'আদিবাসী-অন্ত্যজ শ্রেণির কথাকার মহাশ্বেতা দেবী' - বিষয়ের ওপর

বাংলা বিভাগ আয়োজিত সার্টিফিকেট কোর্সের চূড়ান্ত পরীক্ষার প্রশ্নপত্র

২০২২-২০২৩ শিক্ষাবর্ষ

সময় - ২ ঘন্টা

পূর্ণমান - ৫০

নাম - ....

রেজিস্ট্রেশন নাম্বার - ....

প্রতি প্রশ্নের মান ২ (দুই)। সঠিক উত্তরটির পাশে টিক (   ) চিহ্ন দাও।

১) লেখিকা মহাশ্বেতা দেবীর ভাই ছিলেন কোন বিখ্যাত চলচ্চিত্র পরিচালক -

ক) মৃণাল সেন   খ) ঋত্বিক ঘটক   গ) তপন সিংহ   ঘ) অজয় কর

২) মহাশ্বেতা দেবী আজীবন কাজ করেছেন -

ক) প্রান্তিক ও নিপীড়িত মানুষের জীবন নিয়ে   খ) শহরের মানুষের জীবন নিয়ে   গ) মধ্যবিত্ত মানুষের জীবনকে কেন্দ্র করে ঘ) সব শ্রেণীর

মানুষের জীবনকে কেন্দ্র করে।

৩) মহাশ্বেতা দেবীর বাবা ছিলেন -

ক) তদানীন্তন ম্যাজিস্ট্রেট   খ) স্বদেশী আন্দোলনের নেতা গ) কল্লোল আন্দোলনের একজন কবি এবং উপন্যাসিক   ঘ) সরকারি

চাকুরীজীবী।

৪) মহাশ্বেতা দেবীর স্বামীর নাম -

ক) নারায়ণ গঙ্গোপাধ্যায়   খ) বিজন ভট্টাচার্য   গ) বুদ্ধদেব বসু   ঘ) মানিক বন্দ্যোপাধ্যায়

৫) মহাশ্বেতা দেবী পরলোক গমন করেন -

ক) ২৩ জুলাই ২০১৬   খ) ১৯ ফেব্রুয়ারি ২০২১   গ) ১৮ই মাঘ ১২৩২   ঘ) পঁচিশে ডিসেম্বর ২০১৫।

৬) হাজার চুরাশির মা উপন্যাসটির প্রকাশকাল -

ক) ১৯৭৮খ্রি.   খ) ১৯৯৭খ্রি.   গ) ১৯৭৪খ্রি.   ঘ) ১৯৮০খ্রি.

৭) 'ছোট্ট মুন্ডা এবং তার তীর' - এটি একটি -

ক) উপন্যাস   খ) নাটক   গ) ছোটগল্প সংকলন   ঘ) প্রবন্ধ সংকলন

৮) মহাশ্বেতা দেবীর জীবন এবং কাজের উপর ভিত্তি করে নির্মিত বাংলা চলচ্চিত্রটি হল -

ক) মহানন্দা   খ) মাটি মাই   গ) গুলবাহার   ঘ) বায়েন

৯) মহাশ্বেতা দেবী জ্ঞানপীঠ পুরস্কার পেয়েছিলেন -

ক) ১৯৯৭ সালে   খ) ২০০৩ সালে   গ) ১৯৯৬ সালে   ঘ) ২০১১ সালে

১০) যুবধাশ ছদ্মনামে লিখতেন -

ক) মহাশ্বেতা দেবী   খ) মণীষ ঘটক   গ) ঋত্বিক সেন   ঘ) বিজন ভট্টাচার্য

১১) মহাশ্বেতা দেবীর প্রথম উপন্যাস -

ক) হাজার চুরাশির মা   খ) অরণ্যের অধিকার   গ) ঝাঁসির রানী   ঘ) তিতুমীর

১২) মহাশ্বেতা দেবীর ছোটগল্পগুলির ইংরেজি অনুবাদ করেন -

ক) অরবিন্দ মুখোপাধ্যায়   খ) গায়ত্রী চক্রবর্তী   গ) প্রদীপ সান্যাল   ঘ) জয়ন্ত চক্রবর্তী

১৩) হাজার চুরাশির মা উপন্যাসটি রচনার প্রেক্ষাপট হল -

ক) নকশাল আন্দোলন   খ) সিন্ধুর আন্দোলন গ) কমিউনিস্ট বিরোধী আন্দোলন   ঘ) রাষ্ট্রবিরোধী আন্দোলন

১৪) সুজাতা চরিত্রটি রয়েছে মহাশ্বেতা দেবীর -

ক) ঝাঁসির রানী উপন্যাসে   খ) হাজার চুরাশির মা উপন্যাসে   গ) ভাত ছোটগল্পে   ঘ) স্তন্যদায়িনী ছোট গল্পে।

১৫) মহাশ্বেতা দেবীর সম্পাদিত পত্রিকাটির নাম -

ক) বর্তিকা   খ) আনন্দবাজার   গ) সংঘর্ষ ঘ) গাঙ্গুর

১৬) মহাশ্বেতা দেবীর 'অরণ্যের অধিকার' উপন্যাসটির প্রকাশকাল -

ক) ১৯৭৩ খ্রি.   খ) ১৯৭৭ খ্রি.   গ) ১৯৮০ খ্রি.   ঘ) ১৯৮৩ খ্রি.

১৭) মহাশ্বেতা দেবীর 'শালগিরার ডাকে' উপন্যাসটির প্রকাশকাল -

ক) ১৯৯০খ্রি.   খ) ১৯৮১খ্রি.   গ) ১৯৮৩ খ্রি.   ঘ) ২০০৭খ্রি.

১৮) মহাশ্বেতা দেবীর 'শিবাজীর ঘোড়া' কি জাতীয় রচনা -

ক) উপন্যাস   খ) ছোটগল্প   গ) কল্পনাধর্মী গল্প   ঘ) প্রবন্ধ।

১৯) মহাশ্বেতা দেবীর ছদ্মনাম -

ক) আশাপূর্ণা দেবী   খ) সুমিত্রা দেবী   গ) প্রেমতারা দেবী   ঘ) সুনিতা দেবী

২০) মহাশ্বেতা শব্দের অর্থ -

ক) দেবী দুর্গা   খ) দেবী লক্ষী   গ) দেবী সরস্বতী   ঘ) দেবী মনসা।

২১) মহাশ্বেতা দেবীর 'অমৃত সঞ্চয়' উপন্যাসটি শুরু হয়েছে -

ক) সিপাহী বিদ্রোহের প্রেক্ষাপটে খ) নীল বিদ্রোহের প্রেক্ষাপটে গ) হোমরুল আন্দোলনের প্রেক্ষাপটে ঘ) নকশাল আন্দোলনের প্রেক্ষাপটে

২২) 'অরণ্যের অধিকার' উপন্যাসে রয়েছে -

ক) বিরসা মুন্ডার জীবন কাহিনী   খ) সিধু কানুর জীবন কাহিনী   গ) হুল আন্দোলনের প্রেক্ষাপট ঘ) সিপাহী বিদ্রোহের প্রেক্ষাপট

২৩) মহাশ্বেতা দেবীর একটি ইতিহাস আশ্রিত রোমান্সধর্মী উপন্যাস হলো -

ক) অরণ্যের অধিকার   খ) নটী   গ) অমৃত সঞ্চয়   ঘ) আঁধার মানিক

২৪) মহাশ্বেতা দেবী সাহিত্য অকাদেমি পুরস্কার পান যে উপন্যাসটির জন্য, তা হল -

ক) আঁধারে মানিক   খ) অরণ্যের অধিকার   গ) তিতুমীর   ঘ) হুলমাহা

২৫) উচ্ছব চরিত্রটি রয়েছে মহাশ্বেতা দেবীর যে গল্পে -

ক) ভাত   খ) দ্রৌপদী   গ) নুন   ঘ) স্তন্যদায়িনী

উত্তর সংকেত -

১) খ) ঋত্বিক ঘটক   ২) ক) প্রান্তিক ও নিপীড়িত মানুষের জীবন নিয়ে।   ৩) গ) কল্লোল আন্দোলনের একজন কবি এবং উপন্যাসিক।   ৪) খ) বিজন ভট্টাচার্য   ৫) ক) ২৩ জুলাই ২০১৬   ৬) গ) ১৯৭৪খ্রি.   ৭) গ) ছোট গল্প সংকলন   ৮) ক) মহানন্দা   ৯) গ) ১৯৯৬ সালে   ১০) খ) মণীষ ঘটক   ১১) গ) ঝাঁসির রানী   ১২) খ) গায়ত্রী চক্রবর্তী।   ১৩) ক) নকশাল আন্দোলন   ১৪) খ) হাজার চুরাশির মা উপন্যাসে   ১৫) ক) বর্তিকা   ১৬) খ) ১৯৭৭খ্রি.   ১৭) গ) ১৯৮৩খ্রি.   ১৮) গ) কল্পনাধর্মী গল্প   ১৯) খ) সুমিত্রা দেবী   ২০) গ) দেবী সরস্বতী   ২১) ক) সিপাহী বিদ্রোহের প্রেক্ষাপটে   ২২) ক) বিরসা মুন্ডার জীবন কাহিনী   ২৩) ক) নটী   ২৪) খ) অরণ্যের অধিকার   ২৫) ক) ভাত

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সময় – ২ ঘন্টা

পূর্ণমান – ৫০

নাম - .... Sonalika Kumar ....

রেজিস্ট্রেশন নাম্বার - .... 000416 of ২০২২-২৩ ....

প্রতি প্রশ্নের মান ২ (দুই)। সঠিক উত্তরটির পাশে টিক ( ) চিহ্ন দাও।

১) লেখিকা মহাশ্বেতা দেবীর ভাই ছিলেন কোন বিখ্যাত চলচ্চিত্র পরিচালক -

ক) মৃণাল সেন   খ) ঋত্বিক ঘটক গ) তপন সিংহ   ঘ) অজয় কর

২) মহাশ্বেতা দেবী আজীবন কাজ করেছেন -

ক) প্রান্তিক ও নিপীড়িত মানুষের জীবন নিয়ে   খ) শহরের মানুষের জীবন নিয়ে   গ) মধ্যবিত্ত মানুষের জীবনকে কেন্দ্র করে ঘ) সব শ্রেণীর মানুষের জীবনকে কেন্দ্র করে।

৩) মহাশ্বেতা দেবীর বাবা ছিলেন -

ক) তদানীন্তন ম্যাজিস্ট্রেট   খ) স্বদেশী আন্দোলনের নেতা   গ) কল্লোল আন্দোলনের একজন কবি এবং ঔপন্যাসিক

ঘ) সরকারি চাকুরীজীবী।

৪) মহাশ্বেতা দেবীর স্বামীর নাম -

ক) নারায়ণ গঙ্গোপাধ্যায়   খ) বিজন ভট্টাচার্য   গ) বুদ্ধদেব বসু   ঘ) মানিক বন্দ্যোপাধ্যায়

৫) মহাশ্বেতা দেবী পরলোক গমন করেন -

ক) ২৩ জুলাই ২০১৬   খ) ১৯ ফেব্রুয়ারি ২০২১   গ) ১৮ই মাঘ ১২৩২   ঘ) পঁচিশে ডিসেম্বর ২০১৫।

৬) হাজার চুরাশির মা উপন্যাসটির প্রকাশকাল -

ক) ১৯৭৮খ্রি.   খ) ১৯৯৭খ্রি.   গ) ১৯৭৪খ্রি.   ঘ) ১৯৮০খ্রি.

৭) 'ছোট্ট মুন্ডা এবং তার তীর' - এটি একটি -

ক) উপন্যাস   খ) নাটক   গ) ছোটগল্প সংকলন   ঘ) প্রবন্ধ সংকলন

৮) মহাশ্বেতা দেবীর জীবন এবং কাজের উপর ভিত্তি করে নির্মিত বাংলা চলচ্চিত্রটি হল -

ক) মহানন্দা   খ) মাটি মাই   গ) গুলবাহার   ঘ) বায়েন

৯) মহাশ্বেতা দেবী জ্ঞানপীঠ পুরস্কার পেয়েছিলেন -

ক) ১৯৯৭ সালে   খ) ২০০৩ সালে   গ) ১৯৯৬ সালে   ঘ) ২০১১ সালে

১০) যুবনাশ্ব ছদ্মনামে লিখতেন -

ক) মহাশ্বেতা দেবী   খ) মণীষ ঘটক গ) ঋত্বিক সেন ঘ) বিজন ভট্টাচার্য

১১) মহাশ্বেতা দেবীর প্রথম উপন্যাস -

ক) হাজার চুরাশির মা   খ) অরণ্যের অধিকার   গ) ঝাঁসির রানী   ঘ) তিতুমীর

১২) মহাশ্বেতা দেবীর ছোটগল্পগুলির ইংরেজি অনুবাদ করেন -

ক) অরবিন্দ মুখোপাধ্যায় খ) গায়ত্রী চক্রবর্তী   গ) প্রদীপ সান্যাল   ঘ) জয়ন্ত চক্রবর্তী

১৩) হাজার চুরাশির মা উপন্যাসটি রচনার প্রেক্ষাপট হল -

ক) নকশাল আন্দোলন   খ) সিন্ধুর আন্দোলন   গ) কমিউনিস্ট বিরোধী আন্দোলন   ঘ) রাষ্ট্রবিরোধী আন্দোলন

১৪) সুজাতা চরিত্রটি রয়েছে মহাশ্বেতা দেবীর -

ক) ঝাঁসির রানী উপন্যাসে   খ) হাজার চুরাশির মা উপন্যাসে   গ) ভাত ছোটগল্পে   ঘ) স্তন্যদায়িনী ছোট গল্পে।

১৫) মহাশ্বেতা দেবীর সম্পাদিত পত্রিকাটির নাম -

ক) বর্তিকা   খ) আনন্দবাজার   গ) সংঘর্ষ   ঘ) গাঙুর

১৬) মহাশ্বেতা দেবীর 'অরণ্যের অধিকার' উপন্যাসটির প্রকাশকাল -

ক) ১৯৭৩ খ্রি.   খ) ১৯৭৭ খ্রি.   গ) ১৯৮০ খ্রি.   ঘ) ১৯৮৩ খ্রি.

১৭) মহাশ্বেতা দেবীর 'শালগিরার ডাকে' উপন্যাসটির প্রকাশকাল -

ক) ১৯৯০খ্রি.   খ) ১৯৮১খ্রি.   গ) ১৯৮৩ খ্রি.   ঘ) ২০০৭খ্রি.

১৮) মহাশ্বেতা দেবীর 'শিবাজীর ঘোড়া' কি জাতীয় রচনা -

ক) উপন্যাস   খ) ছোটগল্প   গ) কল্পনাধর্মী গল্প   ঘ) প্রবন্ধ।

১৯) মহাশ্বেতা দেবীর ছদ্মনাম -

ক) আশাপূর্ণা দেবী   খ) সুমিত্রা দেবী   গ) প্রেমতারা দেবী   ঘ) সুনিতা দেবী

২০) মহাশ্বেতা শব্দের অর্থ -

ক) দেবী দুর্গা   খ) দেবী লক্ষ্মী   গ) দেবী সরস্বতী   ঘ) দেবী মনসা।

২১) মহাশ্বেতা দেবীর 'অমৃত সঞ্চয়' উপন্যাসটি শুরু হয়েছে -

ক) সিপাহী বিদ্রোহের প্রেক্ষাপটে খ) নীল বিদ্রোহের প্রেক্ষাপটে গ) হোমরুল আন্দোলনের প্রেক্ষাপটে ঘ) নকশাল আন্দোলনের প্রেক্ষাপটে

২২) 'অরণ্যের অধিকার' উপন্যাসে রয়েছে -

ক) বিরসা মুন্ডার জীবন কাহিনী   খ) সিধু কানুর জীবন কাহিনী   গ) হুল আন্দোলনের প্রেক্ষাপট ঘ) সিপাহী বিদ্রোহের প্রেক্ষাপট

২৩) মহাশ্বেতা দেবীর একটি ইতিহাস আশ্রিত রোমান্সধর্মী উপন্যাস হলো -

ক) অরণ্যের অধিকার   খ) নটী   গ) অমৃত সঞ্চয়   ঘ) আঁধার মানিক

২৪) মহাশ্বেতা দেবী সাহিত্য অকাদেমি পুরস্কার পান যে উপন্যাসটির জন্য, তা হল -

ক) আঁধারে মানিক   খ) অরন্যের অধিকার   গ) তিতুমীর   ঘ) হুলমাহা

২৫) উচ্ছব চরিত্রটি রয়েছে মহাশ্বেতা দেবীর যে গল্পে -

ক) ভাত   খ) দ্রৌপদী   গ) সুর্ন   ঘ) স্তন্যদায়িনী

'আদিবাসী-অন্ত্যজ শ্রেণির কথাকার মহাশ্বেতা দেবী' - বিষয়ের ওপর

বাংলা বিভাগ আয়োজিত সার্টিফিকেট কোর্সের চূড়ান্ত পরীক্ষার প্রশ্নপত্র

২০২২-২০২৩ শিক্ষাবর্ষ

(৩০/৫০)

পূর্ণমান - ৫০   সময় - ২ ঘন্টা

নাম - .... Taramoni Kumar ....

রেজিস্ট্রেশন নাম্বার - .... 000446 of ২০২২- ২৩ ....

