of industrial sector during the colonial period?

14) Differentiate between final goods and intermediate goods ?

\_Page :- 3

15)	All producer	goods are	not capital	goods. Defei	nd or Refute ?
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16)	What was the two-fold motive behind the systematic de-industrialization affected by the British
	in pre independence India?

**17)** Throw light on the state of India's foreign trade during the colonial period . How did it lead "to drain of Indian Wealth ?"

**18)** Were there any positive contributions made by the British in India? Explain.

**19)** Explain the components of net factor income earned from abroad.

20) Machine purchased is always a final goods. Do you agree , Give reasons?

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	D.A.V. MODEL SCHOOL, KSTP, ASANSOL HOLIDAY HOMEWORK (WORKSHEET 1) SESSION: 2024-2025				
SUBJECT: COMPUTER SCIENCE CLASS: Y					
Name	ie	Roll No:	Section:		
	WORKSHEET – F	JNCTIONS			
1	keyword is used to define a function	1			
2					
	A Function can call another function or itsel	? (True/False	2)		
3	What is Local Variable and Global Variables	' Illustrate wi	th example		
4	What is the output of the add() function call				
т	def add(a, b): return a+5, b+5				
	result = add(3, 2) print(result)				
5	Function can alter only Mutable data types?	(True/False)			

	Write statement to call the f	unction.		
	def Add():			
	X = 10 + 20			
	print(X)			
	#statement to call t	the above function		
7	Write statement to call the f	unction		
/	def Add(X,Y=5):			
	Z = X + Y			
	print(Z)	ha alaana fuu atian		
	#statement to call th	ne above function		
8	Write statement to call the f	unction.		
	def Add(X,Y):			
	Z = X + Y			
	return Z			
	#statement to call the	e above function		
	print("Total =",C)			
9	Which Line Number Code wil	l never execute?		
	def Check(num):	#Line 1		
	if num%2==0:	#Line 2		
		#Line 3		
	print("Hello")			
	return True	#Line 4		
	print("Bye")	#Line 5		
	else:	#Line 6		
	return False	#Line 7		
	1 C = C b c c b (20)			
	C = Check(20)			
	print(C)			

10	What will be the output of following code?
10	def Cube(n): print(n*n*n)
	Cube(n) # n is 10 here print(Cube(n))
11	What are the different types of actual arguments in function? Give example of any one of them.
12	What will be the output of following code: def Alter(x, y = 10, z=20): sum=x+y+z print(sum) Alter(10,20,30) Alter(20,30) Alter(100)
3	

13	Call the given function using KEY	WORD ARGUMENT with values 100 and 200
	def Swap(num1,num2): num1,num2=num2,num1 print(num1,num2)	
	Swap(,)	
14	Which line number of and (c) will	not work and why?
14	Which line number of code(s) will	not work and wny?
	def Interest(P,R,T=7): I = (P*R*T)/100 print(I)	
	Interest(20000,.08,15)	#Line 1
	Interest(T=10,20000,.075) Interest(50000,.07)	#Line 2 #Line 3
	Interest(P=10000,R=.06,Time=8)	#Line 4
	Interest(80000,T=10)	#Line 5
15	What will be the output of followi	ng code?
	def Calculate(A,B,C): return A*2, B*2, C*2	
	val = Calculate(10,12,14)	
	print(type(val))	
	print(val)	

16	What will be the output of following code?
	def check(): num=50 print(num)
	num=100 print(num) check() print(num)
	Output
17	What will be the output of following code?
	def check():
	print(num)

	What will be the output of following code?
18	<pre>def display(s): l = len(s) m="" for i in range(0,l): if s[i].isupper(): m=m+s[i].lower() elif s[i].isalpha(): m=m+s[i].upper() elif s[i].isdigit(): m=m+"\$" else: m=m+"\$" else: m=m+"*" print(m) display("davkstp@cbse.com")</pre>
19	What will be the output of following code?
	def Alter(M,N=50): M = M + N N = M - N print(M,"@",N) return M A=200 B=100 A = Alter(A,B) print(A,"#",B) B = Alter(B) print(A,'@',B)

20	What will be the output of following code?
	<pre>def Total(Number=10): Sum=0 for C in range(1,Number+1): if C%2==0: continue Sum+=C return Sum print(Total(4)) print(Total(7)) print(Total())</pre>
21	What will be the output of following code?         def drawline(char='\$',time=5):         print(char*time)         drawline()         drawline('@',10)         drawline(65)         drawline(chr(65))
22	What will be the output of following code? def Fun1(num1): num1*=2 num1 = Fun2(num1) return num1 def Fun2(num1): num1 = num1 // 2 return num1 n = 120 n = Fun1(n) print(n)