প্রতি প্রশ্নের মান ২ (দুই)। সঠিক উত্তরটির পাশে টিক ( ) চিহ্ন দাও।

১) লেখিকা মহাশ্বেতা দেবীর ভাই ছিলেন কোন বিখ্যাত চলচ্চিত্র পরিচালক -

ক) মৃণাল সেন   খ) ঋত্বিক ঘটক   গ) তপন সিংহ   ঘ) অজয় কর

২) মহাশ্বেতা দেবী আজীবন কাজ করেছেন -

ক) প্রান্তিক ও নিপীড়িত মানুষের জীবন নিয়ে   খ) শহরের মানুষের জীবন নিয়ে   গ) মধ্যবিত্ত মানুষের জীবনকে কেন্দ্র করে ঘ) সব শ্রেণীর মানুষের জীবনকে কেন্দ্র করে।

৩) মহাশ্বেতা দেবীর বাবা ছিলেন -

ক) তদানীন্তন ম্যাজিস্ট্রেট   খ) স্বদেশী আন্দোলনের নেতা   গ) কল্লোল আন্দোলনের একজন কবি এবং উপন্যাসিক

ঘ) সরকারি চাকুরীজীবী।

৪) মহাশ্বেতা দেবীর স্বামীর নাম -

ক) নারায়ণ গঙ্গোপাধ্যায়   খ) বিজন ভট্টাচার্য   গ) বুদ্ধদেব বসু   ঘ) মানিক বন্দ্যোপাধ্যায়

৫) মহাশ্বেতা দেবী পরলোক গমন করেন -

ক) ২৩ জুলাই ২০১৬   খ) ১৯ ফেব্রুয়ারি ২০২১   গ) ১৮ই মাঘ ১২৩২   ঘ) পঁচিশে ডিসেম্বর ২০১৫।

৬) হাজার চুরাশির মা উপন্যাসটির প্রকাশকাল -

ক) ১৯৭৮খ্রি.   খ) ১৯৯৭খ্রি.   গ) ১৯৭৪খ্রি.   ঘ) ১৯৮০খ্রি.

৭) 'ছোট্ট মুন্ডা এবং তার তীর' - এটি একটি -

ক) উপন্যাস   খ) নাটক   গ) ছোটগল্প সংকলন   ঘ) প্রবন্ধ সংকলন

৮) মহাশ্বেতা দেবীর জীবন এবং কাজের উপর ভিত্তি করে নির্মিত বাংলা চলচ্চিত্রটি হল -

ক) মহানন্দা   খ) মাটি মাই   গ) গুলবাহার   ঘ) বায়েন

৯) মহাশ্বেতা দেবী জ্ঞানপীঠ পুরস্কার পেয়েছিলেন -

ক) ১৯৯৭ সালে   খ) ২০০৩ সালে   গ) ১৯৯৬ সালে   ঘ) ২০১১ সালে

১০) যুবব্যাশ ছদ্মনামে লিখতেন -

ক) মহাশ্বেতা দেবী   খ) ঋত্বিক ঘটক   গ) ঋত্বিক সেন   ঘ) বিজন ভট্টাচার্য

১১) মহাশ্বেতা দেবীর প্রথম উপন্যাস -

ক) হাজার চুরাশির মা   খ) অরণ্যের অধিকার   গ) ঝাঁসির রানী   ঘ) তিতুমীর

১২) মহাশ্বেতা দেবীর ছোটগল্পগুলির ইংরেজি অনুবাদ করেন -

ক) অরবিন্দ মুখোপাধ্যায়   খ) গায়ত্রী চক্রবর্তী   গ) প্রদীপ সান্যাল   ঘ) জয়ন্ত চক্রবর্তী

১৩) হাজার চুরাশির মা উপন্যাসটি রচনার প্রেক্ষাপট হল -

ক) নকশাল আন্দোলন   খ) সিন্ধুর আন্দোলন   গ) কমিউনিস্ট বিরোধী আন্দোলন   ঘ) রাষ্ট্রবিরোধী আন্দোলন

১৪) সুজাতা চরিত্রটি রয়েছে মহাশ্বেতা দেবীর -

ক) ঝাঁসির রানী উপন্যাসে   খ) হাজার চুরাশির মা উপন্যাসে   গ) ভাত ছোটগল্পে   ঘ) স্তন্যদায়িনী ছোট গল্পে।

১৫) মহাশ্বেতা দেবীর সম্পাদিত পত্রিকাটির নাম -

ক) বর্তিকা   খ) আনন্দবাজার   গ) সংঘর্ষ   ঘ) গাঙুর

১৬) মহাশ্বেতা দেবীর 'অরণ্যের অধিকার' উপন্যাসটির প্রকাশকাল -

ক) ১৯৭৩ খ্রি.   খ) ১৯৭৭ খ্রি.   গ) ১৯৮০ খ্রি.   ঘ) ১৯৮৩ খ্রি.

১৭) মহাশ্বেতা দেবীর 'শালগিরার ডাকে' উপন্যাসটির প্রকাশকাল -

ক) ১৯৯০খ্রি.   খ) ১৯৮১খ্রি.   গ) ১৯৮৩ খ্রি.   ঘ) ২০০৭খ্রি.

১৮) মহাশ্বেতা দেবীর 'শিবাজীর ঘোড়া' কি জাতীয় রচনা -

ক) উপন্যাস   খ) ছোটগল্প   গ) কল্পনাধর্মী গল্প   ঘ) প্রবন্ধ।

১৯) মহাশ্বেতা দেবীর ছদ্মনাম -

ক) আশাপূর্ণা দেবী   খ) সুমিত্রা দেবী   গ) প্রেমতারা দেবী   ঘ) সুনিতা দেবী

২০) মহাশ্বেতা শব্দের অর্থ -

ক) দেবী দুর্গা   খ) দেবী লক্ষ্মী   গ) দেবী সরস্বতী   ঘ) দেবী মনসা।

২১) মহাশ্বেতা দেবীর 'অমৃত সঞ্চয়' উপন্যাসটি শুরু হয়েছে -

ক) সিপাহী বিদ্রোহের প্রেক্ষাপটে খ) নীল বিদ্রোহের প্রেক্ষাপটে গ) হোমরুল আন্দোলনের প্রেক্ষাপটে ঘ) নকশাল আন্দোলনের প্রেক্ষাপটে

২২) 'অরণ্যের অধিকার' উপন্যাসে রয়েছে -

ক) বিরসা মুন্ডার জীবন কাহিনী   খ) সিধু কানুর জীবন কাহিনী   গ) হুল আন্দোলনের প্রেক্ষাপট ঘ) সিপাহী বিদ্রোহের প্রেক্ষাপট

২৩) মহাশ্বেতা দেবীর একটি ইতিহাস আশ্রিত রোমান্সধর্মী উপন্যাস হলো -

ক) অরণ্যের অধিকার   খ) নটী   গ) অমৃত সঞ্চয়   ঘ) আঁধার মানিক

২৪) মহাশ্বেতা দেবী সাহিত্য অকাদেমি পুরস্কার পান যে উপন্যাসটির জন্য, তা হল -

ক) আঁধারে মানিক   খ) অরণ্যের অধিকার   গ) তিতুমীর   ঘ) হুলমাহা

২৫) উচ্ছব চরিত্রটি রয়েছে মহাশ্বেতা দেবীর যে গল্পে -

ক) ভাত   খ) দ্রৌপদী   গ) নুন   ঘ) স্তন্যদায়িনী

Achhruram Memorial College
Jhalda, Purulia
Examination for completion of certificate course on Geography
Course title: **DISASTER MANAGEMENT AND MITIGATION**
Organized by
Department of Geography

Full marks – 50   **Time – 1 hour**

1. What is the first step in the disaster management cycle?
A) Response
B) Recovery
C) Mitigation
D) Preparedness

2. Which type of disaster is caused by natural forces?
A) Technological disaster
B) Environmental disaster
C) Natural disaster
D) Sociological disaster

3. What is the aim of disaster mitigation?
A) To respond to disasters
B) To recover from disasters
C) To reduce the impact of disasters
D) To prepare for disasters

4. Which organization is responsible for coordinating disaster response in the United States?
A) FEMA
B) Red Cross
C) NOAA
D) CDC

5. What is the term for the process of returning to normal after a disaster?
A) Recovery
B) Response
C) Mitigation
D) Preparedness

6. Which type of disaster is caused by human error?
A) Natural disaster
B) Technological disaster
C) Environmental disaster
D) Sociological disaster

7. What is the term for the ability of a community to withstand a disaster?
A) Resilience
B) Vulnerability
C) Risk

D) Hazard

8. Which type of disaster is caused by environmental degradation?
A) Natural disaster
B) Technological disaster
C) Environmental disaster
D) Sociological disaster

9. What is the term for the process of preparing for disasters?
A) Mitigation
B) Preparedness
C) Response
D) Recovery

10. Which organization is responsible for providing humanitarian aid during disasters?
A) Red Cross
B) FEMA
C) NOAA
D) CDC

11. What is the term for the severity of a disaster's impact?
A) Risk
B) Hazard
C) Vulnerability
D) Impact

12. Which type of disaster is caused by conflict?
A) Natural disaster
B) Technological disaster
C) Environmental disaster
D) Sociological disaster

13. What is the term for the process of responding to disasters?
A) Mitigation
B) Preparedness
C) Response
D) Recovery

14. Which type of disaster is caused by weather events?
A) Natural disaster
B) Technological disaster
C) Environmental disaster
D) Sociological disaster

15. What is the term for the ability of a community to adapt to disasters?
A) Resilience
B) Vulnerability
C) Risk
D) Adaptability

16. Which organization is responsible for providing scientific information during disasters?
A) NOAA
B) FEMA
C) Red Cross
D) CDC

17. What is the term for the process of reducing disaster risk?
A) Mitigation
B) Preparedness
C) Response
D) Recovery

18. Which type of disaster is caused by industrial accidents?
A) Natural disaster
B) Technological disaster
C) Environmental disaster
D) Sociological disaster

19. What is the term for the ability of a community to cope with disasters?
A) Resilience
B) Vulnerability
C) Risk
D) Coping capacity

20. Which type of disaster is caused by pandemics?
A) Natural disaster
B) Technological disaster
C) Environmental disaster
D) Sociological disaster

21. What is the term for the process of rebuilding after a disaster?
A) Recovery
B) Response
C) Mitigation
D) Preparedness

22. Which organization is responsible for coordinating international disaster response?
A) UNOCHA
B) FEMA
C) Red Cross
D) NOAA

23. What is the term for the severity of a disaster's impact on a community?
A) Risk
B) Hazard
C) Vulnerability
D) Impact

24. Which type of disaster is caused by earthquakes?
A) Natural disaster
B) Technological disaster

C) Environmental disaster
D) Sociological disaster
25. In which city the National Institute of Disaster Management is situated?
A) New Delhi
B) Hyderabad
C) Manipur
D) Kolkata

ACHHRURAM MEMORIAL COLLEGE

Jhalda, Purulia, West Bengal

Examination of Certificate Course in Library Science

Course Title: Digital Library　　　　　　　**Full Marks: 50**　　　　　　**Time: 1 Hour**

NAME:_____

Reg. No._____ **of** _____　　**Roll**_____**No.**_____

All the questions are mandatory. Students are directed to choose the best alternative from the four answers provided.

2×25= 50

1. What is a Digital Library primarily concerned with?
   A) Physical book preservation
   B) Digital resource management
   C) Archive management
   D) Library legislation

2. Which of the following is NOT a component of the history and evolution of Digital Libraries?
   A) Technological advancements
   B) Major digital library initiatives in India
   C) Theories of information organization
   D) Global digital library projects

3. What distinguishes "Born Digital" resources from "Digitized" resources in Digital Libraries?
   A) Their physical condition
   B) Their copyright status
   C) Their original format
   D) Their storage location

4. Which of the following is a general issue associated with the digitization process?
   A) Intellectual property rights
   B) Metadata standards
   C) Digital preservation techniques
   D) Bibliographic control methods

5. What does Service Oriented Architecture (SOA) emphasize in Digital Libraries?
   A) Centralized management
   B) Modular and interoperable services
   C) Localized access
   D) Hardware requirements

6. Which identifier is commonly used in Digital Libraries to uniquely identify digital objects?
   A) ISBN
   B) ISSN
   C) DOI (Digital Object Identifier)
   D) LCCN (Library of Congress Control Number)

7. What role does Metadata play in Digital Resource Management?
    A) Legal compliance
    B) Access control
    C) Resource discovery and description
    D) Network security

8. What is the primary purpose of Metadata Harvesting in Digital Libraries?
    A) Data mining
    B) Indexing and abstracting
    C) Resource replication
    D) Aggregating metadata records

9. Which legal issue is commonly associated with Digital Libraries?
    A) Library fines
    B) Intellectual Property Rights (IPR)
    C) Access privileges
    D) Library funding

10. What does Copyright law primarily address in the context of Digital Libraries?
    A) Preservation techniques
    B) Use and distribution of digital content
    C) Library cataloging standards
    D) Staff training programs

11. Which architecture type allows for multiple independent digital libraries to be connected under a common search interface while maintaining local control?
    A) Distributed Architecture
    B) Federated Architecture
    C) Service-Oriented Architecture
    D) Component-Based Architecture

12. Which architecture emphasizes the creation of services that can be accessed and composed to create larger applications or processes?
    A) Distributed Architecture
    B) Federated Architecture
    C) Service-Oriented Architecture
    D) Component-Based Architecture

13. In which architecture type are library services encapsulated as reusable components that can be assembled and recomposed into different applications?
    A) Distributed Architecture
    B) Federated Architecture
    C) Service-Oriented Architecture
    D) Component-Based Architecture

14. Which identifier system is specifically designed for managing digital objects and ensuring their persistence and accessibility?
    A) ISBN
    B) DOI (Digital Object Identifier)
    C) ISSN

D) LCCN (Library of Congress Control Number)

15. What is the primary purpose of using Handles in digital libraries?
    A) To manage access control permissions
    B) To uniquely identify digital objects and provide persistent links
    C) To compress digital files for storage efficiency
    D) To enhance search capabilities within digital collections

16. Which digital library software is known for its extensibility, flexibility, and support for a wide range of digital content types?
    A) Greenstone Digital Library Software (GSDL)
    B) DSpace
    C) EPrints
    D) Koha

17. Which of the following is an advantage of using Open Source digital library software?
    A) Higher initial purchase cost
    B) Limited customization options
    C) Dependence on proprietary vendors
    D) Community-driven development and support

18. Which Open Source digital library software is specifically designed for building and distributing digital library collections?
    A) Greenstone Digital Library Software (GSDL)
    B) DSpace
    C) EPrints
    D) Koha

19. What role do Digital Object Identifiers (DOIs) play in scholarly publishing and digital libraries?
    A) They provide unique identification for physical library items.
    B) They ensure access to subscription-based content.
    C) They uniquely identify and persistently link to digital content.
    D) They control access permissions for digital resources.

20. Which architecture type is characterized by a network of interconnected digital libraries that share resources and services through agreements and protocols?
     A) Distributed Architecture
     B) Federated Architecture
     C) Service-Oriented Architecture
     D) Component-Based Architecture

21. What is the primary purpose of metadata in digital resource management?
    A) To store large amounts of data
    B) To provide context and description for resources
    C) To encrypt sensitive information
    D) To improve network security

22. Which of the following is NOT a typical element of metadata?
    A) Author
    B) File size

C) Encryption key
D) Date created

23. What does metadata harvesting involve in digital libraries and repositories?
   A) Gathering information about the hardware used
   B) Collecting metadata from various sources and aggregating it
   C) Deleting outdated digital resources
   D) Encrypting sensitive data

24. Why is metadata important in digital resource management?
   A) It ensures the physical security of servers
   B) It provides a standardized way to describe and locate resources
   C) It speeds up internet connections
   D) It prevents unauthorized access to digital resources

25. Which protocol is commonly used for metadata harvesting in digital libraries?
   A) HTTP
   B) XML
   C) OAI-PMH
   D) TCP/IP

Name_____

Reg. No_____ of_____ Roll No_____

1. Which branch of mathematics is primarily used to model and analyze biological systems?

    A) Calculus

    B) Algebra

    C) Biostatistics

    D) Geometry

2. What is the main purpose of differential equations in medical sciences?

    A) To calculate drug dosages

    B) To model the spread of diseases

    C) To determine the genetic code

    D) To predict patient outcomes

3. In medical imaging, what mathematical method is commonly used to reconstruct images from raw data?

A) Fourier Transform

B) Polynomial Regression

C) Matrix Multiplication

D) Euclidean Geometry

4. Which of the following is a statistical method used to compare the means of two or more groups?

A) Linear Regression

B) Chi Square Test

C) ANOVA (Analysis of Variance)

D) Principal Component Analysis

5. In epidemiology, what does the term 'R0' represent?

A) The average number of secondary infections produced by one infected individual

B) The rate of recovery from an infection

C) The reproduction rate of cells

D) The rate of mutation of a virus

6. Which mathematical concept is essential for understanding rates of change in biological processes?

A) Algebra

B) Calculus

C) Geometry

D) Trigonometry

7. What is the significance of the p value in statistical testing?

   A) It measures the strength of the correlation between two variables

   B) It indicates the probability of obtaining the observed results by chance

   C) It determines the size of the sample needed for a study

   D) It calculates the mean of a dataset

8. In medical research, what does a Kaplan Meier curve illustrate?

   A) The distribution of a variable

   B) The survival probability over time

   C) The correlation between two variables

   D) The rate of disease incidence

9. What is the primary use of logistic regression in medical statistics?

   A) Predicting continuous outcomes

   B) Classifying binary outcomes

   C) Reducing dimensionality

   D) Clustering similar data points

10. Which mathematical tool is used to describe the shape and spread of data distributions?

   A) Mean

   B) Standard Deviation

   C) Variance

   D) All of the above

11. In the context of genetics, what does a Punnett square help to predict?

   A) The distribution of traits in a population

   B) The possible genotypes of offspring

   C) The mutation rate of a gene

   D) The lifespan of an organism

12. What is the role of Markov models in medical decision making?

   A) To simulate the progression of diseases

   B) To optimize treatment plans

   C) To predict patient adherence to medication

   D) To calculate life expectancy

13. Which type of graph is commonly used to represent the distribution of a single variable?

   A) Bar Graph

B) Pie Chart

C) Histogram

D) Scatter Plot

14. What does the term 'sensitivity' refer to in diagnostic testing?

   A) The ability of a test to correctly identify true positives

   B) The ability of a test to correctly identify true negatives

   C) The precision of a test

   D) The reproducibility of a test

15. In pharmacokinetics, what does the area under the curve (AUC) represent?

   A) The maximum concentration of a drug in the blood

   B) The total exposure of the body to the drug over time

   C) The rate at which the drug is metabolized

   D) The time it takes for the drug to reach peak concentration

16. Which of the following is a common method for handling missing data in medical datasets?

   A) Deleting all rows with missing values

   B) Filling in missing values with the mean

   C) Using advanced imputation techniques

D) All of the above

17. In medical research, what does the term 'double blind' study refer to?

   A) A study where both the researchers and participants know the treatment allocation

   B) A study where neither the researchers nor the participants know the treatment allocation

   C) A study with two phases of blinding

   D) A study with double the number of participants

18. What is the main use of the chi square test in medical statistics?

   A) To compare means of two groups

   B) To test the independence of two categorical variables

   C) To measure the strength of a correlation

   D) To analyze time to event data

19. Which type of plot is used to visualize the relationship between two continuous variables?

   A) Bar Plot

   B) Pie Chart

   C) Scatter Plot

   D) Histogram

20. In survival analysis, what does 'censoring' refer to?

   A) Removing outliers from the data

   B) Accounting for incomplete data

   C) Adjusting for confounding variables

   D) Correcting for sampling bias

21. What is the purpose of normalization in data preprocessing?

   A) To reduce the dimensionality of the data

   B) To scale the data to a standard range

   C) To fill in missing values

   D) To identify outliers

22. What does the term 'confidence interval' signify in medical research?

   A) The range within which a true population parameter is expected to fall

   B) The probability of rejecting the null hypothesis

   C) The mean of the sample data

   D) The variance of the sample data

23. Which of the following is an example of a parametric test?

   A) Chi Square Test

B) Wilcoxon Rank Sum Test

C) T Test

D) Kruskal Wallis Test

24. In the context of neural networks, what does 'backpropagation' refer to?

   A) The process of adjusting weights to minimize the error

   B) The initialization of weights in the network

   C) The activation function applied to the neurons

   D) The process of splitting data into training and testing sets

25. What is the primary goal of cluster analysis in medical research?

   A) To predict future events based on past data

   B) To group similar objects into clusters

   C) To classify data points into predefined categories

   D) To determine the cause of a disease

ACHHRURAM MEMORIAL COLLEGE
Jhalda, Purulia, West Bengal
Examination of Certificate Course in Mathematics
Course Title : Essential Mathematics for Engineering and Industry
Full Marks : 50   Time 1 Hour

Name_____

Reg. No_____ of_____ Roll No_____

1. What is the primary purpose of linear algebra in engineering?

   A) To solve linear equations

   B) To model and solve problems involving vectors and matrices

   C) To perform statistical analysis

   D) To calculate integrals

2. Which of the following is used to determine the stability of a control system?

   A) Laplace Transform

   B) Fourier Series

   C) Differential Equations

   D) Eigenvalues

3. What does the term 'Fourier Transform' refer to?

A) A method for solving differential equations

B) A technique to transform a time domain signal into its frequency domain representation

C) A way to approximate integrals

D) A process for optimizing functions

4. Which mathematical concept is essential for understanding stress and strain in materials?

A) Trigonometry

B) Linear Algebra

C) Calculus

D) Probability

5. What is the primary application of differential equations in engineering?

A) To model the behavior of dynamic systems

B) To calculate the probability of events

C) To optimize processes

D) To design algorithms

6. Which of the following methods is used for numerical integration?

A) Newton Raphson Method

B) Simpson's Rule

C) Gauss Seidel Method

D) Euler's Method

7. What is the significance of the determinant of a matrix?

   A) It determines the invertibility of the matrix

   B) It represents the sum of the elements

   C) It is used to perform matrix multiplication

   D) It calculates the eigenvalues

8. Which of the following is a method to solve linear programming problems?

   A) Gradient Descent

   B) Simplex Method

   C) Runge Kutta Method

   D) Least Squares Method

9. In engineering, what is the purpose of using a Laplace transform?

   A) To solve partial differential equations

   B) To analyze electrical circuits

   C) To convert differential equations into algebraic equations

   D) To calculate areas under curves

10. What is the primary use of matrices in engineering?

   A) To solve systems of linear equations

   B) To approximate solutions to non linear equations

   C) To perform statistical analysis

   D) To calculate integrals

11. Which of the following is a key concept in vector calculus used in fluid dynamics?

   A) Dot Product

   B) Gradient

   C) Matrix Multiplication

   D) Determinant

12. What is the purpose of the finite element method in engineering?

   A) To solve complex differential equations

   B) To optimize engineering designs

   C) To perform numerical simulations of physical systems

   D) To analyze statistical data

13. In control theory, what does the term 'transfer function' refer to?

A) The relationship between the input and output of a system

B) The frequency response of a system

C) The stability of a system

D) The eigenvalues of a system

14. Which method is used to find the roots of a polynomial equation?

A) Simpson's Rule

B) Newton Raphson Method

C) Gauss Jordan Elimination

D) Euler's Method

15. What is the purpose of using Bode plots in engineering?

A) To analyze the stability of control systems

B) To visualize the frequency response of a system

C) To solve differential equations

D) To perform matrix operations

16. In probability and statistics, what does the term 'expected value' refer to?

A) The most likely outcome of a random variable

B) The average value of a random variable over numerous trials

C) The probability of a specific outcome

D) The variance of a random variable

17. What is the primary application of partial differential equations (PDEs) in engineering?

   A) To model heat transfer and diffusion processes

   B) To calculate probabilities

   C) To optimize linear programming problems

   D) To perform statistical analysis

18. Which of the following is a common method for solving systems of linear equations?

   A) Runge Kutta Method

   B) Simplex Method

   C) Gauss Seidel Method

   D) Newton Raphson Method

19. In engineering, what is the purpose of using eigenvectors and eigenvalues?

   A) To perform matrix inversion

   B) To analyze the stability and dynamic behavior of systems

   C) To solve non linear equations

   D) To calculate integrals

20. Which mathematical concept is crucial for understanding signal processing in engineering?

A) Differential Equations

B) Fourier Series

C) Matrix Multiplication

D) Probability Distributions

21. What is the significance of the Jacobian matrix in engineering?

A) It represents the rate of change of a function with respect to its variables

B) It is used to perform matrix multiplication

C) It calculates the eigenvalues of a matrix

D) It determines the stability of a system

22. Which of the following is a method for solving boundary value problems?

A) Laplace Transform

B) Finite Element Method

C) Newton Raphson Method

D) Simplex Method

23. In optimization, what does the term 'Lagrange multiplier' refer to?

A) A technique to solve linear equations

B) A method to find the maxima and minima of functions subject to constraints

C) A way to approximate integrals

D) A statistical measure of dispersion

24. What is the primary use of probability distributions in engineering?

   A) To model uncertainty and variability in systems

   B) To solve differential equations

   C) To perform matrix operations

   D) To optimize algorithms

25. Which of the following is a numerical method for solving ordinary differential equations?

   A) Gauss Seidel Method

   B) Euler's Method

   C) Simplex Method

   D) Fourier Transform

ACHHRURAM MEMORIAL COLLEGE

Jhalda, Purulia, West Bengal

Examination of Certificate Course in Philosophy

Course Code: Idea of Secularism and the Importance of National Integration

Organized by

Department of Philosophy

Full Marks: 50

Time: 1 Hour

Name…………………………………………………………………………………

Reg. No………………………………………………………………………………

Roll No……………………………………………………………………………….

Answer all 25 multiple choice question.

1. Secularism primarily aims to:

    A) Promote a single religion

    B) Separate religion from state affairs

    C) Eliminate all religious practices

    D) Support religious leaders in governance

2. Which of the following best describes national integration?

    A) Cultural assimilation

    B) Economic uniformity

    C) Social harmony and unity in diversity

    D) Political centralization

3. The historical evolution of secularism can be traced back to:

    A) The Roman Empire

    B) The French Revolution

    C) Ancient Greece

    D) The Industrial Revolution

4. A pluralistic society is characterized by:

    A) Homogeneity in culture and beliefs

    B) Diversity in culture, beliefs, and practices

    C) Strict adherence to a single ideology

    D) Economic uniformity

5. Secularism vs. religious neutrality: Theoretical perspectives suggest:

    A) Secularism supports one dominant religion

    B) Religious neutrality requires state support for all religions equally

    C) Secularism and religious neutrality are identical

    D) Both promote religious tolerance but in different ways

6. Which country's constitution is known for its secular framework?

    A) Saudi Arabia

    B) Iran

    C) India

    D) Vatican City

7. Freedom of religion in a secular state means:

    A) The state endorses one religion

    B) Individuals are free to practice any religion or none

    C) The state imposes religious laws on everyone

    D) Only secular beliefs are permitted

8. A key challenge of secularism is:

    A) Promoting a single national religion

    B) Balancing religious freedom with state laws

    C) Eradicating all religious practices

    D) Enforcing religious uniformity

9. Which principle is essential for national integration in a diverse society?

    A) Cultural suppression

B) Economic equality

C) Social harmony and respect for diversity

D) Political centralization

10. Secularism helps in managing cultural diversity by:

   A) Suppressing minority cultures

   B) Promoting a uniform culture

   C) Ensuring equal treatment of all cultural and religious groups

   D) Encouraging religious homogeneity

11. The concept of secularism in the United States emphasizes:

   A) State religion

   B) Religious neutrality

   C) Preference for Christianity

   D) Religious suppression

12. Which of the following is an example of a secular state?

   A) Iran

   B) India

   C) Saudi Arabia

   D) Vatican City

13. The term "laïcité" refers to secularism in which country?

   A) United Kingdom

   B) United States

   C) France

   D) Germany

14. Secularism and national identity are linked because:

   A) Secularism eliminates all religious identities

   B) Secularism contributes to a unified national identity in a diverse society

   C) Secularism promotes a single national religion

D) Secularism disregards cultural heritage

15. A case study on secularism and religious minorities would likely explore:

    A) State endorsement of a dominant religion

    B) Challenges faced by religious minorities in a secular state

    C) Economic policies

    D) Military strategies

16. Which of the following principles is integral to secularism?

    A) Religious uniformity

    B) State neutrality in religious matters

    C) State promotion of atheism

    D) Cultural homogeneity

17. National integration in a secular state involves:

    A) Imposing a dominant culture

    B) Promoting unity while respecting diversity

    C) Eliminating cultural differences

    D) Encouraging religious conversion

18. One of the main debates around secularism is:

    A) Whether to support religious uniformity

    B) The extent of state involvement in religious affairs

    C) The need for a state religion

    D) Whether to ban all religious practices

19. Secularism can contribute to social harmony by:

    A) Promoting one religion over others

    B) Ensuring equal rights and freedoms for all religious groups

    C) Suppressing minority religions

    D) Enforcing religious uniformity

20. The importance of national integration in pluralistic societies is to:

   A) Enforce cultural homogeneity

   B) Promote economic policies

   C) Foster unity and stability

   D) Encourage religious conversions

21. Secularism and religious freedom are interconnected because:

   A) Secularism limits religious practices

   B) Secularism ensures the freedom to practice any religion

   C) Secularism enforces atheism

   D) Secularism promotes one religion

22. Comparative analysis of secularism in different cultural contexts helps in:

   A) Understanding the universal application of secular principles

   B) Promoting a single model of secularism

   C) Identifying weaknesses in secular states

   D) Creating religious uniformity

23. In a secular state, the role of the government in religious matters is to:

   A) Support the dominant religion

   B) Suppress all religious practices

   C) Remain neutral and impartial

   D) Enforce religious laws

24. What is the core idea of secularism?

A) Separation of religion and state, with equal respect for all religions

B) Establishment of a single state religion, with tolerance for others

C) Eradication of all religious influences from public life

D) Preference for the majority religion, with limited rights for minorities

25. Secularism promotes national integration by:

A) Imposing a single religion on all citizens

B) Suppressing minority religions and cultures

C) Encouraging equal respect and recognition for all religions and cultures

D) Ignoring religious differences and focusing on economic development

Add on Course Examination

Subject: Thin Film Physics and Devices

Course Coordinator: Dr. Tarun Kumar Barik

Student Name: ....

Registration No.: ....

Roll: .... No.: ....

Full Marks: 50   **Time: 2 Hours**

**Each question carries 2 marks:

1. What is a thin film?

a) A layer of material ranging from a few nanometers to several micrometers in thickness

b) A type of photographic film used in old cameras

c) A sheet of paper

d) A thick layer of metal

2. Which method is commonly used for the deposition of thin films?

a) Sputtering

b) Distillation

c) Fermentation

d) Smelting

3. What is one of the key advantages of thin films in technology?

a) They are always cheaper than bulk materials

b) They allow for the miniaturization of devices

c) They have infinite conductivity

d) They are unaffected by temperature changes

4. What role do thin films play in solar cells?

a) They act as the primary light-absorbing material

b) They are used only for aesthetic purposes

c) They reflect sunlight away from the device

d) They prevent the device from overheating

5. What does the term "nano-scale" refer to in thin film technology?

a) The macro-scale size of the film

b) The thickness of the film, typically less than 100 nanometers

c) The length of the film in meters

d) The temperature at which the film operates

6. Which of the following is a common PVD technique?

a) Sol-gel processing

b) Electroplating

c) Sputtering

d) Photolithography

7. In chemical vapor deposition (CVD), what is the main source of the film material?

a) A solid target material

b) A liquid solution

c) A gaseous precursor

d) An electric field

8. Which parameter is crucial in determining the final thickness of a film in spin coating?

a) Temperature of the substrate

b) Spin speed and duration

c) Chemical composition of the solution

d) Humidity in the environment

9. What is a characteristic feature of the drop-casting method?

a) Use of high temperatures to evaporate material

b) Application of a liquid solution directly onto the substrate surface

c) Formation of films through vacuum processes

d) Utilization of magnetic fields to align particles

10. Which deposition technique involves the evaporation of materials in a vacuum environment?

a) Chemical vapor deposition (CVD)

b) Spin coating

c) Thermal evaporation

d) Drop-casting

11. Which of the following is a common metal used in thin film applications?

a) Silicon

b) Aluminum

c) Gallium

d) Carbon

12. Which material is typically used as an insulator in thin film applications?

a) Copper

b) Silicon dioxide (SiO_2)

c) Germanium

d) Gold

13. Which semiconductor material is widely used in thin-film solar cells?

a) Gallium arsenide (GaAs)

b) Copper

c) Silver

d) Titanium

14. Which type of thin film material is known for its application in transparent conductive films?

a) Tin-doped indium oxide (ITO)

b) Lead sulfide (PbS)

c) Aluminum oxide (Al_2O_3)

d) Nickel

15. Which nanomaterial is often used in thin films for its exceptional strength and electrical properties?

a) Graphene

b) Iron oxide

c) Lead

d) Zinc oxide

16. What is the primary purpose of using X-ray diffraction (XRD) in thin film characterization?

a) To determine the film's electrical conductivity

b) To analyze the film's thermal properties

c) To identify the crystalline structure and phases present in the film

d) To measure the film's thickness

17. Which technique provides detailed images of the surface morphology of thin films?

a) X-ray diffraction (XRD)

b) Scanning electron microscopy (SEM)

c) Transmission electron microscopy (TEM)

d) Optical spectroscopy

18. What does an electrical characterization of thin films typically involve?

a) Measuring the film's optical band gap

b) Assessing the film's refractive index

c) Measuring the film's resistivity or conductivity

d) Determining the film's chemical composition

19. Which technique is used to study the cross-sectional structure of thin films at the nanoscale?

a) Scanning electron microscopy (SEM)

b) Transmission electron microscopy (TEM)

c) X-ray diffraction (XRD)

d) Spectroscopic ellipsometry

20. Which of the following is a key factor in determining the optical properties of thin films?

a) Film thickness and composition

b) Film temperature

c) Film elasticity

d) Film hardness

21. Which type of thin film material is commonly used in the active layer of organic solar cells?

a) Silicon

b) Polymers

c) Gallium arsenide

d) Aluminum

22. Which thin film material is frequently used as a transparent conducting layer in LEDs?

a) Copper

b) Gold

c) Indium tin oxide (ITO)

d) Silver

23. What is the function of thin films in light-emitting diodes (LEDs)?

a) To provide electrical insulation

b) To emit light when an electric current passes through them

c) To conduct heat away from the device

d) To reflect light

24. What role do thin film transistors (TFTs) play in LCD screens?

a) They act as light-emitting sources

b) They provide the backlight for the display

c) They control the orientation of liquid crystals in each pixel

d) They form the outer protective layer

25. Why are thin films used in flexible electronics?

a) They are rigid and durable

b) They are expensive and complex to produce

c) They provide flexibility and adaptability to various shapes

d) They have a high thermal resistance

Achhruram Memorial College

Jhalda, Purulia, West Bengal

Examination for Certificate Course on

<u>Systematic Voters Education in India</u>

(Academic Session – 2022-2023)

Full Marks: 50

Answer the following questions: 2×25 = 50

1. **What is the primary objective of voter education in India?**
   A) To promote political parties
   B) To increase voter turnout and informed voting
   C) To create political leaders
   D) To conduct election surveys

2. **Which organization is primarily responsible for conducting elections in India?**
   A) Election Commission of India
   B) Indian National Congress
   C) Central Bureau of Investigation
   D) National Human Rights Commission

3. **The Systematic Voters' Education and Electoral Participation (SVEEP) program was launched by which organization?**
   A) Ministry of Home Affairs
   B) Election Commission of India
   C) Ministry of Education
   D) National Electoral Authority

4. **Which of the following is NOT a key component of the SVEEP program?**
   A) Voter registration
   B) Voter awareness campaigns
   C) Election result analysis
   D) Voter facilitation

5. **What is the role of a 'Voter Helpline' in the context of SVEEP?**
   A) To conduct political surveys
   B) To assist voters with queries related to elections and voting
   C) To recruit election officials
   D) To organize political rallies

6. **Which of the following groups is a primary target for voter education initiatives?**
   A) Government employees
   B) Corporate leaders
   C) First-time voters
   D) International observers

7. **The ECI's SVEEP initiatives often include which of the following activities?**

A) Organizing debates between candidates

B) Creating voter awareness through multimedia campaigns

C) Conducting exit polls

D) Hosting election day celebrations

8. **What is the minimum age required to vote in Indian elections?**
    A) 16 years

    B) 18 years

    C) 21 years

    D) 25 years

9. **Which document is commonly used as proof of identity for voting in India?**
    A) Passport

    B) PAN Card

    C) Voter ID Card (EPIC)

    D) Driving License

10. **In which year did India first introduce the Electronic Voting Machine (EVM)?**
    A) 1980