# DAV MODEL SCHOOL, KSTP, ASANSOL BBSR-21 **HOLYDAY HOMEWORK(WORKSHEET 1)** SESSION;(2024-25) **CLASS-XII SUB: PHYSICAL EDUCATION**

#### **SECTION-A (01 MARKS)**

- 1. The benefits of Intramural competition is/are
  - a) Psychological satisfaction
    - b) Opportunity for participation
  - c) Development of moral values
- d) All of the above
- 2. Which of these in not an objective of organizing sports day?
  - a) All round development of students. b)Development of leadership quality
  - c) Development of social value.
- d)Advertisement of product

d)

3. Match list –I with List-II and select the correct answer from the code given below.

LIST- I	LIST -II
1. Intramural tournament	i. Regulates the rules of game
2. Extramural tournament	ii. Within the walls of institution
3. Secretary of tournament	iii. Does all planning of tournament
4. Technical Committee	iv. Outside the institution

CODES					
	i	ii	iii	iv	
a	4	1	3	2	
b	3	2	4	1	
с	2	3	1	4	
d	1	4	2	3	

4. League- cum –knock-out is a part of which tournament?

a) Knock-out

b) Round Robin

c) transverse plane

d) Combination

5. Which of the following factors may enhance the chances of osteoporosis among Female athletes?

<ul><li>a) Insufficient calcium in the diet</li><li>c) Amenorrhea</li></ul>	<ul><li>b) Eating disorder</li><li>d) All of the above</li></ul>
6. Lordosis can be corrected by?	

a) Back word bending exercise c) Side ward bending exercise

7. In bow legs deformity there is.

a) Wide gap between knees

c) Knees collide with each other

b) Forward bending exercise d) All of the above

b) Plane foot sole

d) bending to side ward.

Page 1

- 8. Postural deformity of kyphosis is commonly known as: b) Hunch back
  - c) knock- knee d) Side ward bending
- 9. Given below are two statements, one of which is labeled as Assertion (A) Reason (R) Assertion (A): In India, women's participation in sports in quite less Reason(R): Indian society still does not promote or accept women's participation in sports. Which one of the following statement is correct?
  - a) Both A and R are true and R is the correct explanation of A.
  - b) Both A and R are true, but R is not the correct explanation of A.
  - c) A is true, but R is false

a) Hollow back

d) A is false, but R is true.

## **SECTION-B**

10. Discuss any four objectives of Intramural. Ans.

11. Elaborate any two functions of sports management in brief. Ans. \_\_\_\_\_

12. Suggest four corrective measures for kyphosis.

Ans. \_\_\_\_\_

13. Suggest any four correct measures for flat foot. Ans. \_\_\_\_\_

**SECTION – C** 14. Differentiate between menarche and menstrual dysfunction. Ans. \_\_\_\_\_

15. What does league tournament mean? Draw a single league fixture for 07 teams in using cyclic method.
Ans.

16. What is seeding? Draw a knock out fixture for 9 teams in which two teams are seeded?

Ans.\_\_\_

Ans.

## **SECTION-D**

17. DAV MOEL SCHOOL, KSTP, ASANSOL could shoulder the responsibility in organizing DAV Zonal Basketball tournament, in which 9 teams participated.

OLBYE		
02 BYE		
03	-	
04		
05 BYE		WINNER
06 BYE		
07BTE		
0 8 BYE	- All the second in	and the
0 9 BYE		
	New Jonator 17	
1	and the second	

On the basis of above given picture answer the following questions?

- a) The first bye goes to team no\_\_\_\_\_
- b) The formula for calculating the total no of byes is\_\_\_\_\_
- c) The 3<sup>rd</sup> byes goes to the team no\_\_\_\_\_
- d) The formula for calculating the no of round is\_\_\_\_
- e) The for formula for calculating the no of teams in upper half is\_\_\_\_\_

## SECTION -E

18. What does knock-out tournament mean? Draw a knock-out fixture for 11 teams with all computations.

Ans:

19 . Define combination tournament. draw a fixture of 16 teams using knock-out cum league method. Ans. \_\_\_\_\_

\_\_\_\_\_

20. Discuss in detail about common post	ural deformities	by making the flo	w chart. Explain a	any three
corrective measures for Lordosis	,			

Ans. \_\_\_\_\_