    B) 1990

    C) 2000

    D) 2010

11. **Which initiative aims to ensure that every eligible citizen in India is registered to vote?**
    A) Voter Registration Drive

    B) Electoral Roll Revision

    C) Voter Awareness Program

    D) Election Day Campaign

12. **Who can file a complaint regarding electoral malpractices?**
    A) Only political parties

    B) Only election observers

    C) Any citizen

    D) Only government officials

13. **Which of the following is an SVEEP activity specifically aimed at encouraging voters to cast their votes?**
    A) Creating voter-friendly environments

    B) Setting up voter education centers

    C) Organizing mock elections

    D) Hosting public speeches by candidates

14. **Which law governs the conduct of elections in India?**
    A) Representation of the People Act, 1951

    B) Indian Election Act, 1947

    C) Electoral Process Act, 1965

    D) Election Conduct Act, 1950

15. **What is the purpose of 'Voter Awareness Week'?**
    A) To recruit election officers

    B) To celebrate election results

    C) To educate and engage citizens about the importance of voting

    D) To organize political rallies

16. **Which of the following is a key feature of the Electoral Roll?**
    A) It lists eligible voters and their details.
    B) It lists all political parties and their leaders.
    C) It provides a history of past elections.
    D) It details election expenses.
17. **Which document is NOT required to register as a voter in India?**
    A) Proof of age
    B) Proof of address
    C) Proof of employment
    D) Proof of citizenship
18. **What is a 'Voter ID Card' also known as in India?**
    A) Electoral Identity Card (EPIC)
    B) Election Card
    C) Voting Authorization Card
    D) Voter Registration Card
19. **Which is a digital platform used for voter registration and information in India?**
    A) MyGov.in
    B) Voter Helpline App
    C) e-India Portal
    D) Electoral India Network
20. **What is the significance of the 'Model Code of Conduct'?**
    A) It defines election results procedures.
    B) It outlines guidelines for conduct of political parties and candidates during elections.
    C) It regulates voting hours.
    D) It specifies the roles of election officials.
21. **Which demographic does SVEEP often target to increase voter participation?**
    A) Senior citizens
    B) Youth and first-time voters
    C) Business professionals
    D) International tourists
22. **How often are General Elections held in India?**
    A) Every 2 years
    B) Every 4 years
    C) Every 5 years
    D) Every 7 years

23. **What does the 'None of the Above' (NOTA) option in elections signify?**
    A) A choice for no political party
    B) A vote for an independent candidate
    C) A vote that is counted as invalid
    D) A choice to reject all candidates on the ballot
24. **Which media is commonly used for voter education campaigns in India?**
    A) Television
    B) Social Media
    C) Radio
    D) All of the above
25. **What is the purpose of a 'Mock Poll' conducted by the Election Commission?**

A) To test the functioning of EVMs and the election process
B) To gauge voter sentiment
C) To collect campaign contributions
D) To conduct voter surveys

ACHHRURAM MEMORIAL COLLEGE
Jhalda, Purulia, West Bengal

Examination of Certificate Course in Zoology

Course Title:-Zoo Management   **Full Marks: -50**   **Time -1 Hr**

Name_____Reg. No_____of_____Roll No_____

All the questions are mandatory. Students are directed to choose the best alternative from the four answers provided.

2×25= 50

1. The primary focus of zoos has shifted in the 21st century towards:

A. Breeding endangered species exclusively
B. Entertainment and profit maximization
C. Conservation, education, and research
D. Exhibiting exotic animals for public amusement

2. Which of the following is NOT a core ethical principle in zoo management?

A. Prioritizing animal welfare
B. Respecting animal behavior and needs
C. Maximizing visitor satisfaction through entertainment
D. Ensuring the humane treatment of animals

3. The historical development of zoos primarily focused on:

A. Conservation efforts
B. Educational purposes
C. Entertainment and display of exotic animals
D. Research and scientific study

4. Ethics in zoo management involves:

A. Solely considering the financial aspects of the zoo
B. Balancing the needs of animals, visitors, and staff
C. Prioritizing visitor experience over animal welfare
D. Focusing exclusively on breeding programs

5. The changing role of zoos in the 21st century emphasizes:

A. Increasing the number of animal exhibits
B. Focusing solely on entertainment
C. Contributing to wildlife conservation efforts
D. Ignoring public education and awareness

6. Enrichment programs in zoos are essential for:

A. Enhancing visitor experience
B. Increasing the number of zoo visitors
C. Promoting physical and mental well-being of animals
D. Reducing the cost of animal care

7. Animal husbandry practices in zoos involve:

A. Neglecting the animals' natural behaviors
B. Providing optimal living conditions and care
C. Prioritizing profit over animal welfare
D. Ignoring the importance of veterinary care

8. Veterinary care in zoos is crucial for:

A. Maintaining animal health and preventing diseases
B. Reducing the cost of animal care
C. Increasing the number of zoo visitors
D. Prioritizing entertainment over animal well-being

9. Nutrition is a vital aspect of zoo animal care because:
A. It has no impact on animal health
B. It is less important than veterinary care
C. It supports optimal physical and mental well-being
D. It is solely determined by the animal's preference

10. Enrichment programs can include:

A. Providing toys and puzzles for animals
B. Creating social interactions with other animals
C. Offering opportunities for exploration and foraging
D. All of the above

11. The primary goal of effective zoo exhibit design is to:

A. Maximize profit through increased visitor numbers
B. Create aesthetically pleasing displays
C. Provide educational and engaging experiences for visitors
D. Prioritize animal comfort over visitor experience

12. Naturalistic exhibits aim to:

A. Recreate the animals' natural habitat
B. Focus solely on entertainment value
C. Ignore the importance of animal welfare
D. Prioritize human comfort over animal needs

13. Enrichment within exhibits is important for:

A. Increasing visitor boredom
B. Reducing animal activity levels
C. Promoting animal well-being and natural behaviors
D. Decreasing the complexity of exhibit design

14. Immersive exhibits:

A. Create a barrier between visitors and animals
B. Allow visitors to feel like they are in the animal's habitat
C. Focus solely on entertainment value
D. Ignore the educational aspect of zoos

15. Effective exhibit design considers:

A. The needs of the animals only
B. The preferences of visitors only
C. A balance between animal welfare and visitor experience
D. The financial aspects of the zoo exclusively

16. Visitor management in zoos involves:

A. Ignoring visitor feedback
B. Prioritizing profit over visitor satisfaction
C. Creating a safe and enjoyable experience for visitors
D. Neglecting crowd control measures

17. Financial management in zoos includes:

A. Focusing solely on increasing ticket prices
B. Neglecting fundraising efforts
C. Developing sustainable revenue streams
D. Ignoring cost control measures

18. Staffing in zoos is important for:

A. Providing excellent animal care and visitor service
B. Reducing operational costs
C. Prioritizing profit over employee welfare
D. Ignoring the importance of training and development

19. Volunteer programs in zoos contribute to:

A. Increasing operational costs
B. Providing additional support and expertise
C. Reducing visitor satisfaction
D. Ignoring the importance of paid staff

20. Visitor engagement strategies include:

A. Offering educational programs and exhibits
B. Creating interactive experiences
C. Providing opportunities for volunteer involvement
D. All of the above

21. Sustainability practices in zoos focus on:

A. Ignoring environmental impact
B. Reducing energy consumption and waste
C. Prioritizing profit over environmental responsibility
D. Neglecting recycling efforts

22. Community engagement in zoos involves:

A. Isolating the zoo from the local community
B. Building partnerships with local organizations
C. Ignoring the importance of public education
D. Focusing solely on visitor numbers

23. Technology can enhance zoo management by:

A. Replacing human interaction with animals
B. Improving animal care and visitor experience
C. Increasing operational costs
D. Ignoring the importance of traditional zoo practices

24. The role of technology in modern zoo management includes:

A. Developing educational apps and virtual reality experiences
B. Using data analytics to optimize operations
C. Improving animal monitoring and tracking
D. All of the above

25. Community engagement programs can help zoos:

A. Increase isolation from the local community
B. Build support for conservation efforts
C. Reduce public awareness of wildlife issues
D. Ignore the importance of education

Name_____

Reg. No_____ of_____ Roll No_____

1. Water harvesting in ancient civilizations was primarily used to:

    A) Enhance trade routes

    B) Improve agricultural productivity

    C) Increase urbanization

    D) Develop religious sites

2. Which ancient civilization is renowned for its advanced water harvesting techniques using qanats?

    A) Ancient Egyptians

    B) Mesopotamians

    C) Persians

    D) Greeks

3. In ancient India, which of the following was a common method for rainwater harvesting?

    A) Stepwells

    B) Aqueducts

    C) Cisterns

    D) Pits

4. The primary purpose of 'Khalsas' in ancient India was:

    A) Storage of water

    B) Irrigation of fields

    C) Religious ceremonies

    D) Cooling air

5. The Romans are known for their use of which technology for water management?

    A) Qanats

    B) Aqueducts

    C) Stepwells

    D) Cisterns

6. The 'Johad' is a traditional water harvesting system used in which region of India?

    A) Rajasthan

    B) Punjab

    C) Gujarat

    D) Kerala

7. The 'Nadi' system, employed in ancient India, was used to:

    A) Collect and store river water

    B) Irrigate crops directly

    C) Purify drinking water

    D) Construct canals

8. Which ancient civilization used 'wells' as a major source of water for agriculture and daily use?

    A) Greeks

    B) Romans

    C) Harappans

    D) Egyptians

9. The concept of 'Ahar' is associated with which ancient Indian water management practice?

    A) Rainwater harvesting

    B) Canal irrigation

    C) Water storage pits

    D) Tank irrigation

10. The 'Bhandara' system was particularly prevalent in which part of India?

    A) North India

    B) South India

    C) East India

    D) West India

11. In ancient China, which method was used to capture and store floodwater?

    A) Terracing

    B) Dams and reservoirs

    C) Irrigation canals

    D) Wells

12. Which Indian ruler is credited with the construction of the extensive irrigation system in the Chola Dynasty?

    A) Ashoka

    B) Raja Raja Chola I

    C) Chandragupta Maurya

    D) Akbar

13. The 'Vav' or 'Baoli' in ancient India primarily functioned as:

    A) An irrigation system

    B) A water storage facility

    C) A religious monument

    D) A cooling system

14. The primary purpose of 'Sarovars' in ancient Indian architecture was to:

    A) Serve as reservoirs for drinking water

    B) Facilitate irrigation

    C) Enhance public baths

    D) Provide recreational spaces

15. The 'Nadi' system was significant in which historical period of India?

    A) Vedic period

    B) Maurya period

    C) Gupta period

    D) Mughal period

16. Which region is known for the traditional use of 'Bandhs' for water harvesting?

    A) Gujarat

    B) Tamil Nadu

    C) Karnataka

    D) West Bengal

17. The primary use of 'Stepwells' in ancient India was to:

    A) Store rainwater

    B) Serve as cooling systems

    C) Provide access to groundwater

    D) Facilitate transportation

18. The ancient Indian practice of constructing 'Kunds' was designed to:

    A) Harvest surface water

    B) Improve soil fertility

    C) Provide drinking water

    D) Enhance river flow

19. Which ancient civilization is known for its extensive use of aqueducts for water supply?

A) Egyptians

B) Greeks

C) Romans

D) Persians

20. The concept of 'Banda' in ancient water harvesting refers to:

A) A rainwater collection tank

B) A water purification system

C) A type of canal

D) A well structure

21. The practice of 'Rainwater Harvesting' in ancient India was particularly important in which geographic region?

A) The Himalayan foothills

B) The Deccan Plateau

C) The Gangetic Plain

D) The Thar Desert

22. Which historical figure is associated with extensive water management and irrigation works in ancient Egypt?

A) Ramses II

B) Cleopatra

C) Tutankhamun

D) Imhotep

23. In ancient Mesopotamia, which method was commonly used to control water flow for agriculture?

    A) Canals and dikes

    B) Cisterns and wells

    C) Reservoirs and aqueducts

    D) Dams and floodgates

24. The ancient practice of 'Terracing' was used in which region to manage water for agriculture?

    A) The Andes

    B) The Nile Delta

    C) The Indus Valley

    D) The Ganges Plain

25. The term 'Jhalar' in ancient Indian water management refers to:

    A) A rainwater harvesting tank

    B) A type of irrigation canal

    C) A water storage pit

    D) A water purification structure

Achhruram Memorial College, Jhalda

Certificate Course

Department of Chemistry

UG/PG………….…..SEMESTER………EXAMINATION Year……. …………………

SUBJECT………………………………………………………………………………

PAPER/COURSETITLE: **Metal Complex as a Sensing Appliance**

NAME……………………………………………………………………………………...

ROLL………………………………………….NO……………………………………………

RIGISTRATION NO…………………………………………………………………….

Full marks: 50 (25×2 = 50)   **Time: 1 Hour**

(There are four options for each question. Candidates are required to mark (Tik sign √) on right answer. It will be wrong to mark more than one for each question).
Answer all the twenty five questions:

1. What is a ligand in a metal complex?

A) A type of metal

B) A molecule or ion that binds to a metal atom

C) A type of organic compound

D) A chemical reaction

2. What is a coordination compound?

A) A compound with no metal

B) A compound where a metal is bonded to ligands

C) A mixture of metals

D) A compound with only non-metals

3. Which of the following is a property of transition metal complexes?

A) They are colourless

B) They have no magnetic properties

C) They often exhibit colour due to d-d transitions

D) They are always solid

4. What does a colorimetric sensor do?

A) Measures electrical signals

B) Detects changes in colour

C) Emits fluorescent light

D) Measures gas concentrations

5. How do fluorescent probes work in metal complexes?

A) They change colour when exposed to light

B) They emit light when excited by an external source

C) They conduct electricity

D) They absorb ultraviolet light

6. What is the main feature of electrochemical sensors?

A) They detect changes in colour

B) They measure electrical changes

C) They produce fluorescent light

D) They change mass

7. Which technique is used to measure the absorption of light in UV-Visible spectroscopy?

A) Mass-to-charge ratio

B) Absorption of specific wavelengths of light

C) Colour change

D) Emission of light

8. What information does IR spectroscopy provide?

A) The size of molecules

B) The functional groups in a molecule

C) The amount of light absorbed

D) The concentration of ions

9. What does NMR spectroscopy measure?

A) Light absorption

B) Nuclear magnetic properties of atoms

C) Mass of molecules

D) Chemical reactivity

10. What is the primary use of High-Performance Liquid Chromatography (HPLC)?

A) To separate compounds in a mixture

B) To measure light absorption

C) To analyze mass

D) To produce fluorescence

11. How does Gas Chromatography (GC) separate compounds?

A) By their size

B) By their mass-to-charge ratio

C) By their vaporization and interaction with a stationary phase

D) By their colour

12. What is the function of mass spectrometry?

A) To separate compounds based on size

B) To measure light absorption

C) To determine the mass-to-charge ratio of ions

D) To detect fluorescence

13. How are metal complexes used in environmental monitoring?

A) To detect and measure pollutants in air and water

B) To improve the colour of water

C) To neutralize pollutants

D) To increase plant growth

14. What role do metal complexes play in food and beverage quality control?

A) They enhance flavour

B) They detect contaminants and ensure safety

C) They improve nutritional value

D) They change the colour of food

15. In biomedical diagnostics, how are metal complexes used?

A) To enhance the taste of medicines

B) To label and track biological molecules

C) To alter the texture of drugs

D) To increase the volume of medical samples

16. What is a colorimetric sensor designed to do?

A) Change colour in response to an analyte

B) Measure electrical currents

C) Emit fluorescence

D) Analyze mass

17. What advantage do fluorescent metal complexes offer?

A) They provide colorimetric responses

B) They offer high sensitivity and can detect low concentrations

C) They are less expensive

D) They do not require special equipment

18. What does UV-Visible spectroscopy measure?

A) The concentration of ions

B) The mass-to-charge ratio

C) The absorption of ultraviolet and visible light

D) The size of molecules

19. What is the main benefit of using IR spectroscopy?

A) Identifying functional groups

B) Separating compounds

C) Measuring electrical changes

D) Emitting light

20. In chromatography, what does the stationary phase refer to?

A) The moving liquid or gas

B) The solid or liquid that remains in place

C) The type of detector used

D) The wavelength of light

21. What does mass spectrometry measure to identify substances?

A) Colour change

B) Mass-to-charge ratio of ions

C) Light absorption

D) Fluorescence intensity

22. How are metal complexes utilized in detecting pollutants?

A) By emitting light

B) By changing colour in response to specific pollutants

C) By altering the pH of the solution

D) By measuring mass

23. What is the purpose of a metal complex in food safety?

A) To alter the taste

B) To detect harmful contaminants

C) To increase shelf life

D) To change the texture

24. What do metal complexes do in biomedical diagnostics?

A) They increase drug volume

B) They label and track molecules for diagnosis

C) They enhance drug flavour

D) They change the colour of medical instruments

25. What is the key feature of a metal complex used in fluorescence sensing?

A) It absorbs light

B) It emits light when excited

C) It changes colour

D) It conducts electricity

ACHHRURAM MEMORIAL COLLEGE,
JHALDA, PURULIA

Examination for Certificate Course on "Mushroom Cultivation"

Full Marks: 50   **Time: 90 minutes**

Name: …………………………………………………..

Semester: …………….. Subject: ……………………….

Date of Examination: …………………………………….   Signature of the Invigilator

Multiple Choice Questions *(Each questions carries 2 marks)***:**

1. What is the primary purpose of pasteurizing substrate in mushroom cultivation?

   A) To increase nutrient content
   B) To kill unwanted microorganisms
   C) To enhance mushroom flavor
   D) To speed up mycelial colonization

2. Which of the following mushrooms is commonly grown on straw?

   A) Agaricus bisporus
   B) Pleurotus ostreatus
   C) Lentinula edodes
   D) Ganoderma lucidum

3. In mushroom cultivation, what does the term 'spawn' refer to?

   A) The final mushroom product
   B) The substrate used for growth
   C) The inoculated medium with mycelium
   D) The process of harvesting mushrooms

4. Which environmental factor is critical for the fruiting of mushrooms?

   A) High temperature
   B) Low humidity
   C) High carbon dioxide levels
   D) Proper lighting

5. What is the typical range of pH for a substrate used in mushroom cultivation?

   A) 4.5-5.5
   B) 6.0-7.0
   C) 7.5-8.5
   D) 9.0-10.0

6. Which mushroom species is known for its medicinal properties and is commonly referred to as "Reishi"?

  A) Agaricus bisporus
  B) Ganoderma lucidum
  C) Pleurotus ostreatus
  D) Lentinula edodes

7. What is the function of 'casing' in the cultivation of Agaricus bisporus?

  A) To provide additional nutrients
  B) To improve substrate consistency
  C) To stimulate fruiting
  D) To reduce contamination risk

8. Which part of the mushroom contains the spores?

  A) Cap
  B) Stem
  C) Gills
  D) Mycelium

9. What is the ideal temperature range for the incubation phase of most mushroom species?

  A) 15-20°C
  B) 20-30°C
  C) 25-35°C
  D) 30-40°C

10. How often should you typically water the substrate in mushroom cultivation?

  A) Every day
  B) Every week
  C) As needed based on humidity levels
  D) Monthly

11. Which substrate is commonly used for cultivating Shiitake mushrooms?

  A) Wood logs
  B) Straw
  C) Coffee grounds
  D) Sawdust

12. What is the main role of the 'mycelium' in mushroom cultivation?

  A) To absorb nutrients from the substrate
  B) To produce spores

C) To form the mushroom cap

D) To decompose the substrate

13. Which of the following is a sign of a healthy mushroom spawn?

    A) Discolored patches
    B) Dry and brittle appearance
    C) Even white growth throughout the substrate
    D) Strong, unpleasant odor

14. Which mushroom species is often referred to as the "button mushroom"?

    A) Pleurotus ostreatus
    B) Lentinula edodes
    C) Agaricus bisporus
    D) Coprinus comatus

15. What is 'fruiting body' in mushroom cultivation?

    A) The mycelium network
    B) The spore-producing structure
    C) The initial substrate
    D) The substrate after incubation

16. Which factor is least likely to cause contamination in mushroom cultivation?

    A) Sterile techniques
    B) Proper ventilation
    C) High humidity levels
    D) Poorly cleaned equipment

17. What is the main advantage of using a commercial mushroom cultivation kit?

    A) Lower cost
    B) Reduced risk of contamination
    C) Increased yield
    D) Customizable substrate

18. In mushroom cultivation, what does 'spawning run' refer to?

    A) The period when mushrooms are harvested
    B) The initial colonization of substrate by mycelium
    C) The process of casing application
    D) The fruiting phase

19. Which method is used to sterilize substrate for mushroom cultivation?

    A) Boiling

B) Freezing
C) Drying
D) Autoclaving

20. What is the main reason for using a humidifier in mushroom cultivation?

A) To provide nutrients
B) To control temperature
C) To maintain high humidity levels
D) To filter air

21. Which of the following is NOT a common pest in mushroom cultivation?

A) Fungus gnats
B) Mites
C) Termites
D) Beetles

22. What is the term used for mushrooms grown in controlled environments?

A) Wild mushrooms
B) Cultivated mushrooms
C) Free-range mushrooms
D) Foraged mushrooms

23. What is the purpose of 'straw shredding' in mushroom cultivation?

A) To increase the surface area for mycelium colonization
B) To reduce the moisture content
C) To improve the substrate's nutritional value
D) To sterilize the straw

24. Which stage of mushroom growth is characterized by the appearance of primordia?

A) Incubation
B) Spawning
C) Fruiting
D) Harvesting

25. Which mushroom species is particularly well-known for its use in culinary dishes and has a mild, nutty flavor?

A) Agaricus bisporus
B) Ganoderma lucidum
C) Lentinula edodes
D) Pleurotus ostreatus

Answer keys for the Examination:

1. B

2. B

3. C

4. D

5. A

6. B

7. C

8. C

9. B

10. C

11. A

12. A

13. C

14. C

15. B

16. A

17. B

18. B

19. D

20. C

21. C

22. B

23. A

24. C

25. A

Examination for Certificate Course on "Bioinformatics"

Full Marks: 50   **Time: 90 minutes**

Name: …………………………………………………………..

Semester: ……………..   Subject: ……………………….

Date of Examination: …………………………………….   Signature of the Invigilator

Multiple Choice Questions *(Each questions carries 2 marks)***:**

1. What is the primary focus of bioinformatics?

 A) Calculating mathematical models
 B) Analyzing biological data using computational techniques
 C) Designing new pharmaceuticals
 D) Conducting field research in biology

2. Which of the following is a common file format for nucleotide sequences?

 A) CSV
 B) FASTA
 C) PDF
 D) DOCX

3. What does BLAST stand for in bioinformatics?

 A) Basic Local Alignment Search Tool
 B) Biological Local Alignment Search Tool
 C) Basic Large Alignment Search Tool
 D) Biological Large Alignment Search Tool

4. Which of the following databases is used for protein sequences?

 A) GenBank
 B) PDB
 C) EMBL
 D) UniProt

5. What is a phylogenetic tree used for?

 A) Determining the secondary structure of proteins
 B) Visualizing evolutionary relationships between species
 C) Finding gene mutations
 D) Analyzing metabolic pathways

6. Which tool is commonly used to align multiple sequences?

A) ClustalW
B) GeneMark
C) BLAST
D) FASTQC

7. What does the acronym SNP stand for?

A) Single Nucleotide Polymorphism
B) Single Nucleotide Protein
C) Small Nucleotide Polymorphism
D) Single Nucleotide Pattern

8. Which of the following is a sequence alignment algorithm?

A) T-Coffee
B) Gene Ontology
C) DAVID
D) STRING

9. In bioinformatics, what does "genome annotation" refer to?

A) The process of sequencing a genome
B) Identifying functional elements in a genome
C) Aligning genomes from different species
D) Predicting protein structures

10. What is the main purpose of a gene expression microarray?

A) To identify gene mutations
B) To measure the expression levels of thousands of genes simultaneously
C) To determine protein structures
D) To sequence DNA

11. Which bioinformatics tool is used for predicting protein secondary structure?

A) BLAST
B) Swiss-Prot
C) PSIPRED
D) GeneBank

12. Which of the following databases contains 3D structures of proteins?

A) GenBank
B) EMBL
C) Protein Data Bank (PDB)
D) KEGG

13. What is an ORF in bioinformatics?

A) Open Reading Frame

B) Optimal Reading Frame
C) Outer Reading Frame
D) Ordered Reading Frame

14. What is the function of a genome browser?

A) To sequence genomes
B) To visualize and analyze genomic data
C) To predict protein functions
D) To align DNA sequences

15. Which algorithm is used for finding the most probable sequence alignment in a pairwise alignment?

A) Needleman-Wunsch
B) Smith-Waterman
C) BLAST
D) HMM

16. What does GO stand for in Gene Ontology?

A) Gene Observation
B) Gene Ontology
C) Gene Organization
D) Gene Order

17. What is the purpose of the EMBL database?

A) Protein sequence data
B) DNA and RNA sequence data
C) Metabolic pathways
D) Gene expression data

18. Which term describes a set of genes that are expressed together in a particular condition?

A) Gene cluster
B) Operon
C) Gene module
D) Gene network

19. Which type of bioinformatics software helps to visualize and analyze molecular structures?

A) Galaxy
B) PyMOL
C) BLAST
D) Geneious

20. What is the primary goal of comparative genomics?

A) To sequence new genomes
B) To compare the genomes of different organisms to find similarities and differences

C) To create genome-wide gene expression profiles
D) To predict protein structures

21. Which type of analysis would you use to find mutations associated with diseases?

A) Phylogenetic analysis
B) Gene expression analysis
C) Variant analysis
D) Protein folding analysis

22. In which of the following scenarios is the use of a genomic sequence alignment tool most appropriate?

A) Determining the 3D structure of a protein
B) Identifying evolutionary relationships between species
C) Measuring gene expression levels
D) Predicting protein interactions

23. Which software is often used for genome-wide association studies (GWAS)?

A) GROMACS
B) PLINK
C) BLAST
D) Cytoscape

24. What type of information can be obtained from the UniProt database?

A) DNA sequence information
B) Protein sequence and functional information
C) RNA secondary structures
D) Protein 3D structures

25. What is the main advantage of using bioinformatics tools in drug discovery?

A) They can perform laboratory experiments
B) They help in predicting and optimizing drug targets and interactions
C) They replace the need for clinical trials
D) They conduct biological field studies

Answer key for the examination:

1. B)
2. B)
3. A)
4. D)
5. B)
6. A)
7. A)
8. A)
9. B)
10. B)
11. C)
12. C)
13. A)
14. B)
15. A)
16. B)
17. B)
18. D)
19. B)
20. B)
21. C)
22. B)
23. B)
24. B)
25. B)

Achhruram Memorial College
Jhalda, Purulia

Course title: **CARTOGRAPHY AND GEOVISUALIZATION**

Organized by
Department of Geography

Full marks – 50   **Time – 1 hour**

Instructions: Choose the most appropriate answer for each question. Each question has only one correct answer.

1. What is the study of making maps called?
A) Cartography
B) Geovisualization
C) GIS
D) Spatial Analysis

2. Which projection preserves shapes well, but distorts sizes?
A) Mercator
B) Gall-Peters
C) Azimuthal
D) Robinson

3. What is the term for the relationship between map scale and the actual distance it represents?
A) Resolution
B) Accuracy
C) Precision
D) Representativeness

4. Which type of map shows spatial patterns and relationships?
A) Reference map
B) Thematic map
C) Topographic map
D) Political map

5. What is the process of creating a 3D representation from 2D data called?
A) Extrusion
B) Visualization
C) Rendering
D) Projection

6. Which Color scheme is often used for quantitative data?

A) Qualitative
B) Sequential
C) Diverging
D) Heatmap

7. What is the smallest unit of spatial resolution in a raster dataset?
A) Pixel
B) Cell
C) Grid
D) Feature

8. Which GIS tool is used for spatial interpolation?
A) Buffer
B) Clip
C) Union
D) Kriging

9. What is the term for the accuracy of a map's spatial relationships?
A) Precision
B) Accuracy
C) Resolution
D) Fidelity

10. Which type of visualization shows flow or movement?
A) Choropleth
B) Flow map
C) Heatmap
D) Scatterplot

11. What is the process of generalizing data to show patterns?
A) Aggregation
B) Disaggregation
C) Classification
D) Visualization

12. Which projection is suitable for small-scale maps?
A) Mercator
B) Gall-Peters
C) Azimuthal
D) Robinson

13. What is the term for the level of detail in a map?
A) Scale
B) Resolution
C) Accuracy
D) Fidelity

14. Which type of map shows categorical data?

A) Choropleth
B) Heatmap
C) Qualitative map
D) Quantitative map

15. What is the process of creating a 2D representation from 3D data called?

A) Projection
B) Extrusion
C) Rendering
D) Visualization

16. Which Color scheme is often used for categorical data?

A) Sequential
B) Diverging
C) Qualitative
D) Heatmap

17. What is the largest unit of spatial resolution in a vector dataset?

A) Feature
B) Polygon
C) Line
D) Point

18. Which GIS tool is used for spatial analysis?

A) Buffer
B) Clip
C) Union
D) Spatial Join

19. What is the term for the accuracy of a map's attribute data?

A) Precision
B) Accuracy
C) Resolution
D) Fidelity

20. Which type of visualization shows spatial relationships?

A) Choropleth
B) Flow map
C) Network map
D) Scatterplot

21. What is the process of creating a map from GIS data called?

A) Cartography

B) Geovisualization
C) Mapping
D) Visualization

22. Which projection preserves sizes well, but distorts shapes?
A) Mercator
B) Gall-Peters
C) Azimuthal
D) Robinson

23. What is the term for the level of spatial detail in a dataset?
A) Resolution
B) Accuracy
C) Precision
D) Fidelity

24. Which type of map shows continuous data?
A) Choropleth
B) Heatmap
C) Qualitative map
D) Quantitative map

25. What is the process of exploring and understanding spatial data called?
A) Spatial analysis
B) Geovisualization
C) Cartography
D) GIS

Achhruram Memorial College
Jhalda, Purulia

Examination for completion of certificate course on Geography

Course title: **INTRODUCTION TO GEOSPATIAL TECHNOLOGIES**

Organized by
Department of Geography

Full marks – 50   **Time – 1 hour**

Instructions:
Choose the most appropriate answer for each question. Each question has only one correct answer.

1. What is the primary purpose of a Geographic Information System (GIS)?
a) To manage and analyse spatial and geographic data
b) To perform statistical calculations
c) To create graphic designs
d) To develop web applications

2. Which of the following is a key component of GIS that stores geographic data?
a) Database
b) Spreadsheet
c) Web server
d) Text editor

3. What is the main function of Remote Sensing technology?
a) Collecting data from a distance using satellites or aircraft
b) Managing spatial databases
c) Creating digital maps
d) Analysing economic trends

4. Which of the following is NOT a type of data format used in GIS?
a) Shapefile
b) GeoTIFF
c) CSV
d) MP3

5. What does GPS stand for in the context of geospatial technology?
a) Geographic Positioning System
b) Global Positioning System
c) Geographic Planning System

d) Geospatial Positioning System

6. Which GIS tool is commonly used for creating, editing, and analysing spatial data layers?
a) Google Earth
b) ArcGIS
c) Photoshop
d) Excel

7. In GIS, what is a 'layer'?
a) A collection of geographic data representing a specific theme
b) A file format for storing spatial data
c) A type of coordinate system
d) A method of data encryption

8. Which of the following is a commonly used coordinate system in GIS?
a) Decimal Degrees
b) RGB Colorspace
c) CMYK Color Model
d) HTML Color Codes

9. What does 'buffering' mean in the context of GIS?
a) Creating a zone around a geographic feature
b) Compressing data files
c) Increasing the resolution of satellite images
d) Removing redundant data

10. What type of map projection preserves angles and shapes but distorts areas?
a) Mercator Projection
b) Robinson Projection
c) Winkel Tripel Projection
d) Mollweide Projection

11. Which technology is used to capture detailed 3D information of an area?
a) LIDAR
b) GPS
c) Remote Sensing
d) GIS

12. What does the term 'georeferencing' refer to in GIS?
a) Assigning geographic coordinates to a digital map or image
b) Converting raster data to vector data
c) Creating a new layer in GIS
d) Importing data from an external source

13. In GIS, what is 'spatial analysis'?

a) Analysing the relationships and patterns of spatial data
b) Studying the economic impact of a location
c) Generating reports based on spatial data
d) Processing text data for geographic relevance

14. Which of the following is an example of raster data?

a) Satellite imagery
b) Street maps
c) Vector-based polygons
d) Digital elevation models

15. What is a 'vector data model' in GIS used for?

a) Representing geographic features as points, lines, and polygons
b) Storing raster images
c) Encoding GPS signals
d) Analysing temporal data

16. Which GIS function is used to combine multiple layers of data into a single layer?

a) Overlay
b) Buffering
c) Clipping
d) Interpolation

17. What is the primary use of 'network analysis' in GIS?

a) To analyse and optimize routes and networks, such as transportation or utility networks
b) To create digital maps
c) To capture spatial data from satellites
d) To store and manage large datasets

18. Which type of GIS data model represents geographic features with discrete boundaries?

a) Raster Data Model
b) Vector Data Model
c) Time-Series Data Model
d) Temporal Data Model

19. What is the primary purpose of 'digital elevation models' (DEMs)?

a) To represent the Earth's surface elevation
b) To store land cover data
c) To provide location coordinates
d) To display population density

20. What does 'GPS' technology primarily rely on for determining location?
a) A network of satellites
b) Ground-based sensors
c) Radar systems
d) Acoustic signals

21. In GIS, what is a 'geospatial dataset'?
a) A collection of spatial data with geographic references
b) A database for storing non-spatial information
c) A set of graphic design files
d) A series of statistical reports

22. Which process involves converting paper maps into digital formats for use in GIS?
a) Digitizing
b) Georeferencing
c) Vectorization
d) Rasterization

23. Which term refers to a GIS analysis technique used to predict values at unsampled locations based on known values?
a) Interpolation
b) Buffering
c) Classification
d) Extraction

24. What is 'map algebra' used for in GIS?
a) Performing mathematical operations on raster data
b) Creating and editing map layers
c) Designing cartographic symbols
d) Analysing vector data

25. Which GIS technique is used to determine how changes in land use may affect environmental factors?
a) Impact Assessment
b) Data Cleaning
c) Network Analysis
d) Feature Extraction

ACHHRURAM MEMORIAL COLLEGE, JHALDA
Assessment Examination, 2022-2023

Course Title: - Certificate Course in Hindi Language (हिंदी भाषा में सर्टिफिकेट कोर्स)

Time: 2 Hours   F.M. – 50

निम्नलिखित प्रश्नों के सही विकल्पों का चयन करें :-   15x2=30

1. हिंदी में स्वरों की संख्या है -
   a. 10   b. 11
   c. 12   d. 13

2. जिन स्वरों के उच्चारण में हस्र्व स्वर से भी अधिक समय लगता है, उन्हें कहते हैं -
   a. ह्स्व स्वर   b. अर्द्ध स्वर
   c. प्लुत स्वर   d. दीर्घ स्वर

3. प्लुत स्वर का उदाहरण है -
   a. अ   b. इ
   c. उ   d. ऊँ

4. हिंदी में व्यंजनों की संख्या है -
   a. 33   b. 34
   c. 35   d. 36

5. ' स ' का उच्चारण स्थान है -
   a. कंठ   b. तालू
   c. मूर्धा   d. दाँत

6. ' प ' का उच्चारण स्थान है -
   a. कंठ   b. होंठ
   c. दाँत   d. मूर्धा

7. एक अल्पप्राण व्यंजन का उदाहरण है -
   a. ख   b. छ
   c. फ   d. त

8. एक महाप्राण व्यंजन का उदाहरण है -
   a. क   b. च
   c. ठ   d. त

9. एक घोष व्यंजन का उदाहरण है -

    a. क   b. च

    c. त   d. भ

10. एक अघोष व्यंजन का उदाहरण है -

    a. क   b. ज

    c. ध   d. भ

11. एक उष्म व्यंजन का उदाहरण है -

    a. ग   b. झ

    c. त   d. प

12. एक तालव्य व्यंजन का उदाहरण है -

    a. ख   b. छ

    c. थ   d. फ़

13. अर्थ के आधार पर वाक्य के भेद होते हैं -

    a. सात   b.आठ

    c. नौ   d. दस

14. "जो मेहनत करेगा, फल पायेगा" कैसा वाक्य है -

    a. सरल   b. संयुक्त

    c. मिश्रित   d. इनमें से कोई नहीं

15. एक प्रधान उपवाक्य और एक या अधिक आश्रित उपवाक्य से बने वाक्य को कहते हैं -

    a. सरल वाक्य   b. संयुक्त वाक्य

    c. मिश्रित वाक्य   d. इनमें से कोई नहीं

निम्नलिखित गद्यांश को पढ़कर उससे संबंधित प्रश्नों के सही उत्तर का चयन करें :- 2X5=10

बहुत समय पहले एक मनुष्य ने अकस्मात दो पत्थरों को इकट्ठा कर रगड़ा और आग पैदा की | इस प्रकार उसने एक लाभदायक चीज की खोज की ; परन्तु हम उस मनुष्य का नाम नहीं जानते हैं | मनुष्य एक बेघर बिचरनेवाला प्राणी था जो कि अपने खाने की खोज में एक स्थान से दूसरे स्थान जाता रहता था | किसी ने खेती-बाड़ी की खोज की | इससे मनुष्य के रहने के ढंग में एक महान परिवर्तन आया | अब उसे भोजन की खोज में इधर-उधर भटकने की आवश्यकता नहीं थी | काफी समय के पश्चात किसी ने पहिये का आविष्कार किया | आज के समय में चल रही साइकिलें, कारें तथा बसें उसी आविष्कार का फल है |

16. बहुत समय पहले एक मनुष्य ने अकस्मात दो पत्थरों को इकट्ठा कर रगड़ा और क्या पैदा किया -
   a. आग   b. पानी
   c. हवा   d. घी

17. बहुत समय पहले मनुष्य था -
   a. घरवाला प्राणी   b. बेघर प्राणी
   b. महान प्राणी   d. तुच्छ प्राणी

18. मनुष्य किसकी खोज में एक स्थान से दूसरे स्थान जाता रहता था -
        a. आग   b. पानी
   c. हवा   d. भोजन

19. किसकी खोज के बाद मनुष्य ने भोजन के लिए एक स्थान से दूसरे स्थान पर भटकना छोड़ दिया -
   a. आग   b. खेती-बाड़ी
   c. लोहा   d. पहिया

20. आज के समय में चल रही साइकिलें, कारें तथा बसें किस आविष्कार का फल है -
   a.आग   b. लोहा
   c. पहिया   d. खेती-बाड़ी

निम्नलिखित पद्यांश को पढ़कर उससे संबंधित प्रश्नों के सही उतर का चयन करें :- 2X5=10

जिन्हें सपने अपने पाने हैं
बन जाते वे तो दीवाने हैं
गर लक्ष्य जो साधा है तूने
उसे पाने की कोशिश तू कर
चल आगे बढ़, तूफानों से न डर
चल कश्ती उठा, सागर में उतर
है रात अंधेरी फिक्र है क्या
एक दिन आयेगी अपनी सहर
चल कश्ती उठा,सारग में उतर ।

21. जिन्हें अपने सपने पाने हैं, वे क्या बन जाते हैं -
   a. आवारा   b. पागल
   c. दीवाना   d. मस्ताना

22. लक्ष्य साधनेवाले को क्या करना चाहिए -
    a. कोशिश   b. आराम
    c. पलायन   d. खान-पान

23. यहाँ कवि किससे नहीं डरने को कहता है -
        a. आग से   b. पानी से
        c. हवा से   d. तूफान से

24. यहाँ 'रात अंधेरी' का क्या अर्थ है -
    a. दुख   b. सुख
    c. अंधेरा   d. प्रकाश

25. यहाँ 'सहर' का क्या अर्थ है -
    a. मंजिल   b. किनारा
    c. नगर   d. मझधार

ACHHRURAM MEMORIAL COLLEGE

Jhalda, Purulia, West Bengal

Examination of Certificate Course in Library

Course Title: Information Indexing and Searching   **Full Marks: 50**   **Time: 1 Hour**

NAME:_____

Reg. No._____ **of** _____   **Roll**_____ **No.**_____

All the questions are mandatory. Students are directed to choose the best alternative from the four answer provided.

2×25= 50

1. What does a search strategy primarily aim to achieve?
   A. Organizing search results
   B. Finding relevant information efficiently
   C. Digitizing documents
   D. Storing data securely

2. Why is it important to develop a search strategy before conducting research?
   A. To increase search costs
   B. To complicate the research process
   C. To ensure effective and systematic information retrieval
   D. To limit access to information

3. What is the purpose of feedback and refining in the search process?
   A. To collect more data
   B. To identify gaps in search results and improve search queries
   C. To limit access to search tools
   D. To digitize search results

4. What do Boolean operators (AND, OR, NOT) allow users to do in a search query?
   A. Narrow or broaden search results
   B. Access full-text documents
   C. Translate search queries
   D. Validate search findings

5. How does truncation enhance search capabilities?
   A. By limiting search results
   B. By expanding search terms to find variations of a word
   C. By excluding specific keywords
   D. By ordering search results

6. Which technique allows users to restrict search results based on specific criteria such as date, language, or document type?
   A. Metadata search
   B. Field search
   C. Proximity search
   D. Full-text search

7. What does online searching primarily involve?
   A. Storing physical documents
   B. Accessing information via digital networks
   C. Cataloging library materials
   D. Digitizing images

8. Which feature is essential for online searching platforms to efficiently retrieve relevant information?
   A. Printing capabilities
   B. Real-time updates
   C. User authentication
   D. Search algorithms

9. How do searching and browsing differ in online information retrieval?
   A. Searching uses predefined keywords, while browsing does not
   B. Browsing relies on alphabetical order, while searching does not
   C. Searching retrieves specific information, while browsing is more exploratory
   D. Browsing requires special software, while searching does not

10. What distinguishes meta search engines from primary search engines?
   A. Meta search engines focus on a specific topic
   B. Meta search engines combine results from multiple search engines
   C. Meta search engines only index academic content
   D. Meta search engines are faster than primary search engines

11. What feature of Google Search allows users to search for specific types of content, such as images or videos?
   A. Google Scholar
   B. Google Translate
   C. Google Trends
   D. Google Advanced Search

12. What is the primary function of subject gateways in online searching?
   A. To store personal information
   B. To manage social media profiles
   C. To provide access to quality-assured resources in specific subject areas
   D. To encrypt search queries

13. What is the primary characteristic of a controlled indexing language?
   A. It allows unlimited variations in indexing terms
   B. It is restrictive and uses a predefined set of terms
   C. It relies solely on natural language
   D. It excludes synonyms and related terms

14. What is the main purpose of vocabulary control in information retrieval?
   A. To limit access to information
   B. To enhance precision and consistency in indexing and searching
   C. To digitize library collections
   D. To increase the number of search results

15. Which tool is commonly used to control vocabulary by providing standardized terms and their relationships?
   A. Library catalog
   B. Citation index
   C. Thesaurus
   D. Abstracting journal

16. What is the structure of a thesaurus primarily designed to facilitate?
   A. Random access to information
   B. Alphabetical ordering of terms
   C. Hierarchical and associative relationships among terms
   D. Full-text indexing

17. In designing a thesaurus, what is the typical approach to organizing terms based on their semantic relationships?
   A. Alphabetical order
   B. Chronological order
   C. Hierarchical structure
   D. Random grouping

18. What is a distinguishing feature of post coordinate indexing?
   A. It uses a single term to represent a concept
   B. It allows combining index terms after retrieval
   C. It relies solely on alphabetical order
   D. It requires manual indexing only

19. How does uniterm indexing differ from traditional indexing methods?
   A. It uses full-text documents for indexing
   B. It assigns multiple terms to each concept
   C. It employs a single term to represent concepts
   D. It excludes keywords from indexing

20. What does KWIC indexing primarily focus on?
   A. Alphabetizing keywords
   B. Grouping similar terms
   C. Providing context for keywords
   D. Assigning index numbers

21. What is the main advantage of citation indexing?
   A. It uses natural language processing
   B. It identifies documents based on their content
   C. It connects related documents based on citations
   D. It requires manual sorting of citations

22. What is the concept behind automatic indexing?
   A. Using human experts to index documents
   B. Employing software algorithms to assign index terms
   C. Alphabetizing index terms
   D. Limiting access to indexed content

23. Which statement best describes a difference between manual and automatic indexing?
   A. Manual indexing is faster than automatic indexing
   B. Automatic indexing requires human judgment
   C. Manual indexing relies on software algorithms
   D. Automatic indexing is error-prone

24. What is the primary concept behind federated search?
   A. Combining search results from multiple sources into a single interface
   B. Using advanced algorithms to rank search results
   C. Limiting access to search queries
   D. Focusing on natural language processing

25. Why is federated search increasingly important in modern information retrieval?
   A. To reduce the number of search engines
   B. To increase the speed of search queries
   C. To aggregate results from diverse sources
   D. To limit access to search results

ACHHRURAM MEMORIAL COLLEGE

Jhalda, Purulia, West Bengal

Examination of Certificate Course in Library Science

Course Title: Preservation and Conservation of Library Materials   **Full Marks: 50**

                                                                                                            Time: 1 Hour

NAME:_____

Reg. No._____ **of** _____   **Roll**_____**No.**_____

All the questions are mandatory. Students are directed to choose the best alternative from the four answers provided.

2×25= 50

1. Which of the following is considered a non-book material in libraries?
   A. Manuscripts
   B. Periodicals
   C. Palm Leaves
   D. Books

2. What is the primary concern addressed in the Evolution of Library Materials?
   A. Preservation techniques
   B. Digitalization efforts
   C. Historical development
   D. Classification systems

3. Which of the following is a chemical agent that can deteriorate library materials?
   A. Temperature
   B. Humidity
   C. Dust
   D. Acidic paper

4. What is the primary focus of Digital Preservation as an enemy of library materials?
   A. Physical damage
   B. Technological obsolescence
   C. Environmental factors
   D. Biological threats

5. What does Environment Control primarily aim to manage in libraries?
   A. Dust accumulation
   B. Temperature and humidity levels
   C. Biological agents
   D. Physical wear and tear

6. What is the main goal of Rehabilitation of Documents in libraries?
   A. Digitization efforts
   B. Restoration to usable condition
   C. Discarding damaged materials
   D. Recycling damaged paper

7. Which of the following is NOT a type of binding commonly used for library materials?
   A. Saddle stitching
   B. Perfect binding
   C. Thermal binding
   D. Papier-mâché binding

8. What are Binding Materials primarily used for in library practices?
   A. Digital archiving
   B. Reinforcing book covers
   C. Repairing torn pages
   D. Storing micro-documents

9. Why is preservation important for library materials?
   A. To increase library expenses
   B. To limit access to rare materials
   C. To protect and prolong the lifespan of materials
   D. To digitize all library collections

10. Which of the following was one of the earliest materials used for recording information?
    A. Micro documents
    B. Periodicals
    C. Digital resources
    D. Palm leaves

11. What are examples of non-book materials commonly found in libraries?
    A. Manuscripts and books
    B. Newspapers and periodicals
    C. Micro documents and digital resources
    D. Palm leaves and clay tablets

12. Which physical agent poses a threat to library materials by causing physical damage over time?
    A. Light
    B. Proper shelving
    C. Controlled humidity
    D. Archival boxes

13. What type of chemical agent can lead to the deterioration of paper-based library materials?
    A. Acidic compounds
    B. Carbon dioxide
    C. Dehumidifiers
    D. Archival paper

14. Which biological agent is commonly responsible for damaging organic library materials?
    A. Archival quality materials
    B. Insects and pests
    C. Digital preservation
    D. Controlled temperature

15. What is a primary goal of digital preservation?
   A. To increase physical access to materials
   B. To store digital content for a short period
   C. To ensure long-term access to digital materials
   D. To limit access to digital collections

16. Which type of binding is known for its durability and ability to open flat, making it suitable for reference materials?
   A. Perfect binding
   B. Case binding
   C. Spiral binding
   D. Pamphlet binding

17. What material is commonly used for the covers of hardcover books?
   A. Cardboard
   B. Plastic
   C. Metal
   D. Paper

18. What is a key step in the binding process to ensure durability and uniformity?
   A. Storing books in humid conditions
   B. Using adhesive without stitching
   C. Applying pressure during drying
   D. Using low-quality materials

19. What do binding standards typically aim to achieve?
   A. To limit access to library materials
   B. To ensure consistency and durability in bookbinding
   C. To restrict book sizes
   D. To reduce the use of binding materials

20. Which binding type is most commonly used for high-use library materials due to its durability and flexibility?
   A. Saddle Stitching
   B. Perfect Binding
   C. Case Binding
   D. Spiral Binding

21. What is the primary characteristic of saddle stitching?
   A. Uses a hardcover with a printed dust jacket
   B. Secures pages by sewing or stapling along the fold line
   C. Uses plastic or metal coils to hold the pages together
   D. Involves adhesive binding of pages to a flexible cover

22. Which type of binding is known for its flexibility and is often used for notebooks or manuals?
   A. Perfect Binding
   B. Spiral Binding
   C. Case Binding
   D. Comb Binding

23. What is a key advantage of perfect binding compared to other binding methods?
   A. It allows for easy replacement of individual pages.
   B. It provides a more polished and professional appearance with a flexible spine.
   C. It can accommodate very thick books with heavy use.
   D. It uses a hardcover for increased durability.

24. Which type of binding is often used for materials that require frequent updating or easy disassembly, such as manuals and reports?
   A. Case Binding
   B. Comb Binding
   C. Saddle Stitching
   D. Perfect Binding

25. In which binding method are the pages glued together at the spine, and the book is typically covered with a soft cover?
   A. Case Binding
   B. Perfect Binding
   C. Spiral Binding
   D. Saddle Stitching

Name_____

Reg. No_____ of_____ Roll No_____

1. What is Vedic Mathematics primarily known for?

   A) Complex calculus techniques

   B) Speedy and mental calculations

   C) Theorems on geometry

   D) Modern algebraic equations

2. Which ancient texts are the basis of Vedic Mathematics?

   A) Upanishads

   B) Vedas

   C) Puranas

   D) Mahabharata

3. Who is credited with the revival of Vedic Mathematics in the 20th century?

A) Swami Vivekananda

B) Sri Aurobindo

C) Bharati Krishna Tirthaji

D) Ramanujan

4. What is the primary benefit of learning Vedic Mathematics?

A) Enhancing language skills

B) Improving calculation speed and accuracy

C) Developing artistic abilities

D) Understanding historical contexts

5. Which of the following is a key concept in Vedic Mathematics?

A) Quadratic Equations

B) Multiplication Sutras

C) Differential Equations

D) Probability Theory

6. What does the sutra "Ekadhikena Purvena" mean?

A) The product of the sum

B) By one more than the previous one

C) The square of the sum

D) The difference of squares

7. How does Vedic Mathematics propose to simplify division problems?

   A) Using complex algorithms

   B) Through cross multiplication

   C) By specific division sutras

   D) By logarithmic tables

8. What is the sutra "Nikhilam Navatashcaramam Dashatah" used for?

   A) Simplifying additions

   B) Multiplying numbers close to the base

   C) Dividing large numbers

   D) Solving geometric problems

9. In Vedic Mathematics, what does the term "Vertically and Crosswise" refer to?

   A) A method for quick division

   B) A technique for solving simultaneous equations

   C) A method for rapid multiplication

   D) A way to solve polynomial equations

10. How many basic sutras are there in Vedic Mathematics?

   A) 16

   B) 12

   C) 10

   D) 8

11. Which Vedic sutra can be used to find the square of a number ending in 5?

   A) Anurupyena

   B) Ekadhikena Purvena

   C) Urdhva Tiryagbhyam

   D) Nikhilam Navatashcaramam Dashatah

12. What is the main advantage of using Vedic Mathematics in education?

   A) It eliminates the need for calculators

   B) It provides a cultural context to mathematics

   C) It fosters creativity and logical thinking

   D) It ensures understanding of complex theories

13. In the context of Vedic Mathematics, what does the sutra "Paravartya Yojayet" deal with?

   A) Subtraction

   B) Division

   C) Simple equations

D) Squaring numbers

14. Which Vedic Mathematics technique is used for quick subtraction?

A) By complements

B) Cross multiplication

C) Base method

D) Vertical subtraction

15. How can Vedic Mathematics aid in human development?

A) By improving physical health

B) By enhancing cognitive skills and mental agility

C) By fostering artistic abilities

D) By providing historical insights

16. What does the Vedic Mathematics sutra "Yavadunam" help to compute?

A) Multiplication of any two numbers

B) Squaring of numbers

C) Cubing numbers

D) Division of fractions

17. Which of the following is NOT a feature of Vedic Mathematics?

   A) Simplicity in calculations

   B) Rapid mental math techniques

   C) Dependence on electronic calculators

   D) Use of ancient sutras

18. The sutra "Sankalana vyavakalanabhyam" is primarily used for what purpose?

   A) Addition and subtraction

   B) Multiplication

   C) Division

   D) Solving quadratic equations

19. How does Vedic Mathematics simplify the process of solving quadratic equations?

   A) By using factorization techniques

   B) By eliminating the need for coefficients

   C) By employing specific sutras

   D) By using approximation methods

20. Which of the following techniques is used in Vedic Mathematics for quick multiplication?

A) Anurupyena

B) Yavadunam

C) Urdhva Tiryagbhyam

D) Paravartya

21. What is the main focus of the sutra "Sopaantyadvayamantyam"?

A) Simplifying roots

B) Simplifying logarithms

C) Simplifying multiplication

D) Simplifying polynomial equations

22. Which sutra is used in Vedic Mathematics to calculate the product of two binomials?

A) Nikhilam

B) Ekadhikena

C) Vertically and Crosswise

D) Sankalana vyavakalanabhyam

23. How many upasutras (sub sutras) are there in Vedic Mathematics?

A) 15

B) 13

C) 14

D) 12

24. What is a key application of Vedic Mathematics in modern times?

   A) Enhancing computational efficiency in IT

   B) Developing philosophical theories

   C) Writing historical documentation

   D) Designing architectural plans

25. How does Vedic Mathematics contribute to stress reduction in students?

   A) By eliminating the need for memorization

   B) By providing faster calculation techniques

   C) By introducing a playful approach to learning math

   D) All of the above

ACHHRURAM MEMORIAL COLLEGE

Jhalda, Purulia, West Bengal

Examination of Certificate Course in Philosophy

Course Code: Vedic-Upanishadic Influence on Indian Ethics

Organized by

Department of Philosophy

Full Marks: 50

Time: 1 Hour

Name……………………………………………………………………………………

Reg. No…………………………………………………………………………………

Roll No………………………………………………………………………………….

Answer all 25 multiple choice question.

1. Which of the following is not one of the Vedas?

    A) Rigveda

    B) Samaveda

    C) Bhagavad Gita

    D) Yajurveda

2. The Vedas are primarily composed of:

    A) Historical narratives

    B) Hymns and chants

    C) Philosophical discourses

    D) Prose and poetry

3. Which Veda is known for its hymns dedicated to various deities?

    A) Atharvaveda

    B) Yajurveda

    C) Rigveda

    D) Samaveda

4. The cultural context of Vedic society is best described as:

    A) Nomadic and pastoral

    B) Urban and industrial

C) Agricultural and settled

D) Maritime and commercial

5. The Upanishads are primarily concerned with:

A) Ritualistic practices

B) Philosophical and spiritual ideas

C) Historical events

D) Political theories

6. Which of the following is a major Upanishad?

A) Mahabharata

B) Brihadaranyaka

C) Ramayana

D) Panchatantra

7. The central theme of the Upanishads is the exploration of:

A) Social order

B) Economic systems

C) Self and ultimate reality

D) War and peace

8. The term "Upanishad" literally means:

A) Sitting down near

B) Enlightened knowledge

C) Sacred hymns

D) Divine law

9. Dharma in the Vedic context refers to:

A) Wealth accumulation

B) Moral duty and ethical conduct

C) Political power

D) Ritual sacrifices

10. Karma theory implies that:

A) Actions have no consequences

B) One's actions determine future outcomes

C) Destiny is fixed regardless of actions

D) Rituals alone can change one's fate

11. Which of the following best describes the concept of Dharma?

    A) Random behavior

    B) Law of the jungle

    C) Ethical and moral duty

    D) Political authority

12. Karma is closely related to:

    A) Material wealth

    B) Past actions and their results

    C) Social status

    D) Birthright

13. The Rigveda contains:

    A) Mythological stories

    B) Ethical principles and hymns

    C) Agricultural guidelines

    D) Architectural designs

14. Vedic ethics emphasizes:

    A) Competition and rivalry

    B) Harmony and balance

    C) Wealth and power

    D) Individualism

15. Which Veda includes spells and incantations often used in rituals?

    A) Rigveda

    B) Samaveda

    C) Yajurveda

    D) Atharvaveda

16. Moral values in Vedic literature are typically expressed through:

    A) Legal codes

    B) Hymns and prayers

    C) Trade regulations

D) Military strategies

17. Atman in the Upanishads refers to:

A) Physical body

B) Material wealth

C) Inner self or soul

D) Social status

18. Brahman is best described as:

A) Personal god

B) Universal consciousness

C) Political leader

D) Historical figure

19. Realizing the Atman is believed to lead to:

A) Material success

B) Spiritual liberation

C) Social prestige

D) Political power

20. The connection between Atman and Brahman implies:

A) Individual and universal unity

B) Conflict between self and universe

C) Separation of self from cosmos

D) Dominance of individual over universe

21. Vedic-Upanishadic ethics can be applied to contemporary issues such as:

A) Technological advancements

B) Moral dilemmas and ethical decisions

C) Economic policies

D) Political campaigns

22. A modern ethical dilemma that can be analyzed using Vedic-Upanishadic principles is:

    A) Social media usage

    B) Genetic engineering

    C) Urban planning

    D) Environmental conservation

23. The principle of Ahimsa (non-violence) is rooted in:

    A) Vedic rituals

    B) Upanishadic philosophy

    C) Political doctrines

    D) Economic theories

24. Case studies in this course aim to:

    A) Analyze historical events

    B) Apply ancient ethical principles to modern contexts

    C) Study ancient languages

    D) Develop business strategies

25. The relevance of ancient Indian ethics today includes:

    A) Advancing technology

    B) Resolving ethical conflicts

    C) Political maneuvering

    D) Economic growth

ACHHRURAM MEMORIAL COLLEGE, JHALDA

Assessment Examination, 2022-2023

Course Title: - Certificate Course in Yoga and Wellness

Time :- 2 Hours   F.M. : 50

Answer the following questions:-   25X2=50

1. How many koshas do humans have as per the yogic system?
2. Name the asana in which the waist and arms look like a cobra?
3. Karma yoga is a branch of yoga based on the teaching of which text?
4. What is the theme of International Day of Yoga 2021?
5. What is the theme of International Day of Yoga 2020?
6. What is the name of the video blogging contest jointly organized by the Ministry of AYUSH (MoA) and the Indian Council of Cultural Relations (ICCR) in 2020?
7. Which of the following statement is/are correct about Yoga:-

   A. Yoga is practiced since ancient India. It is a physical, mental and spiritual practice.
   B. The 'yoga' word is derived from Sanskrit.
   C. Yoga means to join or unite, represent the union of body and consciousness or alertness.
   D. All the above are correct

8. What is the theme for IYD 2023?
9. What are the advantages of doing Yoga?
10. What should you wear to a Yoga class?
11. What should you eat before a Yoga class?
12. How often should you practice Yoga?
13. What are the five types of Yama according to Patanjali ?
14. Raja Yoga is the yoga of controlling for what ?
15. The word "Nadi" is derived from the word "Nad" which means?
16. Which is not a Pancha Bhuta?
17. Astangamarga is the contribution of which philosophy?
18. What is the nature of Pingla Swar?
19. Normally Yama not follows what?
20. What is the meaning of Prana ?
21. What is Bahiranga Yoga practice?
22. Which of the following Kriya is beneficial for reducing excess fats from the body?
23. For what Shatkarmas are the techniques used ?
24. What is controlled by the 'Chitta'?
25. In what practice mind become in Alpha state ?

Add on Course Examination

Subject: Robot Motion Planning

Course Coordinator: Arindam Biswas

Student Name: …………………………………………

Registration No.: ………………………………………….

Roll: ………………………. No.: ……………………………...

Full Marks: 50   **Time: 2 Hours**

**Each question carries 2 marks:

1. What is the primary focus of robotic motion?

A) Designing the physical appearance of robots

B) Creating algorithms for robot decision-making

C) Planning and controlling the movement of robots

D) Enhancing the battery life of robots

2. Which of the following best defines robotic motion planning?

A) The process of determining a sequence of actions to achieve a goal

B) The study of robot design and structure

C) The development of software for robot communication

D) The optimization of robot energy consumption

3. Why is robotic motion planning important in robotics?

A) It helps in reducing the cost of robots

B) It ensures efficient and collision-free movement

C) It enhances the aesthetic appeal of robots

D) It increases the processing speed of robots

4. In which application is robotic motion planning most critical?

A) Data analysis

B) Autonomous vehicles

C) Cloud computing

D) Web development

5. What role does robotic motion play in space exploration?

A) Building satellites

B) Controlling spacecraft trajectories and landings

C) Conducting experiments on Earth

D) Monitoring weather patterns

6. Which of the following is a type of motion planning problem?

A) Linear regression

B) Kinematic motion planning

C) Text classification

D) Image segmentation

7. What does a configuration space (C-space) represent in motion planning?

A) The physical layout of a robot

B) The possible positions and orientations of a robot in its environment

C) The set of all possible sensor readings

D) The energy consumption of a robot

8. Which of the following is an essential component of path planning in configuration space?

A) Selecting the fastest processor for computation

B) Defining obstacles and free space within the configuration space

C) Designing the exterior of the robot

D) Increasing the size of the configuration space

9. Which of the following algorithms is commonly used for path planning in configuration space?

A) Merge Sort

B) RRT (Rapidly-exploring Random Tree)

C) Bubble Sort

D) PageRank

10. What is a common challenge in path planning within configuration space?

A) Visualizing the robot's design

B) Avoiding local minima that can trap the path-planning algorithm

C) Increasing the speed of communication

D) Developing new software languages

11. What is the primary purpose of using graph-based methods in motion planning?

A) To enhance the visual appearance of robots

B) To organize data for machine learning tasks

C) To represent the connectivity of the robot's configuration space

D) To optimize the robot's power consumption

12. Which of the following is a key feature of probabilistic roadmaps (PRMs)?

A) Deterministic node placement

B) Uniform sampling of the configuration space

C) Random sampling to create a roadmap of feasible paths

D) Use of a global heuristic function

13. Which of the following statements best describes Rapidly-exploring Random Trees (RRTs)?

A) RRTs systematically explore the configuration space in a grid-like manner.

B) RRTs use a depth-first search approach for pathfinding.

C) RRTs are designed to quickly and randomly explore large configuration spaces.

D) RRTs guarantee an optimal path by exhaustive search.

14. What is a primary challenge when using PRMs in motion planning?

A) Ensuring deterministic outcomes

B) Handling dynamic obstacles efficiently

C) Sampling nodes only in free space

D) Avoiding collisions with deterministic paths

15. What is the primary goal of optimization-based motion planning methods?

A) To minimize computational resources

B) To find the most energy-efficient design for robots

C) To determine the optimal path that minimizes a cost function

D) To improve the robot's appearance

16. Which of the following describes the basic concept of potential fields in motion planning?

A) Using random sampling to explore the configuration space

B) Defining attractive and repulsive forces to guide the robot

C) Systematically exploring the environment using a grid

D) Applying machine learning to predict the optimal path

17. What is a significant drawback of the potential fields method?

A) High computational cost

B) Difficulty in handling high-dimensional spaces

C) Tendency to get stuck in local minima

D) Inability to handle dynamic obstacles

18. How does RRT differ from the original RRT algorithm? *

A) RRT* uses fixed grid points instead of random sampling

B) RRT* guarantees finding the shortest path by continuously optimizing the tree

C) RRT* avoids the use of collision detection

D) RRT* is deterministic, while RRT is probabilistic

19. In which scenario are gradient-based methods most effective?

A) When the configuration space is high-dimensional and complex

B) When the cost function is differentiable and smooth

C) When there are numerous dynamic obstacles

D) When the path must be computed in real-time

20. What is a common challenge when using sampling-based optimization methods like RRT and PRM?

A) Managing computational complexity in low-dimensional spaces

B) Ensuring convergence to a global optimum

C) Handling dense obstacle environments

D) Avoiding local minima traps

21. What does "kinodynamic planning" refer to in robotics?

A) Planning the aesthetic design of robots

B) Planning both the motion and the dynamic constraints like velocity and acceleration

C) Creating efficient communication protocols

D) Optimizing the power consumption of robots

22. Which of the following is a primary challenge in kinodynamic planning?

A) Designing user interfaces for robots

B) Handling dynamic constraints while ensuring collision-free paths

C) Reducing the cost of manufacturing robots

D) Increasing the battery life of robots

23. Which type of algorithm is typically used in kinodynamic planning to account for both kinematics and dynamics?

A) A* algorithm

B) Dijkstra's algorithm

C) Sampling-based algorithms like RRT and RRT*

D) Binary search algorithm

24. In kinodynamic planning, what is the significance of "dynamic constraints"?

A) They define the robot's visual appearance.

B) They limit the robot's speed, acceleration, and other forces during movement.

C) They determine the robot's energy consumption.

D) They enhance the robot's sensory capabilities.

25. Which algorithm is often modified for kinodynamic planning to incorporate dynamic constraints?

A) Prim's algorithm

B) Kruskal's algorithm

C) RRT (Rapidly-exploring Random Tree)

D) Merge sort

Achhruram Memorial College

Jhalda, Purulia, West Bengal

Certificate Course

Media and Politics in the Globalizing World

(Academic Session – 2022-2023)

Course Title:

Media and Politics in the Globalizing World

Full marks: 50   2 × 25 = 50

Questions :

1. What is the primary role of media in a democratic society ?
    a) To promote government policies
    b) To serve as a watchdog over the government
    c) To entertain the masses
    d) To shape public opinion

2. Which of the following is a characteristic of globalization in the media ?
    a) Homogenisation of local cultures
    b) Increased government control over media
    c) Reduced access to global news
    d) Decreased reliance on advertising revenue

3. What is the term for the influence of media on political decisions and public opinion ?
    a) Media literacy
    b) Media bias
    c) Agenda – setting
    d) Propaganda

4. Which of the following media platforms has revolutionized political communication in the 21st century ?
    a) Print media
    b) Radio
    c) Television
    d) Social media

5. What is the term for the spread of misinformation or disinformation through media ?
    a) Fake news
    b) Propaganda
    c) Media literacy

d) Agenda-setting
6. How has globalisation affected media ownership ?
   a) Increased local ownership
   b) Decreased concentration of ownership
   c) Increased government ownership
   d) Concentration of ownership among a few corporations
7. What is the role of media in shipping public opinion on global issues ?
   a) To provide objective information
   b) To promote national interests
   c) To influence public opinion
   d) To ignore global issues
8. What is the term for the process by which media conglomerates expand their reach across national borders ?
   a) Media globalisation
   b) Media localisation
   c) Media Imperialism
   d) Media convergence
9. Which of the following is a consequence of the concentration of media ownership ?
   a) Increased diversity of viewpoints
   b) Improved journalistic standards
   c) Homogenisation of content
   d) Enhanced media literacy
10. How has social media impacted political mobilization ?
    a) Reduced the effectiveness of grassroots movements
    b) Increased the influence of traditional media outlets
    c) Enabled marginalized voices to be heard
    d) Decreased the role of money in politics
11. What is the term for the use of media to promote a particular ideology or agenda ?
    a) Propaganda
    b) Public relations
    c) Media literacy
    d) Agenda setting
12. How has the internet impacted the flow of information across national borders ?
    a) Reduced the speed of information dissemination
    b) Interest government control over information
    c) Enabled real time global communication
    d) Decreased access to global news
13. What is the term for the study of the relationship between media, politics and power ?

    a) Political Science

    b) Media studies

    c) Political economy of media

    d) Communication studies

14. Which of the following is a consequence of media globalisation ?

    a) Increased cultural diversity

    b) Decreased cultural Homogenisation

    c) Enhanced local content

    d) Threat to local cultures

15. What is the term for the process by which global media conglomerates impose their dominance over local media ?

    a) Media Imperialism

    b) Media globalisation

    c) Media localisation

    d) Media convergence

16. Which of the following is a characteristic of global news flow ?

    a) Dominance of local news

    b) Equal representation of all countries

    c) Dominance of news from western countries

    d) Ignoring of global events

17. How has social media impacted political participation ?

    a) Reduced voter turnout

    b) Increased political apathy

    c) Enabled citizen journalism

    d) Decreased the role of money in politics

18. What is the term for the use of media to shape public opinion during wartime ?

    a) Propaganda

    b) Public relations

    c) Media literacy

    d) Agenda setting

19. Which of the following is a consequence of the digital divide ?

    a) Increased access to global news

    b) Decreased reliance on traditional media

    c) Exacerbated social inequalities

    d) Improved media literacy

20. How has globalisation impacted media regulation ?

    a) Increased government control

    b) Decreased government control

    c) Harmonization of regulations across countries

    d) Abolition of media regulations

21. What is the term for the study of the impact of media on political attitude and behaviours ?
    a) Political Science
    b) Media studies
    c) Political communication
    d) Public opinion research
22. Which of the following is a characteristic of transnational media corporations ?
    a) Focus on local markets
    b) Ignoring of global events
    c) Diversification of media products
    d) Dependence on government subsidies
23. What is the term for the use of media to promote democratic values ?
    a) Propaganda
    b) Public relations
    c) Media literacy
    d) Democracy promotion
24. How has social media impacted political campaigns ?
    a) Reduced the role of money in politics
    b) Increased the influence of traditional media outlets
    c) Enabled targeted advertising
    d) Decreased voter turnout
25. What is the term for the study of the impact of media on political institutions?
    a) Political science
    b) Media studies
    c) Political communication
    d) Institutional media analysis

SIDHO-KANHO-BIRSHA UNIVERSITY

Exam: UG – Semester -II   **YEAR: - 2022**

Subject: - Zoology   **Course Code:-**   **Course Type:-**

Course Title:- Wildlife Conservation and Management

Full Marks: -50   **Time -1 Hr**

The figures in the right-hand margin indicate marks.

All the questions are mandatory. Students are directed to choose the best alternative from the four answers provided.

$2\times25= 50$

1. What is the primary significance of wildlife conservation?

   A) Economic gain

   B) Maintaining biodiversity

   C) Urban development

   D) Industrial growth

2. Which of the following is a current challenge in wildlife conservation?

   A) Abundance of protected areas

   B) Climate stability

   C) Habitat destruction

   D) Excessive wildlife population

3. What is biodiversity?

   A) Variety of plant and animal species in an ecosystem

   B) Single species in a habitat

   C) Uniformity of species in an ecosystem

   D) Absence of invasive species

4. Ecosystem services include:

   A) Pollination of crops

   B) Water purification

C) Climate regulation

D) All of the above

5. Which international treaty focuses on wildlife conservation?

A) Kyoto Protocol

B) CITES

C) Paris Agreement

D) NAFTA

6. What is the purpose of protected areas in wildlife conservation?

A) Urban development

B) Industrial use

C) Preservation of natural habitats

D) Commercial fishing

7. Habitat restoration involves:

A) Destroying natural habitats

B) Creating artificial habitats

C) Rehabilitating degraded ecosystems

D) Removing native species

8. Which principle is essential in habitat conservation?

A) Sustainable land use

B) Monoculture farming

C) Deforestation

D) Urban sprawl

9. Which of the following is a major threat to wildlife?

A) Habitat destruction

B) Climate change

C) Poaching

D) All of the above

10. Invasive species can:

   A) Enhance local biodiversity

   B) Disrupt local ecosystems

   C) Improve soil quality

   D) Reduce water pollution

11. Field techniques in wildlife research include:

   A) Satellite imaging

   B) Radio telemetry

   C) Genetic analysis

   D) All of the above

12. Why is data collection important in wildlife conservation?

   A) To track species populations

   B) For academic purposes only

   C) To promote tourism

   D) For entertainment

13. Local communities play a role in wildlife conservation by:

   A) Exploiting natural resources

   B) Participating in conservation programs

   C) Ignoring wildlife laws

   D) Engaging in poaching

14. Ecotourism promotes:

   A) Mass tourism

   B) Sustainable travel practices

C) Environmental degradation

D) Economic exploitation

15. Successful conservation programs often involve:

   A) Solely government initiatives

   B) Collaborative efforts between various stakeholders

   C) Ignoring local communities

   D) Reducing protected areas

16. Practical applications in wildlife conservation include:

   A) Fieldwork and data analysis

   B) Urban development

   C) Deforestation

   D) Industrialization

17. Which of the following is an example of ecosystem service?

   A) Soil erosion

   B) Water purification

   C) Deforestation

   D) Air pollution

18. The primary goal of wildlife conservation is to:

   A) Increase human population

   B) Maintain natural habitats and biodiversity

   C) Promote urbanization

   D) Expand agricultural lands

19. Which technique is used for tracking animal movements in research?

   A) Radiocarbon dating

   B) Radio telemetry

C) Soil sampling

D) Carbon sequestration

20. Sustainable development aims to:

   A) Exploit natural resources

   B) Balance economic growth with environmental protection

   C) Increase carbon emissions

   D) Promote monoculture farming

21. Habitat destruction primarily results from:

   A) Industrial activities

   B) Conservation efforts

   C) Biodiversity enhancement

   D) Sustainable practices

22. Community involvement in conservation can lead to:

   A) Increased poaching

   B) Enhanced local stewardship

   C) Habitat destruction

   D) Reduced biodiversity

23. The term 'biodiversity hotspot' refers to:

   A) Areas with low species diversity

   B) Regions with significant levels of biodiversity under threat

   C) Urban centers

   D) Desert ecosystems

24. An example of a protected area is:

   A) A national park

   B) An industrial zone

C) A suburban area

D) A commercial forest

25. What is the role of international treaties in wildlife conservation?

A) To promote poaching activities

B) To establish global standards for protecting endangered species

C) To increase industrial growth

D) To encourage habitat destruction

Name_____

Reg. No_____ of_____ Roll No_____

1. Which of the following movements is considered one of the earliest environmental movements in history?

    A) The Chipko Movement

    B) The Sierra Club

    C) The Love Canal Movement

    D) The Green Belt Movement

2. The Chipko Movement, a prominent environmental movement, originated in which country?

    A) India

    B) United States

    C) Kenya

    D) Brazil

3. Which Indian leader is closely associated with the Chipko Movement?

    A) Mahatma Gandhi

    B) Sunderlal Bahuguna

    C) Jawaharlal Nehru

    D) Vinoba Bhave

4. The Green Belt Movement, known for its reforestation efforts, was led by:

   A) Vandana Shiva

   B) Wangari Maathai

   C) Rachel Carson

   D) Jane Goodall

5. Rachel Carson's book "Silent Spring" is credited with launching the modern environmental movement in:

   A) India

   B) Kenya

   C) United States

   D) Australia

6. The Love Canal Movement is associated with which type of environmental issue?

   A) Deforestation

   B) Industrial pollution

   C) Climate change

   D) Land degradation

7. The Sierra Club, one of the oldest environmental organizations, was founded in:

   A) 1872

   B) 1892

   C) 1902

   D) 1922

8. The Earth Day movement began in which year?

   A) 1962

   B) 1968

   C) 1970

   D) 1980

9. The main focus of the 'Save the Whales' campaign in the 1970s was:

   A) Reducing deforestation

   B) Limiting industrial emissions

   C) Protecting whale species from commercial whaling

   D) Controlling urban pollution

10. Which international agreement was a significant milestone in addressing climate change?

   A) Kyoto Protocol

   B) Montreal Protocol

   C) Paris Agreement

   D) Rio Declaration

11. The 'No Dam' movement in India is associated with opposition to the construction of which dam?

   A) Sardar Sarovar Dam

   B) Bhakra Nangal Dam

   C) Tungabhadra Dam

   D) Tehri Dam

12. The modern environmental movement in the 20th century was significantly influenced by which of the following books?

   A) "The Silent Spring"

   B) "The Omnivore's Dilemma"

   C) "The End of Nature"

   D) "Collapse"

13. The concept of 'sustainable development' was prominently discussed in which major international report?

    A) The Brundtland Report

    B) The Stern Review

    C) The IPCC Report

    D) The Rio Report

14. The 1992 Earth Summit, also known as the Rio Conference, was held in which city?

    A) New York

    B) Kyoto

    C) Rio de Janeiro

    D) Stockholm

15. Which movement focused on environmental justice and was founded in the United States to address issues related to hazardous waste and its impact on communities?

    A) The Green Party

    B) The Environmental Justice Movement

    C) The Sierra Club

    D) The Nature Conservancy

16. The 'Fridays for Future' movement, which involves students protesting for climate action, was started by:

    A) Greta Thunberg

    B) Al Gore

    C) Bill McKibben

    D) Naomi Klein

17. Which environmental movement aims to restore the wetlands and protect wildlife habitats in the United States?

    A) The National Wildlife Federation

    B) The Nature Conservancy

    C) The Wetlands Restoration Movement

    D) The American Rivers Movement

18. The 'Green New Deal' proposed in the United States is a plan to address which two major issues simultaneously?

    A) Economic inequality and pollution

    B) Economic growth and industrialization

    C) Climate change and economic inequality

    D) Urbanization and land conservation

19. Which environmental organization is known for its work in protecting endangered species and their habitats globally?

    A) World Wildlife Fund (WWF)

    B) Greenpeace

    C) Friends of the Earth

    D) Earthjustice

20. The 'Save the Rainforest' campaign primarily aimed to protect rainforests in which region?

    A) Amazon Basin

    B) Congo Basin

    C) Southeast Asia

    D) Northern Europe

21. The concept of 'ecological footprint' refers to:

    A) The impact of human activities on the environment

    B) The area of land needed for agriculture

    C) The carbon emissions from transportation

D) The size of protected natural reserves

22. Which of the following movements focuses on advocating for the reduction of plastic use and pollution?

    A) The Zero Waste Movement

    B) The Plastic Free July Campaign

    C) The Green Belt Movement

    D) The Renewable Energy Movement

23. Which U.S. environmental organization was founded in 1970 and is known for its legal efforts to protect the environment?

    A) Earthjustice

    B) The Sierra Club

    C) Greenpeace

    D) The Nature Conservancy

24. The 'Extinction Rebellion' movement, which protests to halt biodiversity loss, was founded in which country?

    A) United States

    B) United Kingdom

    C) Australia

    D) Canada

25. Which of the following is a major international environmental organization that focuses on issues like climate change and conservation?

    A) World Resources Institute

    B) The Green Party

    C) Global Witness

    D) The Earth Liberation Front

UG/PG:………………....................SEMESTER………EXAMINATION ……………………..

SUBJECT……

PAPER/COURSETITLE: Nanoscience /Nanotechnology and their advance applications in different field.

NAME……….

ROLL………………………………………..NO:…………………………………………………………………..

RIGISTRATION NO:………………………………………………………………………………………………...

Full marks: 50

Time: 2 Hrs

Answer all the twenty five questions:
There are four options for each question. Candidates are required to mark (Tik sign √) on right answer. It will be wrong to mark more than one for each question.
25×2 = 50

1. **What is the primary focus of nanoscience?**
   o A) Study of the universe at large scales
   o B) Study of materials at atomic and molecular levels
   o C) Study of macroscopic materials
   o D) Study of biochemical processes at a macro scale
2. **Which of the following is NOT a characteristic feature of nanomaterials?**
   o A) High surface area to volume ratio
   o B) Quantum effects
   o C) Enhanced mechanical strength
   o D) Standard bulk properties

3. **Which of the following is a chemical method for synthesizing nanomaterials?**
   o A) Ball milling
   o B) Chemical vapor deposition (CVD)
   o C) Physical vapor deposition (PVD)
   o D) Mechanical grinding
4. **What is the primary purpose of physical characterization of nanomaterials?**
   o A) To determine their chemical reactivity
   o B) To understand their physical properties and structure
   o C) To measure their biological activity
   o D) To assess their economic value
5. **Which method would you use to measure the particle size distribution of nanomaterials?**
   o A) Scanning Electron Microscopy (SEM)
   o B) Transmission Electron Microscopy (TEM)
   o C) Dynamic Light Scattering (DLS)

      o   D) X-ray Photoelectron Spectroscopy (XPS)

6. **What information does a UV-Visible spectrum provide about a nanomaterial?**
   - o A) Atomic composition
   - o B) Optical band gap
   - o C) Surface roughness
   - o D) Magnetic properties
7. **In photoluminescence (PL) studies, what does the emission wavelength indicate?**
   - o A) Chemical bonding
   - o B) Band gap energy
   - o C) Surface area
   - o D) Thermal conductivity

8. **Which technique is used to determine the crystalline structure of nanomaterials?**
   - o A) X-ray Photoelectron Spectroscopy (XPS)
   - o B) Field Emission Scanning Electron Microscopy (FESEM)
   - o C) Powder X-ray Diffraction (XRD)
   - o D) Energy Dispersive Spectroscopy (EDS)
9. **What information does X-ray Photoelectron Spectroscopy (XPS) provide?**
   - o A) Particle size distribution
   - o B) Surface elemental composition
   - o C) Band gap energy
   - o D) Magnetic properties
10. **What is the primary advantage of using FESEM over conventional SEM?**
    - o A) Higher resolution imaging
    - o B) Better thermal conductivity
    - o C) More affordable equipment
    - o D) Faster analysis time
11. **What does Energy Dispersive Spectroscopy (EDS) analyze?**
    - o A) Surface texture
    - o B) Elemental composition
    - o C) Crystalline structure
    - o D) Thermal properties

12. **What does Transmission Electron Microscopy (TEM) primarily reveal?**
    - o A) Surface morphology
    - o B) Internal structure and lattice details
    - o C) Chemical bonding
    - o D) Magnetic properties
13. **What does High-Resolution TEM (HRTEM) allow scientists to observe?**
    - o A) Bulk properties
    - o B) Atomic-scale details
    - o C) Chemical reactivity
    - o D) Surface roughness
14. **What does Selected Area Electron Diffraction (SAED) provide information about?**
    - o A) Optical properties

- o B) Lattice structure and crystallography
- o C) Surface composition
- o D) Thermal properties

15. **Which application is a common use of nanomaterials in catalysis?**
- o A) Enhancing electrical conductivity
- o B) Increasing chemical reactivity and selectivity
- o C) Improving optical transparency
- o D) Reducing thermal expansion

16. **In which application are nanomaterials used to improve energy storage?**
- o A) Catalysts
- o B) Solar cells
- o C) Batteries
- o D) Coatings

17. **How do nanomaterials contribute to the efficiency of solar cells?**
- o A) By increasing light absorption
- o B) By improving mechanical strength
- o C) By reducing thermal conductivity
- o D) By enhancing chemical stability

18. **Which of the following is a common method for synthesizing oxide nanomaterials?**
- o A) Chemical vapor deposition (CVD)
- o B) Sol-gel process
- o C) Ball milling
- o D) Physical vapor deposition (PVD)

19. **What is a key characteristic of oxide nanomaterials synthesized via the sol-gel process?**
- o A) Large particle size
- o B) High uniformity and purity
- o C) Poor surface area
- o D) Low thermal stability

20. **What is one potential future application of nanotechnology in medicine?**
- o A) Improved construction materials
- o B) Targeted drug delivery systems
- o C) Enhanced automotive performance
- o D) More efficient agricultural tools

21. **Which of the following is a challenge facing the advancement of nanotechnology in India?**
- o A) Lack of research funding
- o B) High number of qualified researchers
- o C) Overabundance of technological infrastructure
- o D) Excessive market demand

22. **What is a key feature that distinguishes nanotechnology from conventional technology?**

- A) It involves the study of materials at a macro scale.
- B) It operates at the atomic and molecular levels.
- C) It exclusively deals with biological systems.
- D) It uses only large-scale machinery.

23. **Which of the following is a physical method of synthesizing nanomaterials?**

- A) Hydrothermal synthesis
- B) Electrospinning
- C) Chemical vapor deposition (CVD)
- D) Sol-gel method

24. **In UV-Visible spectroscopy, what does a red shift in the absorption peak usually indicate?**

- A) Decrease in particle size
- B) Increase in particle size
- C) Change in the surface chemistry
- D) Higher band gap energy

25. **Which technique provides information on the surface chemical states and bonding environments of nanomaterials?**

- A) Powder X-ray Diffraction (XRD)
- B) Field Emission Scanning Electron Microscopy (FESEM)
- C) X-ray Photoelectron Spectroscopy (XPS)
- D) Dynamic Light Scattering (DLS)

Achhruram Memorial College, Jhalda

Certificate Course

Department of Chemistry

UG/PG……………..….SEMESTER………EXAMINATION Year……. …………………

SUBJECT………………………………………………………………………………

PAPER/COURSETITLE: **Application and Limitations of Polymers**

NAME…………………………………………………………………………………...

ROLL………………………………………….NO……………………………………………

RIGISTRATION NO……………………………………………………………………….

Full marks: 50 (25×2 = 50)   **Time: 1 Hour**

(There are four options for each question. Candidates are required to mark (Tik sign √) on right answer. It will be wrong to mark more than one for each question).
Answer all the twenty five questions:

1. What is a polymer?

   A) A type of metal

   B) A complex carbohydrate

   C) A large molecule composed of repeating structural units

   D) A simple organic compound

2. which of the following is a classification based on polymer origin?

   A) Synthetic and Natural

   B) Linear and Branched

   C) Thermoplastic and Thermosetting

   D) Homopolymer and Copolymer

3. What type of polymer has a linear structure with strong covalent bonds?

   A) Thermoplastic

   B) Thermosetting

   C) Elastomer

   D) Composite

4. Which property is generally associated with thermoplastic polymers?

A) High melting point and cross-linked structure

B) Reversible softening on heating

C) Decomposition on heating

D) Irreversible curing

5. What does the term "copolymer" refer to?

A) A polymer made from a single type of monomer

B) A polymer made from multiple types of monomers

C) A polymer with a branched structure

D) A polymer with a high molecular weight

6. Which polymer is commonly used in food packaging due to its excellent barrier properties?

A) Polyethylene

B) Polystyrene

C) Polyethylene terephthalate (PET)

D) Polycarbonate

7. Which type of polymer is widely used in the automotive industry for its high impact resistance and low weight?

A) Polypropylene

B) Nylon

C) Polycarbonate

D) Polymethyl methacrylate (PMMA)

8. What is a key feature of smart polymers?

A) High resistance to chemicals

B) Ability to respond to external stimuli

C) High tensile strength

D) Inherent biodegradability

9. Which of the following is an example of a biomedical application of polymers?

A) Disposable cutlery

B) Drug delivery systems

C) Car tires

D) Packaging films

10. What are nanocomposites?

A) Polymers with nanoscale fillers incorporated into their structure

B) Polymers with nanometer-sized pores

C) Polymers made from nanometer-sized monomers

D) Polymers with nanometer-sized chains

11. Which mechanical limitation is commonly observed in polymers?

A) High electrical conductivity

B) Low melting point

C) Poor thermal stability

D) High tensile strength

12. What is a common environmental issue with conventional polymers?

A) Rapid biodegradation

B) Low energy consumption in processing

C) Non-biodegradability and accumulation in landfills

D) High recycling efficiency

13. which of the following is a challenge related to the recycling of polymers?

A) High cost of raw materials

B) Difficulties in sorting and cleaning different types of polymers

C) Limited applications for recycled polymers

D) Lack of technology for polymer production

14. Which property makes polymers susceptible to environmental degradation?

A) High density

B) Low molecular weight

C) Lack of UV resistance

D) High thermal conductivity

15. Economic challenges in polymer processing can include:

A) High availability of raw materials

B) Low energy requirements

C) High capital and operational costs

D) Minimal waste generation

16. What is a significant factor in a successful polymer application case study?

A) High cost of materials

B) Overly complex processing techniques

C) Effective integration of polymer properties with application requirements

D) Lack of industry support

17. In practical polymer labs, which of the following might be a focus?

A) Designing new synthetic methods

B) Testing mechanical properties and performance of polymers

C) Marketing polymer products

D) Developing economic policies for polymer industries

18. What benefit do guest lecturers from industry experts provide in a polymer course?

A) Detailed historical background of polymers

B) Insights into current industry practices and future trends

C) Basic chemistry knowledge

D) Simple laboratory techniques

19. Which of the following is typically not part of polymer case studies?

A) Success stories of polymer innovations

B) Financial analysis of polymer companies

C) Performance evaluations in real-world applications

D) Detailed descriptions of polymer synthesis

20. What is the purpose of lab sessions in a polymer course?

A) To understand theoretical concepts only

B) To gain hands-on experience with polymer processing and testing

C) To study historical uses of polymers

D) To focus solely on polymer economics

21. Which of the following is an emerging trend in polymer research?

A) Increased use of metals in packaging

B) Development of biodegradable polymers

C) Reduction in polymer recycling technologies

D) Decrease in polymer customization

22. How is 3D printing impacting the field of polymers?

A) It reduces the variety of polymers used

B) It allows for rapid prototyping and customized polymer structures

C) It decreases the demand for polymer products

D) It makes polymers less versatile

23. What ethical consideration is important in the development of new polymers?

A) Minimizing the cost of polymer production

B) Ensuring polymers do not have harmful environmental or health impacts

C) Maximizing the speed of polymer processing

D) Increasing the complexity of polymer synthesis

24. What is a potential future application of smart polymers?

A) Increased plastic pollution

B) Enhanced medical implants that respond to physiological changes

C) Limited use in consumer products

D) Decreased efficiency in electronics

25. Which area of polymer research focuses on creating materials that can degrade naturally?

A) Nanocomposites

B) Biodegradable polymers

C) High-performance elastomers

D) Smart polymers